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ILLICIT FINANCIAL FLOWS: CONCEPTS AND FIRST MACRO ESTIMATES FOR BELGIUM AND ITS 18 PREFERRED PARTNER COUNTRIES

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Introduction and synthesis of reported evidence

Summary

There is a growing awareness that illicit financial flows and the shadow economy might have a substantial impact on the financing of development. This paper provides a disentanglement of the definitions, sources and causes and measurement methodologies used and a first quantitative estimate for the 18 partner countries for development of Belgium. All those studies are in search of a 'dark figure' that risks to become, as some scholars call it, 'facts by repetition'. More than 2 trillion euro undeclared economy in the EU, 1 trillion euro missed tax revenue in the same EU, they became officially quoted figures but they go back to the same, sometimes criticised source of information. Almost 1 trillion USD illicit financial flows worldwide is a similar fact that is cited over and over again. But it remains the best practical starting point to look for further evidence or understanding of those phenomena in the 18 partner countries. 46 billion USD illicit financial flows or 3.5% of their GDP are estimated for the 18 partner countries of Belgium (around 2012). 261 billion USD estimated underground economy or some 31.6% of GDP of those 18 countries (around 2007). Ten times more, as share of GDP. Both figures reveal the massive potential importance for financing of development.

For an economist everything is linked with everything. Disentangling the concepts and topics of this contribution to the financing for development, we discover again this cohesion of some phenomena. We try to give some coherent overview.

There is a growing awareness that illicit financial flows might have a substantial impact on the financing of development, whatever the origin of those flows might be. This brings us to the disentanglement of the definition, sources and causes and measurement methodologies to be used.

The aim of this contribution is to provide a first scan of the international literature and comparative studies to search for evidence for the 18 partner countries for Development of Belgium. At the same time we will each time define the relevant concepts and sometimes the methodologies applied. To put it in perspective we present here sometimes similar information for Belgium and its two Benelux partners. This is meant to put it in perspective to our Belgium reality, and it happens that in some of the flows that we will later further analyse, tax heavens will pop up, including our neighbour countries.

We summarise in the Tables 0.1 and 0.2 the main macro-economic dimensions of the countries focussed on: GDP, undeclared GDP, tax revue, illicit financial flows identified for the moment. Those 18 partner countries stand for a total population of 524 million (more than the EU population), to be compared with the 11.1 million in Belgium. The total GDP is estimated in 2012 at 1,289 billion USD, compared tot the 483 billion USD for Belgium. The GDP per capita is on average 2,460 USD, to be compared with 43,551 USD in Belgium. The total government revenue is 254 billion USD or 30% of GDP, of which 8.2 billion grants (or 1% of GDP). Those counties receive 44 billon FDI and 24 billion ODA (or 2.8% of GDP 2012), of which 571 million from Belgium. The latter is on average 1 USD per inhabitant per year. The illicit financial outflows are estimated at 46 billion USD or 3.5% of their GDP for the 18 partner countries of Belgium (around 2012). The underground economy is estimated at 261 billion USD or some 31.6% of GDP of those 18 countries (around 2007). Ten times more as share of GDP. Both figures reveal the massive potential importance for financing of development. The estimated capital flight is lower than the total of FDI and ODA in the considered 18 partner countries. In many developing countries it is even higher. But the outflow is nevertheless some 2/3 of that inflow in the 18 partner countries.

For some of the considered countries the mere existence of IFF will imply that the time needed to reach the Millennium Development Goal MDG 4 to reduce under-5 mortality remain 29 years under the current rate of decline: one and a half generation further. Without IFF it could be reduced to 16 years, still dramatically long.

There should be one important caveat that goes along with those figures on undeclared, illegal and illicit activities. They are all in search of a 'dark figure' that risks to become, as some scholars called it, 'facts by repetition'. More than 2 trillion euro undeclared economy in the EU, 1 trillion euro missed tax revenue in the same EU, they became officially quoted figures but they go back to the same, sometimes criticised source of information. Almost 1 trillion USD illicit financial flows is a similar fact that is cited over and over again. Also in this paper. But it remains the best practical starting point to look for further evidence or understanding.

Table 0.1 Summary Statistics illicit financial flows and informal economy

Country	Population	GDP/ capita	GDP	Total Government Revenue	Of which		FDI	ODA	ODA Belgium	Shadow economy	Gross illicit financial outflows	Capital Flight
					Grants	Non-tax revenues						
	(2012, million persons)	(2012, current prices USD in units)	(2012, billion USD)	(2010, billion USD)	(2010, billion USD)	(2010, billion USD)	(2012, current million USD)	(2012, current million USD)	(2013, current million USD)	(2007, billion USD)	(2012, billion USD)	(2010, billion constant 2010 USD)
Algeria	37.5	5,542.1	207.8	58.6	0.0	41.4	1,500.4	144.5	7.6	42.1	2.6	-
Benin	10.1	750.9	7.5	1.3	0.1	0.2	158.6	511.3	24.2	2.7	0.0	-
Bolivia	10.8	2,517.3	27.3	5.5	0.2	1.4	1,060.0	658.6	13.2	8.3	1.4	-
Burundi	8.8	286.0	2.5	0.8	0.5	0.0	0.6	522.7	65.2	0.5	0.1	0.0
Congo, Dem. Rep.	74.7	367.7	27.5	6.8	3.0	1.2	2,891.6	2,859.4	144.9	7.6	0.1	1.8
Ecuador	15.5	5,637.4	87.5	16.4	0.0	5.2	591.3	149.4	15.0	15.5	1.9	-
Mali	16.3	627.3	10.3	1.9	0.3	0.3	310.5	1,001.3	29.7	2.9	0.3	-
Morocco	32.5	2,948.9	95.9	24.9	0.2	3.5	2,842.0	1,480.4	13.8	24.9	0.8	-
Mozambique	25.2	567.1	14.3	2.7	0.8	0.2	5,238.3	2,096.9	30.9	-	0.0	0.7
Niger	16.1	415.5	6.7	1.0	0.2	0.1	793.4	901.9	25.0	-	0.2	-
Peru	30.5	6,322.6	192.7	21.3	0.0	3.1	12,244.2	393.8	17.8	54.9	0.0	-
Rwanda	10.5	694.4	7.3	1.4	0.7	0.0	159.8	879.0	47.6	-	0.6	-0.3
Senegal	13.7	1,023.3	14.0	2.8	0.3	0.1	337.7	1,080.2	23.9	4.7	0.0	-
South Africa	52.3	7,314.0	382.3	101.4	0.2	19.5	4,626.0	1,067.2	20.0	72.1	29.1	-
Tanzania	44.9	633.3	28.5	5.0	1.3	0.3	1,706.9	2,831.9	13.3	9.0	0.7	-0.2
Uganda	35.6	595.9	21.2	2.4	0.4	0.1	1,205.4	1,655.2	15.7	5.0	0.6	-0.2
Vietnam	88.8	1,752.6	155.6	0.0	0.0	0.0	8,368.0	4,115.8	29.8	11.1	6.9	-
West Bank and Gaza	-	-	10.2	0.1	0.1	0.0	179.6	2,001.4	33.5	0.0	-	-
Belgian partner countries	**523.9**	**2,460.1**	**1,288.9**	**254.6**	8.2	73.4	**44,214.3**	**24,350.9**	**571.1**	**261.4**	**45.6**	**1.9**
Belgium	11.1	43,550.5	483.2	230.3	0.0	24.9	-	-	-	97.9	-	-
Luxembourg	0.5	103,806.4	55.2	20.9	0.0	2.3	-	-	-	6.7	-	-
Netherlands	16.8	49,158.1	823.6	406.8	0.0	64.9	-	-	-	73.6	-	-
Benelux	**28.4**	**47,988.3**	**1,362.0**	**650.9**	0.0	91.3	**-**	**-**	**-**	**178.1**	**-**	**-**

Source See tables in report

Table 0.2 Summary Statistics illicit financial flows and informal economy (as % of GDP or total employment)

Country	Share of informal jobs in total employment (2005-2010, %)	Total Government Revenue (2010, % of GDP)	Of which		FDI (2012, % of GDP)	ODA (2012, % of GDP)	ODA Belgium (2013, % of GDP)	Shadow economy (2007, % of GDP)	Gross illicit financial outflows (2012, % of GDP)	Capital Flight (2010, constant 2010, % of GDP)
			Grants (2010, % of GDP)	Non-tax revenues (2010, % of GDP)						
Algeria	-	36.4	0.0	25.7	0.7	0.1	0.0	31.2	1.3	-
Benin	-	20.0	1.5	2.4	2.1	6.8	0.3	49.1	0.0	-
Bolivia	75.1	31.7	1.0	8.1	3.9	2.4	0.0	63.5	5.1	-
Burundi	-	37.3	22.7	0.9	0.0	21.1	2.4	39.6	5.5	-0.3
Congo, Dem. Rep.	-	33.3	14.6	5.7	10.5	10.4	0.5	46.7	0.5	8.8
Ecuador	60.9	26.2	0.0	8.3	0.7	0.2	0.0	30.4	2.3	-
Mali	81.8	20.1	2.9	2.7	3.0	9.7	0.3	39.9	3.2	-
Morocco	-	27.5	0.2	3.9	3.0	1.5	0.0	33.1	0.8	-
Mozambique	-	28.7	8.4	2.2	36.4	14.6	0.2	38.6	0.0	7.7
Niger	-	17.5	3.1	2.5	11.7	13.3	0.3	38.6	3.5	-
Peru	70.6	0.0	0.0	3.0	6.4	0.2	0.0	53.7	0.0	-
Rwanda	-	24.6	12.6	0.5	2.2	12.3	0.6	39.1	8.6	-5.6
Senegal	-	22.0	2.5	0.7	2.4	7.7	0.2	41.7	0.0	-
South Africa	32.7	37.1	0.1	7.1	1.2	0.3	0.0	25.2	7.6	-
Tanzania	76.2	21.7	5.8	1.2	6.0	10.0	0.0	53.7	2.5	-0.7
Uganda	68.5	14.7	2.5	0.6	6.0	8.3	0.1	40.3	3.2	-0.9
Vietnam	68.2	28.7	0.5	11.5	5.4	2.6	0.0	14.4	4.4	-
West Bank and Gaza	57.2	1.9	1.9	0.0	1.8	19.5	-	-	-	-
Belgian partner countries	**62.3**	**30.7**	**1.0**	**9.5**	**3.4**	**1.9**	**0.04**	**31.6**	**3.5**	**0.4**
Belgium	-	48.9	0.0	5.3	-	-	-	21.3	-	-
Luxembourg	-	42.3	0.0	4.6	-	-	-	13.0	-	-
Netherlands	-	46.7	0.0	7.4	-	-	-	9.4	-	-
Benelux	**-**	**47.3**	**0.0**	**6.6**	**-**	**-**	**-**	**21.5**	**-**	**-**

Source See tables in report

1 | Policy context: rising awareness and concern

The tax system is a way to mobilise resources in the economy for redistribution and for investment.

Financing for growth and development involves own investment and investment from abroad.

A large informal economy and fiscal fraud will reduce this potential. It will leave large untapped resources and opportunities for growth and development. This can/mostly goes together with large international outflows of funds, outbalancing inflows of aid, remittances, FDI and loans and going sometimes directly to the developed countries or to tax heavens.

Already in 2011 Reed and Fontana provide an overview of the devastating size of those flows:

'Global Financial Integrity estimates that from 2002 to 2006, between 850 billion and 1 trillion USD illicit funds flowed every year out of developing countries.

The African Union has estimated that 25% of GDP of African countries (around 148 billion USD) is lost to corruption every year (U4, 2007). Various researchers have argued that despite large volumes of aid and borrowing, Africa is a net creditor to the rest of the world (Christensen 2009, 16; Boyce and Ndikumana 2001; Cerra et al., 2005) due to illicit flows, and that illicit flows far outweigh debt and aid relief.

Ndikumana and Boyce (2008) estimated net cumulated capital flight (licit and illicit financial flows) of 420 billion USDs (in 2004 USD) from 40 African countries for the period from 1970 to 2004. This figure underpinned the authors' claim that Africa is a net creditor to the world: on average, the region's assets held abroad were 2.9 times the stock of debt they owed to the world at the time of the study. Their data includes both licit and illicit flows, although the authors question the legitimacy even of legally acquired assets when these are held by African elites abroad in secrecy havens.

Cobham (2005) has estimated the total loss to developing countries from tax evasion and tax avoidance at 385 billion USD per year. However, the assumptions underlying this estimate have been questioned by other researchers (for example Fuest & Riedel, 2009) for a number of reasons. For example, they claim that losses due to tax evasion and avoidance are estimated on the implicit assumption that appropriate policies would lead to all of the losses being recovered, whereas in fact the shadow economy statistics on which tax evasion losses are calculated, include illegal activities that could not be taxed anyway. Christian Aid (2008) has estimated a 160 billion USD loss to developing countries from 2 types of tax evasion/avoidance: transfer mispricing between multinational corporations, and falsified invoicing between formally unrelated companies.

Unless existing estimates of illicit flows are fundamentally flawed, it would seem reasonable to assume that illicit flows are larger than those estimates, given the furtive nature of many of the activities that produce them.' (Reed & Fontana, 2011, p. 9-10).

According to more recent estimates of Global Financial Integrity, this are conservatively underestimations due to exclusion of major sources like 'trade mispricing handled by collusion between importers and exporters within the same invoice' which is not shown by IMF's Direction of Trade Statistics (DOTS). The smallest share of illicit flows is shown in the African region (approximately 3% of total). However this can particularly explained by their incomplete and unreliable statistics (Kar & Cartwright-Smith, 2008). In the most recent study of Kar and Spanjers (2014) illicit financial flows are estimated around 991.2 billion USD. This amount was larger than the developing countries received from the combined total of FDI and ODA.

'It is estimated that with more effective institutions, African States could double their tax revenue' (AfDB, OECD, UNDP, 2014, p. 115-116). The last 10 years, in 41 of 52 African countries improvements in domestic revenue mobilisation and public administration were achieved. However, among African countries only little progress has been made against corruption between 2002 and 2012

In addition, there is also an OECD-report that analyses and evaluates the tool of policy coherence in order to better understand the complexity of the illicit financial flows and their significant negative impact on development and growth. Every year huge sums of financial flows, which by far exceeds inflows from Official Development Assistance (ODA) and Foreign Direct Investment (FDI), are transferred out of developing countries illegally. These financial outflows could otherwise be used for crucial public expenditure (e.g. healthcare). Many of these developing countries are faced with a deep governance failure, weak institutions and corruption, which makes them vulnerable for illicit financial flows. The report shows that coherent policies in OECD countries, concerning tax evasion, anti-bribery and money laundering, can reduce the illicit financial flows coming from developing countries. Besides, the developing countries themselves need to install accountable and effective institutions, which deliver the needed services to their population (OECD, 2014, p. 3).[1]

A report of Eurodad (Griffiths, 2014)[2] argues that developing countries are confronted with a large amount of financial losses: for every 1 USD of financial inflow, a financial outflow of 2 USD is represented. Almost half of this financial outflow is caused by illicit financial flows (634 billion USD in 2011). The other outflows are caused by 'profits taken out by foreign companies (468 billion USD by 2012), lending to rich countries (276 billion USD by 2012) and interest repayments on foreign debt (188 billion USD).

Tax Justice Network (2013) even states that 'for every USD of aid provided by OECD countries to developing nations, 10 USDs or so flow back, under the table, towards OECD nations and their offshore satellites'. In particular 1 trillion USD figure for annual illicit financials out of developing countries compared to just 130 billion USD or so in global foreign aid.[3]

Henry (2012) estimated that 21-32 trillion USD is in unreported tax havens. For the 139 mostly low-middle income countries total external debts were 4.1 trillion USD in 2010. However these countries tend to be major net creditors to the world if we take into account their foreign reserves and offshore private holdings of their wealthiest citizens: aggregative external debts seem then to be minus 10.1-13.1 trillion USD.[4]

Many of those studies reveal the importance and unbalance at a global level. Within a first paper we want to identify the available information on those flows of funds for the 18 partner countries of the governmental development cooperation of Belgium.

1 OECD (2014). Better Policies for Development 2014. Policy Coherence and Illicit Financial Flows. OECD Publishing, doi: http://dx.doi.org/10.1787/9789264210325-en, ISBN: 9789264210325 (PDF), http://www.oecd.org/pcd/Better-Policies-for-Development-2014.pdf.

2 Study also mentioned in the Guardian (Chonghaile, Thursday 18 December 2014), 'Developing countries lose 2 USD for every 1 USD gained, report says'.

3 http://www.financialsecrecyindex.com/introduction/introduction

4 Source: http://www.taxjustice.net/ topics/inequality-democracy/capital-flight-illicit-flows/

2 | The 18 partner countries and their economic situation

The 18 partner countries of the Belgian governmental development cooperation were selected, based on criteria like poverty degree and good governance, as defined in the law 'Wet betreffende de Belgische ontwikkelingssamenwerking' and a Royal Decree 'KB van 26 januari 2004'.

In the Table 2.1 those 18 Belgian partner countries are situated in the list of Development Assistance Committee (DAC)-Recipient Countries, classified by level of income. Most of them appear within the category of the least developed countries. In the table are in bold also those countries that appear on the list of Heavily Indebted Poor Countries (HIPC) that under certain conditions can benefit an extra assistance to decrease their unsustainable debt (sort of 'debt relief' financed by the IMF, multilateral institutions and bilateral creditors). The HIPC Initiative (supplemented by the Multilateral Debt Relief Initiative) tries to support these countries with their debt burden they cannot manage, so that they can finance crucial social expenditures like health and education (see Millennium Development Goals) instead of only servicing their debt. We can see that 10 of the Belgian partner countries are on the list and 9 of them are considered as least developed countries in the DAC-list. In total there are 39 countries on this list.

2.1 The 18 partners and their income ranking

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven..**1 Belgian partner countries in the DAC (Development Assistance Committee) list of ODA recipients, effective for reporting on 2012 and 2013 flows (valid until 31 December 2014)***

Least developed countries	Other low income Countries (per capita GNI <=1,005 USD in 2010)	Lower middle income countries and territories (per capita GNI 1,006 USD-3,975 USD in 2010)	Upper middle income countries and territories (per capita GNI 3,976USD-12,275 USD in 2010)
Benin		**Bolivia**	Algeria
Burundi			Ecuador
Congo, Dem. Rep.		Morocco	Peru
Mali		Vietnam	South Africa
Mozambique		West Bank and Gaza Strip	
Niger			
Rwanda			
Senegal			
Tanzania			
Uganda			

* HIPC in bold

Source OECD, http://www.oecd.org/investment/stats/daclistofodarecipients.htm and IMF, http://www.imf.org/external/np/exr/facts/hipc.htm

2.2 National income of partner countries

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven..**2 General descriptive statistics Belgian partner countries and Benelux, 2005-2012-2019**

Countries	GDP, in billion USD			GDP/capita, in current prices USD in units			Population, in million persons		
	2005	2012	2019	2005	2012	2019	2005	2012	2019
Algeria	103.2	207.8	275.9	3,141.0	5,542.1	6,521.4	32.9	37.5	42.3
Benin	4.4	7.5	14.4	533.5	750.9	1,206.4	8.2	10.1	11.9
Bolivia	9.6	27.3	54.3	1,015.5	2,517.3	4,395.4	9.4	10.8	12.4
Burundi	1.1	2.5	4.5	149.1	286.0	439.2	7.5	8.8	10.4
DR Congo	12.0	27.5	49.1	196.6	367.7	534.2	60.8	74.7	91.9
Ecuador	41.5	87.5	142.2	3,025.0	5,637.4	8,236.3	13.7	15.5	17.3
Mali	5.5	10.3	18.4	417.1	627.3	910.1	13.2	16.3	20.3
Morocco	59.5	95.9	164.5	1,972.8	2,948.9	4,729.0	30.2	32.5	34.8
Mozambique	6.6	14.3	28.7	313.1	567.1	960.9	21.0	25.2	29.9
Niger	3.4	6.7	14.1	263.8	415.5	706.0	12.8	16.1	19.9
Peru	74.4	192.7	295.3	2,733.0	6,322.6	8,701.8	27.2	30.5	33.9
Rwanda	2.6	7.3	12.9	293.1	694.4	1,026.7	8.8	10.5	12.6
Senegal	8.7	14.0	23.0	773.9	1,023.3	1,370.0	11.3	13.7	16.8
South Africa	247.0	382.3	426.8	5,183.7	7,314.0	7,432.1	47.6	52.3	57.4
Tanzania	14.1	28.5	57.4	376.2	633.3	1,038.6	37.6	44.9	55.3
Uganda	10.0	21.2	37.0	353.1	595.9	827.2	28.4	35.6	44.7
Vietnam	57.6	155.6	281.4	699.7	1,752.6	2,947.6	82.4	88.8	95.5
Belgian partner countries (excl. West Bank and Gaza)	**661.2**	**1,288.9**	**1,900.1**	**1,459.6**	**2,460.1**	**3,129.0**	**453.0**	**523.9**	**607.3**
Belgium	378.0	483.2	612.0	36,187.2	43,550.5	53,119.7	10.4	11.1	11.5
Luxembourg	37.7	55.2	79.7	80,971.4	103,806.4	132,109.6	0.5	0.5	0.6
Netherlands	673.5	823.6	1,024.9	41,269.9	49,158.1	60,009.6	16.3	16.8	17.1
Benelux	**1,089.2**	**1,362.0**	**1,716.6**	**39,998.5**	**47,988.3**	**58,781.4**	**27.2**	**28.4**	**29.2**

Source Own calculations dataset IMF World Economic Outlook Database (2014)

2.3 Current account statistics

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven..**3 Descriptive statistics Current account balance, Belgian partner countries and Benelux, 2005-2012-2019**

Countries	Current account balance, in billions USD			Total investment, % of GDP			Gross national savings, % of GDP			Volume of imports of goods and services, % change			Volume of exports of goods and services, % change		
	2005	2012	2019	2005	2012	2019	2005	2012	2019	2005	2012	2019	2005	2012	2019
Algeria	21.2	12.3	-10.3	22.1	30.3	34.6	64.5	54.4	45.7	6.3	15.1	2.4	5.0	-3.6	1.3
Benin	-0.3	-0.6	-1.0	16.4	17.6	20.2	9.9	9.7	13.4	5.3	27.5	16.0	16.4	97.1	18.9
Bolivia	0.6	2.3	0.3	14.3	17.6	18.8	19.9	25.7	20.2	9.2	4.6	3.8	1.4	21.9	3.1
Burundi	-0.1	-0.4	-0.7	17.8	19.5	20.0	15.1	2.7	4.3	56.4	11.0	5.9	20.6	14.9	8.5
DR Congo	-0.4	-1.7	-3.0	12.5	20.3	24.2	4.4	12.3	17.9	33.5	-7.8	6.8	34.8	-1.7	8.2
Ecuador	0.5	-0.3	-2.5	21.6	28.3	28.5	22.8	27.9	26.7	14.4	1.9	7.6	8.6	2.7	6.0
Mali	-0.4	-0.3	-1.1	26.6	16.9	29.1	18.5	14.2	23.1	16.0	6.4	5.3	16.8	8.6	2.8
Morocco	1.1	-9.3	-6.5	28.8	35.3	35.5	30.6	25.5	31.6	12.3	-1.1	6.8	5.7	-1.3	8.6
Mozambique	-1.1	-6.5	-13.5	17.7	53.6	54.8	0.5	8.2	7.8	12.1	65.2	0.8	3.9	35.7	9.3
Niger	-0.3	-1.0	-1.5	23.1	37.4	37.5	14.2	22.0	27.2	14.9	-10.0	1.0	-5.1	20.3	10.8
Peru	1.2	-6.3	-10.5	15.9	26.7	28.1	17.4	23.5	24.5	10.4	11.0	5.5	14.4	2.3	6.5
Rwanda	-0.1	-0.8	-1.0	17.3	23.9	23.9	21.9	12.7	16.1	19.2	12.4	6.7	13.5	21.1	4.9
Senegal	-0.8	-1.5	-1.9	24.5	29.8	26.4	15.6	19.0	18.2	7.1	4.3	5.1	2.6	2.8	6.1
South Africa	-8.6	-20.0	-19.8	18.0	19.4	20.1	14.5	14.2	15.5	10.9	6.0	3.2	8.6	0.4	4.0
Tanzania	-0.9	-4.5	-6.2	25.1	34.5	30.8	18.3	18.2	20.1	6.2	11.4	10.0	9.5	3.3	7.3
Uganda	-0.3	-2.0	-3.6	21.6	25.2	27.5	19.1	15.8	17.9	9.4	5.9	8.7	12.2	20.4	10.2
Vietnam	-0.6	9.3	-5.4	33.8	27.2	21.9	32.4	33.2	20.0	7.0	9.2	7.9	6.0	20.6	7.0
Belgian partner countries (excl. West Bank and Gaza)	**10.7**	**-31.6**	**-88.0**												
Belgium	7.5	-9.4	1.0	21.9	21.0	21.3	23.9	19.0	21.5	4.8	-1.4	4.9	3.8	-0.9	4.8
Luxembourg	4.4	3.2	3.2	22.4	21.3	20.0	34.0	27.2	24.0	4.1	-1.0	2.4	4.4	-1.9	2.3
Netherlands	47.3	73.5	89.8	20.8	19.4	19.5	27.8	28.3	28.3	5.0	3.8	4.1	6.5	3.4	4.0
Benelux	**59.1**	**67.3**	**93.9**												

Source Own calculations dataset IMF World Economic Outlook Database (2014)

2.4 National income of partner countries

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven..**4 General descriptive statistics Belgian partner countries and Benelux, 2005-2012-2019**

Countries	GDP, in billion USD			GDP/capita, in current prices USD in units			Population, in million persons		
	2005	2012	2019	2005	2012	2019	2005	2012	2019
Algeria	103.2	207.8	275.9	3,141.0	5,542.1	6,521.4	32.9	37.5	42.3
Benin	4.4	7.5	14.4	533.5	750.9	1,206.4	8.2	10.1	11.9
Bolivia	9.6	27.3	54.3	1,015.5	2,517.3	4,395.4	9.4	10.8	12.4
Burundi	1.1	2.5	4.5	149.1	286.0	439.2	7.5	8.8	10.4
DR Congo	12.0	27.5	49.1	196.6	367.7	534.2	60.8	74.7	91.9
Ecuador	41.5	87.5	142.2	3,025.0	5,637.4	8,236.3	13.7	15.5	17.3
Mali	5.5	10.3	18.4	417.1	627.3	910.1	13.2	16.3	20.3
Morocco	59.5	95.9	164.5	1,972.8	2,948.9	4,729.0	30.2	32.5	34.8
Mozambique	6.6	14.3	28.7	313.1	567.1	960.9	21.0	25.2	29.9
Niger	3.4	6.7	14.1	263.8	415.5	706.0	12.8	16.1	19.9
Peru	74.4	192.7	295.3	2,733.0	6,322.6	8,701.8	27.2	30.5	33.9
Rwanda	2.6	7.3	12.9	293.1	694.4	1,026.7	8.8	10.5	12.6
Senegal	8.7	14.0	23.0	773.9	1,023.3	1,370.0	11.3	13.7	16.8
South Africa	247.0	382.3	426.8	5,183.7	7,314.0	7,432.1	47.6	52.3	57.4
Tanzania	14.1	28.5	57.4	376.2	633.3	1,038.6	37.6	44.9	55.3
Uganda	10.0	21.2	37.0	353.1	595.9	827.2	28.4	35.6	44.7
Vietnam	57.6	155.6	281.4	699.7	1,752.6	2,947.6	82.4	88.8	95.5
Belgian partner countries (excl. West Bank and Gaza)	**661.2**	**1,288.9**	**1,900.1**	**1,459.6**	**2,460.1**	**3,129.0**	**453.0**	**523.9**	**607.3**
Belgium	378.0	483.2	612.0	36,187.2	43,550.5	53,119.7	10.4	11.1	11.5
Luxembourg	37.7	55.2	79.7	80,971.4	103,806.4	132,109.6	0.5	0.5	0.6
Netherlands	673.5	823.6	1,024.9	41,269.9	49,158.1	60,009.6	16.3	16.8	17.1
Benelux	**1,089.2**	**1,362.0**	**1,716.6**	**39,998.5**	**47,988.3**	**58,781.4**	**27.2**	**28.4**	**29.2**

Source Own calculations dataset IMF World Economic Outlook Database (2014)

2.5 Current account statistics

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven.**.5 Descriptive statistics Current account balance, Belgian partner countries and Benelux, 2005-2012-2019**

Countries	Current account balance, in billions USD			Total investment, % of GDP			Gross national savings, % of GDP			Volume of imports of goods and services, % change			Volume of exports of goods and services, % change		
	2005	**2012**	**2019**	**2005**	**2012**	**2019**	**2005**	**2012**	**2019**	**2005**	**2012**	**2019**	**2005**	**2012**	**2019**
Algeria	21.2	12.3	-10.3	22.1	30.3	34.6	64.5	54.4	45.7	6.3	15.1	2.4	5.0	-3.6	1.3
Benin	-0.3	-0.6	-1.0	16.4	17.6	20.2	9.9	9.7	13.4	5.3	27.5	16.0	16.4	97.1	18.9
Bolivia	0.6	2.3	0.3	14.3	17.6	18.8	19.9	25.7	20.2	9.2	4.6	3.8	1.4	21.9	3.1
Burundi	-0.1	-0.4	-0.7	17.8	19.5	20.0	15.1	2.7	4.3	56.4	11.0	5.9	20.6	14.9	8.5
DR Congo	-0.4	-1.7	-3.0	12.5	20.3	24.2	4.4	12.3	17.9	33.5	-7.8	6.8	34.8	-1.7	8.2
Ecuador	0.5	-0.3	-2.5	21.6	28.3	28.5	22.8	27.9	26.7	14.4	1.9	7.6	8.6	2.7	6.0
Mali	-0.4	-0.3	-1.1	26.6	16.9	29.1	18.5	14.2	23.1	16.0	6.4	5.3	16.8	8.6	2.8
Morocco	1.1	-9.3	-6.5	28.8	35.3	35.5	30.6	25.5	31.6	12.3	-1.1	6.8	5.7	-1.3	8.6
Mozambique	-1.1	-6.5	-13.5	17.7	53.6	54.8	0.5	8.2	7.8	12.1	65.2	0.8	3.9	35.7	9.3
Niger	-0.3	-1.0	-1.5	23.1	37.4	37.5	14.2	22.0	27.2	14.9	-10.0	1.0	-5.1	20.3	10.8
Peru	1.2	-6.3	-10.5	15.9	26.7	28.1	17.4	23.5	24.5	10.4	11.0	5.5	14.4	2.3	6.5
Rwanda	-0.1	-0.8	-1.0	17.3	23.9	23.9	21.9	12.7	16.1	19.2	12.4	6.7	13.5	21.1	4.9
Senegal	-0.8	-1.5	-1.9	24.5	29.8	26.4	15.6	19.0	18.2	7.1	4.3	5.1	2.6	2.8	6.1
South Africa	-8.6	-20.0	-19.8	18.0	19.4	20.1	14.5	14.2	15.5	10.9	6.0	3.2	8.6	0.4	4.0
Tanzania	-0.9	-4.5	-6.2	25.1	34.5	30.8	18.3	18.2	20.1	6.2	11.4	10.0	9.5	3.3	7.3
Uganda	-0.3	-2.0	-3.6	21.6	25.2	27.5	19.1	15.8	17.9	9.4	5.9	8.7	12.2	20.4	10.2
Vietnam	-0.6	9.3	-5.4	33.8	27.2	21.9	32.4	33.2	20.0	7.0	9.2	7.9	6.0	20.6	7.0
Belgian partner countries (excl. West Bank and Gaza)	**10.7**	**-31.6**	**-88.0**												
Belgium	7.5	-9.4	1.0	21.9	21.0	21.3	23.9	19.0	21.5	4.8	-1.4	4.9	3.8	-0.9	4.8
Luxembourg	4.4	3.2	3.2	22.4	21.3	20.0	34.0	27.2	24.0	4.1	-1.0	2.4	4.4	-1.9	2.3
Netherlands	47.3	73.5	89.8	20.8	19.4	19.5	27.8	28.3	28.3	5.0	3.8	4.1	6.5	3.4	4.0
Benelux	**59.1**	**67.3**	**93.9**												

Source Own calculations dataset IMF World Economic Outlook Database (2014)

3 | The size of the informal economy, the undeclared economy and the illegal economy

3.1 Definition

Traditionally a first measure of the size of the economy is GDP, as used in previous chapter.

In order to get a full picture of the size of all activities (formal and informal) in the national accounts, informal economic activities needs to be estimated accurately. To develop these national accounts, standard procedures, in particular the 'System of National Accounts' (SNA), needs to be followed. The estimate of the GDP should include all activities including the 'non-observed economy'. 'The non-observed economy refers to all productive activities that may not be captured in the basic data sources used for national accounts compilation' (UNECE, 2003, 2008).

The 'non-observed economy' consists of (OECD, 2002):

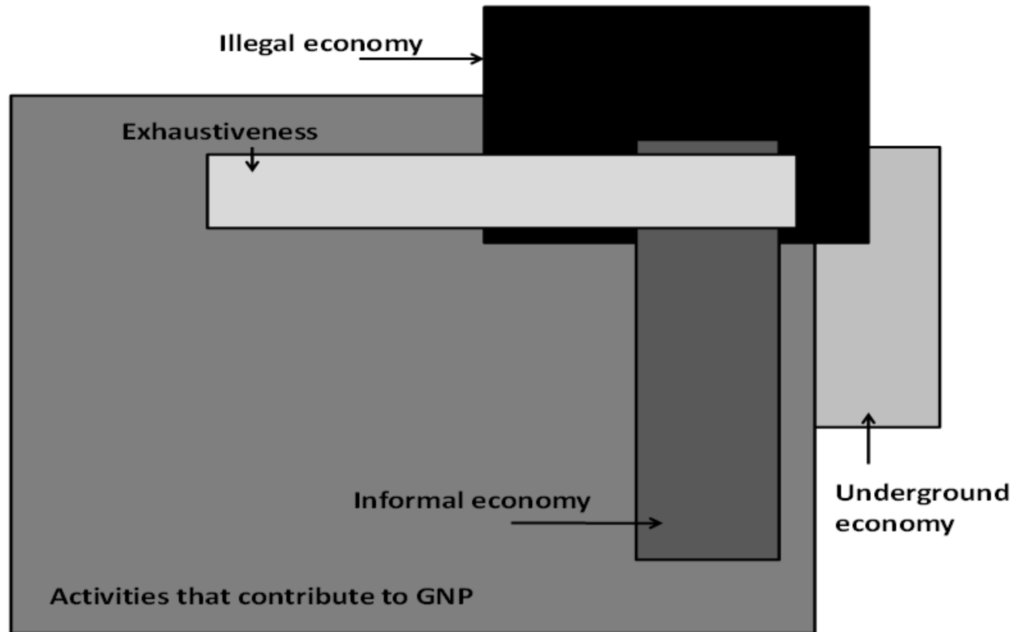
- underground production;
- illegal production;
- informal production;
- household production for own final use;
- production missed due to deficiencies in data collection programme.

This unobserved economy consists of 3 elements: underground economy and black work, illegal production[5] and informal economy. Depending on the level of sophistication of the national accounts and the statistical apparatus the 'exhaustive' estimation of the GDP should include informal production, household production for own final use and illegal and underground production. In reality this is not the case. On top of that according to different uses the perimeter might be different. Activities can be included in the estimate of the GDP but nevertheless remains undeclared or non-taxed. And the basis of some categories of taxation (for instance estate taxes) do not even appear in the calculation of the GDP but might be included in the tax evasion.

The underlying relationships between these three elements and the aim of completeness of the national accounts, are shown in Figure 3.1. We have to remark that the size of unobserved economy presented in the national accounts, is highly underestimated. In calculating the GDP, illegal activities are only taking into account when there is a mutual compromise between both parties. By consequence, following activities are not taken into account: blackmail, theft, some types of fiscal fraud (VAT-carrousel), non-declaration of financial assets, tax evasion, tax avoidance (Kazemier, 2003; NBB, 2010; OECD, 2002 in Pacolet & De Wispelaere, 2013a, p. 6-7). They are however to a lesser or larger degree part of the missed revenue for the government. For that reason we give in Figure 3.2 a more exhaustive definition of illegal activities, fraud, evasion, ... and avoidance. It is the same broader definition of illicit financial flow that can/should include avoidance, evasion but also money flows about criminal activities.

5 'The borderline between underground and illegal production is not entirely clear … It is not necessary for the purposes of the System to try and fix the precise borderline between underground and illegal production as both are included within the production boundary' (OECD, 2002, p. 38, in Pacolet & De Wispelaere, 2013a, p. 6).

Figure Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven..**1**
Relationship between the illegal economy, the informal economy, the underground economy and exhaustiveness



Source Kazemier (2003) in Pacolet & De Wispelaere (2013a)

Figure Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven..**2**
Broad definition of fiscal and social fraud and avoidance

	Evasion	Grey zone	Avoidance	Charge not or less taxes because Cannot fully tax	Grey zone	Don't want fully tax	Fiscal underestimation
Fiscal contributions	Undeclared income		• To form • Relocate fiscal basis • Spread in time	Moveable property		Cadastral income own house Savings account	A fixed deduction of certain occupations
Social contributions	Undeclared work		• To form • Relocate fiscal basis • Spread in time	Exemption and subsidy	Domestic help, fiscal amesty	Domestic help, service vouchers	A fixed deduction of certain occupations
Social benefits	Benefit fraud and misuse						
Criminal and illegal activities							

Source Pacolet and De Wispelaere, 2009a based on Pacolet & Geeroms

In defining informal economy, the 'System of National Accounts' (SNA) refers to domestic work and voluntary work. These activities are conducted under an informal 'contract' rather than an offi-

cial contract of employment. This kind of activities is particularly important in developing countries because the lack of strict work rules (Pacolet & De Wispelaere, 2013a, p. 37). Here their importance can be much more substantial since a large part of activities are in those countries organised in units with less or no formal structure of organisation, regulation, administrative registration or accounting, adequate working conditions. The latter can imply absence in those countries of adequate social regulation, or, and then it becomes similar to undeclared or underground activities, by not respecting those labour conditions and regulation. The difference between this share of informal economy and undeclared economy is unclear.

The size of informal activities is substantial in many developing countries as even recently is stated by the ILO (2012) that looked to the informal employment. It identified (informal) employment in informal firms but also informal employment (in fact missing formal labour conditions, perhaps because of undeclared activity) in formal organisation. The difficulty to identify those entities, and their contribution in GDP, because that is in the end the ambition of exhaustive estimates of GDP, is illustrated by the fact that the ILO is here even limiting its information to the non-agricultural sector.

Schneider (2011) defines the shadow economy as follows:

> *'The shadow economy can be divided into two parts. 'Undeclared work,' which refers to wages that workers and businesses don't declare to the government to avoid taxes or documentation, accounts for about two-thirds of the shadow economy. Undeclared work is widespread in construction, agriculture and household services, such as cleaning, babysitting, elderly care and tutoring […] The other one-third comes from underreporting, which occurs primarily when cash-based businesses, such as small shops, bars and taxis, report only part of their income to avoid some of the tax burden. This is common in cash-based businesses that require little documentation, such as a bar owner taking money for a drink and not documenting it, or a plumber receiving cash for his services at a private household without issuing a receipt or declaring the income.'* (Schneider, 2011, p. 3).

Undeclared work is defined differently among (sometimes there is even no definition) the EU member states (European Commission, 2014). At EU Level, 'undeclared work is defined as any paid activities that are lawful as regards their nature but not declared to public authorities, taking into account differences in the regulatory system of Member States. This definition links undeclared work with tax and/or social security fraud and covers diverse activities ranging from informal household services to clandestine work by illegal residents, but excludes criminal activities' (COM, 2007, 628). There are different types (in gradation) of undeclared work: from partially undeclared work (also called 'under-declared work', 'envelope wages', or 'cash in hand') to fully undeclared work. The difference refers to the partial or fully non-payment of taxes and contributions on the employee's salary: on the one hand only the minimum wage is officially paid or a full-time work is only paid officially as part-time work, on the other hand nothing at all is paid (most of the cases even no employee contract is established). Another type refers to undeclared 'own account' or 'self-employed work'. Most common form of undeclared work, consists of work carried out in a formal undertaking, mostly in sectors like construction, cleaning, and so on, ... (European Commission, 2014, p. 1-2).

Undeclared work has a negative impact on:

- workers: the loss of social benefits calculated on the base of the declared salary and the loss of several kind of employment rights;
- employers: creation of unfair competition by those who are not declaring work;
- State: Lower government revenue due to unpaid taxes and social security contributions (European Commission, 2014, p. 2-3).

Illegal economy refers to goods and services of which the production, the sale, the possession or use is prohibited (Pacolet & De Wispelaere, 2013a, p. 38).

3.2 Measurement of the informal economy

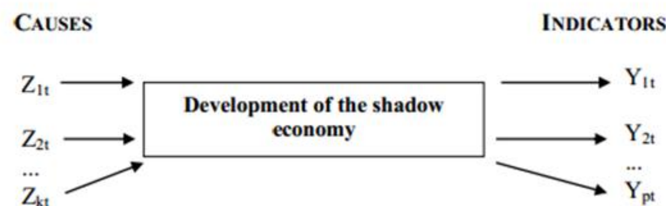
Several methodologies exist to estimate the size of the undeclared economy: macroeconomic estimates, proper assessment of national accountants, administrative sources and micro surveys. Eurostat (n.d.) also considers three main methods to estimate the magnitude of the informal economy: (1) 'direct (microeconomic) methods' based on surveys or tax audits, (2) 'indirect macroeconomic methods' based on a combination of several economic variables and assumptions; (3) 'model approaches' based on structural equations to link unobserved variables to observed and indicators and cause. In case of the model approaches, the most common used method is the Multiple Indicator-Multiple Cause (MIMIC) model. The use of this model in compiling national accounts is however not recommended because this method suffers serious problems according to the Intersecretariat Working Group on National Accounts (ISWGNA).

A wide range of estimates can be observed for the developed world, Europe or Belgium. Tanzi (1999) concluded some years ago that even after 40 years of study on the size of the undeclared economy, not much progress can be observed in the search for this 'dark figure'. The last decade only F. Schneider continued to estimate, based on 'observable' factors, the 'unobserved' economy. It is called the MIMIC-methodology (see box). The estimates remain contested. It has the advantage of being available. The disadvantage is that the way it is estimated and the link with more detailed national information and estimates is missing. In measuring the shadow economy Schneider (2012b) refers to 2 types of informal activities: (1) illicit employment, and (2) the production of goods and services mostly consumed within the household. Excluded are illegal activities like drug production and informal production in the household of goods/services consumed within the same household.

Estimating the informal economy: the MIMIC (Multiple Indicators Multiple Causes) methodology of Schneider & Buehn (2014)

This model studies the relationship between the latent variable size of the shadow economy activities and the observable variables:

'The idea of the MIMIC model application is to examine the relationships between the latent variable size of shadow economy activities and observable variables in terms of the relation-ships among a set of observable variables by using their covariance information. The observable variables are divided into causes and indicators of the latent variable (see figure). The key benefits of the MIMIC model are that it allows modelling shadow economy activities as an unobservable (latent) variable and that it takes into account its multiple determinants (causes) and multiple effects (indicators). A factor- analytic approach is used to measure the size of shadow economy activities as an unobserved variable over time. The unknown coefficients are estimated in a set of structural equations, as the 'unobserved' variable, that is, the size of the shadow economy cannot be measured directly. Formally, the MIMIC model consists of two parts: the structural equation model and the measurement model' (Schneider & Buehn, 2014, p. 19). The unobserved variable undeclared economy is first linked to indicator variables in a 'factor analytical model'. Such indicators are variables that 'best reflect the characteristics of shadow economy activities, as the use of currency, labour force participation and the change in it, growth of GDP. Then the relationship is specified between the 'unobserved' variable for undeclared economy and the explanatory or causal variables (Schneider, Buehn & Montenegro, 2010, p. 6-7, 10). Those causes are tax and social security contributions, regulatory red tape (here a variable of 'Business freedom' has been used), and public sector services and its quality (here measured by the government effectiveness from the World Bank Worldwide Government Indicator) and finally the state of the economy (GDP per capita, unemployment rate). When this model is estimated, the dynamics (yearly evolution) of the undeclared economy can be simulated. That has to be 'translated' to the real economy by identifying the starting level at a certain moment. Here other methodologies or administrative estimates are needed. The authors agree that this is a week point where further research is needed. For the lack of transparency of the methodology, and this arbitrary choice of the starting level, the estimates have been criticised on many occasions by national accountants ... but widely used in political debate.



Source Schneider & Buehn (2014, p. 19)

3.3 Size

Schneider a.o. could provide on several occasions not only estimates of the shadow economy for the EU or OECD countries, but also for the rest of the world. We provide hereafter the evidence we can find in his latest estimate for the world for the 18 partner countries of Belgium.

Complementary to the figures for undeclared work for the 18 partner countries, as estimated by F. Schneider a.o., we reproduce a recent table of the European Commission that summarises national estimates of undeclared activities. They are within a wide range. For Belgium for instance the 'official' estimates of undeclared work varied from 4% to 20% in the past, while the estimates of F. Schneider varies from more than 20% in the past to some 16% at present. In the national accounts the estimate for undeclared activities, even after including some illegal activities, is still around 4%. With those caveats on their reliability we keep this information as the 'best practical estimate'. Here also they risk to become, what P. Reuter calls 'facts by repetition'. 'Numbers are frequently cited, with minimal documentation, becoming facts by repetition'.

There are still a lot of unreliable estimations (size, characteristic and contribution to GDP) of the informal economy in developing countries due to limited resources of national statistical systems. It needs to be highlighted that often in countries with a large informal sector, these resources are even more limited. In turn, national statistical offices need to prioritise a reliable estimation of the infor-

mal sector (Eurostat, n.d.). We can conclude that measuring the informal economy still is a major challenge in developing ... and developed countries.

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven..**1**
Estimated size of the shadow economy, in % of GDP, Belgian partner countries*, 1999-2007

	1999	2000	2001	2002	2003	2004	2005	2006	2007	Country average
Algeria	34.2	34.1	33.8	33.3	32.5	31.7	31.1	31.0	31.2	32.5
Benin	51.2	50.2	49.8	49.6	49.3	49.5	49.8	49.6	49.1	49.8
Bolivia	67.0	67.1	67.6	67.7	67.7	66.9	64.3	62.8	63.5	66.1
Burundi	39.1	39.5	39.6	39.4	39.6	39.6	39.7	39.6	39.6	39.5
DR Congo	47.2	48.0	48.2	48.1	47.1	46.9	46.8	46.8	46.7	47.3
Ecuador	34.2	34.4	33.7	33.3	32.8	31.6	30.8	30.4	30.4	32.4
Mali	42.5	42.3	40.8	40.2	39.9	40.6	40.1	39.9	39.9	40.7
Morocco	36.5	36.4	35.7	35.5	35.0	34.2	34.9	33.1	33.1	34.9
Mozambique	41.1	40.3	40.4	39.8	39.8	39.7	38.9	38.6	-	39.8
Niger	41.7	41.9	40.9	40.3	39.7	40.7	39.7	38.6	-	40.4
Peru	60.1	59.9	60.2	59.1	58.6	57.9	57.2	55.7	53.7	58.0
Rwanda	40.5	40.3	40.6	39.9	40.7	40.2	39.3	39.1	-	40.1
Senegal	45.0	45.1	44.5	45.1	44.4	43.2	42.3	42.4	41.7	43.7
South-Africa	28.4	28.4	28.4	28.0	27.8	27.1	26.5	26.0	25.2	27.3
Tanzania	58.6	58.3	57.7	56.9	56.6	56.0	55.4	54.7	53.7	56.4
Uganda	43.5	43.1	42.9	42.9	42.5	42.4	42.2	41.0	40.3	42.3
Vietnam	15.8	15.6	15.5	15.3	15.2	15.1	14.7	14.6	14.4	15.1
Belgium	22.7	22.2	22.1	22.0	22.0	21.8	21.8	21.4	21.3	21.9
Netherlands	13.3	13.1	13.1	13.2	13.3	13.2	13.2	13.2	13.0	13.2
Luxembourg	10.0	9.8	9.8	9.8	9.8	9.8	9.7	9.6	9.4	9.7

* West Bank and Gaza is excluded.
Source Schneider, Buehn & Montenegro (2010)

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven.**.2**
Estimated size of the shadow economy and undeclared work in the EU

Country	Size of shadow economy (in % of GDP), 2012[1]	Undeclared work (% of GDP), 1992–2006[2]	Country data or stimations[3] (% of GDP)	World Bank research[4] (% of extended labour force)	Demand of UDW[5] (% of respondents to Eurobarometer Survey 2013)	Supply of UDW[6] (% of respondents to Eurobarometer Survey 2013)	Envelope wages[7] (% of respondents to Eurobarometer Survey 2013)
Austria	7.6	1,5 (1995)	No data	19.7	14	5	2
Belgium	16.8	6-20	No data	10.5	15	4	4
Bulgaria	31.9	22-30 (2002)	20 (2011)	13.2	16	5	6
Cyprus	25.6	10 (2007)	19.1 (2012)	53.0	16	2	2
Croatia	29.0	No data	No data	No data	17	7	8
Czech Republic	16.0	9-10 (1998)	No data	12.5	19	4	5
Denmark	13.4	3 (2005)	No data	11.5	23	9	2
Estonia	28.2	7-8 (2007)	8 (2011)	9.8	12	11	5
Finland	13.3	4.2 (1992)	No data	11.2	11	3	1
France	10.8	4-6.5 (1998)	No data	10.3	9	5	1
Germany	13.3	7 (2007)	No data	11.9	7	2	1
Greece	24.0	24-30 (2007)	36.3 (2012)	46.7	30	3	7
Hungary	22.5	18 (1998)	16-17 (2006)	9.4	11	4	6
Ireland	12.7	8 (2002)	No data	33.0	10	2	2
Italy	21.6	6,4 (2006)	12.1 (2011)	22.4	12	2	2
Latvia	26.1	16-18 (2007)	No data	8.0	28	11	11
Lithuania	28.5	15-19 (2003)	No data	6.4	14	8	6
Luxembourg	8.2	No data	No data	No data	14	5	3
Malta	25.3	25 (1998)	No data	No data	23	1	0
Netherlands	9.5	2 (1995)	No data	12.6	29	11	3
Poland	24.4	12-15 (2007)	4.6 (2010)	21.6	5	3	5
Portugal	19.4	15-37 (2004)		22.4	10	2	3
Romania	29.1	16-21 (2007)	31.4	11.8	10	3	7
Slovakia	15.5	13-15 (200)	No data	12.2	17	5	7
Slovenia	23.6	17 (2003)	No data	14.1	22	7	4
Spain	19.2	12,3 (2006)	17 (2011)	18.8	8	5	5
Sweden	14.3	5 (2006)	No data	8.2	16	7	1
United Kingdom	10.1	2 (2000)	No data	21.7	8	3	2

Sources:

1. Schneider, F. (2012), "Size and development of the Shadow Economy from 2003 to 2012: some new facts",
2. European Commission (2004, 2007), European Employment Observatory Review, Spring 2004 and Spring 2007,
3. EUROFOUND (2012), EU MS and Norway fact sheets on estimates and approaches to measure undeclared work.
4. World Bank´s research working paper 5912 on "Informal Workers across Europe": Mihails Hazans, December 2011
5. Eurobarometer 2013, Replies to the question "Have you in the last 12 months paid for any goods or services of which you had a good reason to assume that they included undeclared work (e.g. because there was no invoice or VAT receipt)?"
6. Eurobarometer 2013, Replies to the question "Apart from a regular employment, have you yourself carried out any undeclared paid activities in the last 12 months?"
7. Eurobarometer 2013, Replies to the question "Sometimes employers prefer to pay all or part of the salary or the remuneration (for extra work, overtime hours or the part above a legal minimum) in cash and without declaring it to tax or social security authorities. Has your employer paid you any of your income in the last 12 months this way?"

Source European Commission (2014)

3.4 Undeclared economy and informal employment

There is a link between the undeclared and the informal part of the economy. The latter especially is important in the developing world, and so by definition will also be the size of the undeclared economy. Among others the ILO tries to measure the informal part of the economy if not as share of the GDP, at least as share of the total employment.

Figure 3.3 represents a framework for defining and estimating informal employment in the economy. The figure can be interpreted as follows: dark coloured cells refer to jobs that does not exist for the particular production unit; light colour cells refers to jobs that exist in the particular production unit but that not contribute to the informal economy; unshaded cells refer to the jobs in the different production units of the informal economy (Eurostat, n.d.). It illustrates the varieties in possible definitions of informality. But we are interested in quantification.

The data in Table 3.3 refers to the non-agricultural employment. The term 'jobs' includes both employees and self-employment persons. Persons with more than one job (formal and informal) were classified on the basis of the characteristics of the main job. The primary data sources were national labour force surveys in most of the cases, which were obtained by country questionnaires of the International Labour Organisation (ILO) Department of Statistics and special tabulations of national survey data, accessible to ILO and Women in Informal Employment: Globalizing & Organizing (WIEGO). The table illustrates that for the limited set of Belgian partner countries where the ILO could provide information, the share of informal jobs (in the non-agricultural sector) is almost 2/3. Some 62% of the total employment is either persons employed in informal sectors, or informal jobs in the rest of the economy. It would have been even higher in the agricultural sector was included.

Figure Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven.**.3 Framework of informal employment in the economy***

	Jobs by status in employment								
Production units by type	Own-account workers		Employers		Contributing family workers	Employees		Members of producers' cooperatives	
	Informal	Formal	Informal	Formal	Informal	Informal	Formal	Informal	Formal
Formal sector enterprises					1	2			
Informal sector enterprises (a)	3		4		5	6	7	8	
Households (b)	9					10			

* (a) Definition of informal economy by the Fifteenth International Conference of Labour Statisticians in 1993, (b) 'households producing goods for their own final use and households employing domestic workers'.
Source Eurostat (n.d.)

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven..**3**
Importance of informal employment in total employment

Country	Informal jobs (in thousands of persons)	Formal jobs (in thousands of persons)	All jobs (in thousands of persons)	Share of informal jobs in total employment (in %)	Share of persons employed in the informal sector (in %)	Share of persons in informal employment outside the informal sector (in %)
Bolivia (2006)	2,069	684	2,753	75	52	24
Ecuador (2009, IV)	2,691	1,727	4,419	61	37	24
Mali (2004)	1,180	262	1,443	82	71	11
Peru (2009)	7,168	2,991	10,159	71	50	21
South Africa (2010, IV)	4,089	8,416	12,505	33	18	15
Tanzania (2005-2006)	3,467	1,083	4,550	76	52	25
Uganda (2010)	2,597	1,192	3,789	69	59	14
Vietnam (2009)	17,172	8,012	25,185	68	43	25
West Bank and Gaza Strip (2010)	375	281	656	57	21	36
Total	**40,808**	**24,650**	**65,458**	**62**		

Source ILO (2012)

3.5 The unclear border line between evasion, avoidance and illicit activities

As illustrated in Figure 3.2 the difference between tax evasion and avoidance is sometimes unclear, or certainly both need to be considered to assess the global impact on the public finances. The same seems to be the case for those studying illicit financial flows. Here also it is difficult to disentangle financial flows related with legal economic activities but intended to minimalise taxes.

The difference between tax evasion and tax avoidance is acting outside the law and acting within the law (although it is against the spirit of the law). The OECD states tax avoidance as following: 'A term that is difficult to define but which is generally used to describe the arrangement of a taxpayer's affairs that is intended to reduce his tax liability and that although the arrangement could be strictly legal it is usually in contradiction with the intent of the law it purports to follow.' Tax evasion is defined by OECD as following: 'A term that is difficult to define but which is generally used to mean illegal arrangements where liability to tax is hidden or ignored, i.e. the taxpayer pays less tax than he is legally obligated to pay by hiding income or information from the tax authorities' (OECD, Glossary of Tax Terms). In other words: tax evasion contravenes the intention and the letter of legislation, tax avoidance contravenes the intention of legislation but not its letter, and tax planning neither contravenes the intention of legislation nor its letter (Hearson, 2014). There is also a distinction between acceptable tax avoidance (tax mitigation) whereby the tax payer benefits a fiscally attractive advantage whereby of the economic consequences of this measure are intended by the legislation. On the contrary, unacceptable tax avoidance is that the taxpayer not incurs the economic consequences intended by the legislation (Head & Krever, 2009). Legislative instruments, in particular specific anti-avoidance rules (SAARs) and general anti-avoidance rules (GAARs), can be used to prevent tax avoidance (Hearson, 2014).

'Base-erosion profit shifting (BEPS) refers chiefly to instances where the interaction of different tax rules leads to some part of the profits of MNEs not being taxed at all. It also relates to arrangements that achieve no or low taxation by shifting profits away from the jurisdictions where the activities creating those profits take place' (OECD, 2014d, p. 8). An important remark is that

BEPS does not have to be illegal, it is just a consequence of the global integration whereby some taxation principles are nog globalised (e.g. different tax jurisdictions). Given the global dimension, the BEPS issue was addressed by the current OECD/20 Project (in particular OECD/G20 BEPS Action Plan, which is 'an international effort to assist both developed and developing countries' (OECD, 2014d, p. 8). However we need to keep in mind that developing countries, with a weak administration and loopholes in the tax legislation, are confronted with relatively more tax avoidance aggression in relation to the developed countries. However, an important BEPS issue that not is included in the Action Plan, is the increasingly offering of tax incentives to MNE's by the government (OECD, 2014d).

Several studies already tried to show the existence of BEPS by analysing the effective tax rates (ETRs) for Multinational Enterprises (MNE's), while other studies tried to demonstrate the existence by analysing data on flows and positions. Although there is enough discussion about the existence of BEPS, it is very difficult to show the real impact of BEPS, giving the current available data. However the available data on FDI's may give useful information about the magnitude of BEPS. Despite the FDI statistics shown by IMF and OECD (collected at national level) reveal some interesting aspects, more in-depth-analysis (e.g. through the IMF Co-ordinated Direct Investment Survey, CDIS) could reveal more useful information (OECD, 2013a). In addition, there is also useful information shown in the OECD Investment Database, in particular the information about FDI positions through special purpose entities (SPE) for some countries. 'In general terms, SPEs are entities with no or few employees, little or no physical presence in the host economy, whose assets and liabilities represent investments in or from other countries, and whose core business consists of group financing or holding activities (OECD, 2013a, p. 18). 'According to OECD Secretariat estimates, the capacity to deal with international tax matters lags significantly behind in up to 54 countries' (OECD, 2013a, p. 87).

Aside from these BEPS driven issues like tax planning and tax avoidance, there is also the issue of allocating tax rights between two treaty partners, in particular the balance between source (where the taxable income is generated) and residence (where the person who receives the income is based) taxation in bilateral tax treaties,[6] which can strongly harm the economy of the developing countries (OECD, 2014d, p. 9). In general, the richer developed countries prefer residence-based taxation, and the developing countries prefer source-based taxation (Tax Justice Network, 2008). Developing countries need to find the right balance between tax revenue policy on the one hand, and creating an attractive investment environment for foreign direct investment (FDI) on the other hand (OECD, 2014d, p. 9).

According to the IMF, developing countries are locked in a 'partial race to the bottom over tax incentives (Abbas & Klemm, 2012 in ActionAid, 2013). An overview of possible tax incentive measure is given in Table 3.4 (Keen &Mansour, 2009 in ActionAid, 2013).

6 These bilateral tax treaties are based on two models: the OECD model treaty which emphasises residence taxation, and the United Nations model treaty, which emphasises source-base taxation (Tax Justice Network, 2008).

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven..**4**
The proliferation of tax incentives in Sub-Saharan Africa*

Type of investment tax incentive	Proportion of countries offering incentives in, …	
	1980 (in %)	2005 (in %)
Tax holidays	45	69
Reduced CIT rates	10	51
Investment allowances	59	56
Incentives for exports	10	28
Free zones	3	46
Investment code	31	74

* Sub-Saharan Africa consists of a sample of 40 Sub-Saharan African countries of which 29 low income countries, 5 lower middle countries and 6 upper middle income countries (based on World Bank 2006 country classification).
Source Keen and Mansour (2009) in ActionAid (2013)

3.6 Risk of informality: corruption and week state indexes

The size of the undeclared economy and tax evasion is on several occasions linked with the weakness of the state to collect taxes and to control fraud. Corruption influences public finances and in the end public debt, as is for instance illustrated in Cooray & Schneider (2013). A positive relation has been discovered between the Transparency International index and the size of public debt (as share of GDP). The relation goes via the size of the shadow economy, but also the size and structure of public spending. The political and administrative infrastructure can itself be corrupt or fraudulent.

Many lists of several dimensions of the fragility of the state and its weakness to tackle fraud have been constructed. We give some of them, and the place taken in by the 18 partner countries.

3.6.1 Corruption perception index of Transparency International

Based on survey data, Transparency International (2014) calculated a corruption perception index (CPI) for all the countries in the world. In Table 3.5, we observe a high level of perceived corruption in developing countries (which are partners of Belgium), which make them vulnerable victims for corruption, and by consequence also for several illicit financial flows. The countries are ranked from better to the worst situation. Some 175 countries are ranked, so a country like Burundi was situated at the 159th place, illustrating the severe situation. Although the countries of the Benelux are on the top the index, they need to stop harmful trade transactions (like illicit financial flows) with developing countries because of the damaging effect on their economies.

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven..**5**
Corruption perception index, Belgian partner countries and Benelux, 2014

Country/territory	Country rank*	CPI 2014 score**
Partners of Belgium (excl. West Bank and Gaza)		
Rwanda	55	49
South Africa	67	44
Senegal	69	43
Morocco	80	39
Peru	85	38
Algeria	100	36
Bolivia	103	35
Niger	103	35
Ecuador	110	33
Mali	115	32
Mozambique	119	31
Tanzania	119	31
Vietnam	119	31
Uganda	142	26
Democratic Republic of the Congo	154	22
Burundi	159	20
Benelux		
Netherlands	8	83
Luxembourg	9	82
Belgium	15	76

* In the study 175 countries are taking into account.
** Relates to the degree to which corruption is perceived to exist among public officials and politicians by business people and country analysts. Score ranges between 100 (highly clean) and 0 (highly corrupt).
Source Transparency International (2014)

3.6.2 Fragile state index

In a study of The Fund for Peace (FFP, 2014), a fragile state index (FSI) is calculated. The FSI shows both the normal pressures that all states experience and those pressures that can lead to a state failure. It is based on twelve key social, economic, or political and military indicators of the Conflict Assessment System Tool (CAST), whereby each indicator can be valued between 0 and 10. In Table 3.6 all these indicators are summarised. In the next Table 3.7 we only consider the Belgian partner countries and Benelux. The indexes are shown for the 12 indicators and the total ranking within a list of 178 countries. Here the highest number stands for the lowest fragility of the state. The level of (un)successful combatting illicit financial flows and creating a fair tax compliance to ensure a stable domestic tax revenue, can in particular be shown by the indicator 'State Legitimacy'.

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven.**.6**
The twelve indicators of the Fragility States Index (FGI), 2014

Social and economic indicators	Political and military indicators
Demographic Pressures	State Legitimacy
Refugees and IDPs	Public Services
Group Grievance	Human Rights and Rule of Law
Human Flight and Brain Drain	Security Apparatus
Uneven Economic Development	Factionalised Elites
Poverty and Economic Decline	External Intervention

Source: The Fund for Peace (FPP, 2014)

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven..**7 Fragile States Index 2014, Belgian partner countries (excl. West Bank and Gaza) and Benelux**

Rank		Fragile States Index 2014*	Demo-graphic pressures	Refugees and IDPs	Group grievance	Human flight	Uneven develop-ment	Poverty and economic decline	Legitimacy of the State	Public services	Human rights	Security apparatus	Fac-tionalised elites	External interven-tion
4	Congo (D. R.)	110.2	9.4	9.9	9.6	7.2	8.5	8.2	9.3	9.4	10.0	9.4	9.5	9.8
19	Niger	97.9	9.3	8.2	7.5	6.6	7.9	8.1	7.8	9.3	7.3	8.4	8.9	8.6
21	Burundi	97.1	8.7	9.0	8.1	6.5	7.5	8.8	8.1	8.6	8.0	7.4	7.9	8.5
22	Uganda	96.0	8.7	8.7	8.3	6.9	7.6	7.3	7.8	8.3	7.6	7.9	8.9	8.0
34	Rwanda	90.5	8.0	8.2	8.5	7.2	7.9	6.7	6.5	7.5	7.8	5.9	8.2	8.1
36	Mali	89.8	9.0	7.5	7.5	8.1	7.1	7.9	5.9	8.6	6.8	8.0	4.9	8.5
50	Mozambique	85.9	8.9	4.9	5.4	7.4	8.3	8.1	7.5	8.7	6.4	6.6	6.6	7.1
62	Senegal	82.8	8.1	7.3	6.6	7.1	7.0	7.0	6.0	7.9	6.5	6.5	6.6	6.2
65	Tanzania	80.8	8.6	6.7	5.9	6.7	6.7	6.7	6.0	8.7	6.3	5.2	5.7	7.6
70	Bolivia	78.9	6.6	4.3	6.8	6.1	8.6	5.9	6.9	7.0	6.0	6.4	8.0	6.3
71	Algeria	78.8	5.7	6.7	7.9	5.0	5.9	6.1	7.5	6.1	7.4	7.5	7.3	5.7
74	Benin	78.2	8.2	6.3	3.6	6.5	7.2	6.9	6.1	8.7	5.1	5.9	6.1	7.6
79	Ecuador	77.3	5.9	5.7	7.5	6.5	7.1	5.6	6.9	6.6	5.0	6.4	8.2	5.9
92	Morocco	74.4	5.7	5.6	6.8	7.3	6.6	5.6	6.6	5.9	6.5	6.0	6.6	5.2
	Peru	72.9	5.8	5.0	7.3	6.4	7.5	4.2	7.4	6.7	4.8	6.7	6.7	4.4
98	Vietnam	72.7	6.2	5.0	6.0	5.5	5.8	5.7	8.0	5.5	7.6	5.1	6.9	5.4
115	South Africa	66.6	7.4	6.2	5.8	4.6	7.7	5.8	5.0	6.1	4.3	4.9	5.6	3.2
164	*Belgium*	*32.0*	*2.8*	*1.6*	*4.2*	*1.9*	*3.5*	*4.0*	*2.0*	*2.4*	*1.5*	*2.3*	*3.9*	*1.9*
166	*Netherlands*	*28.6*	*3.3*	*2.4*	*4.1*	*2.4*	*2.4*	*3.7*	*1.0*	*1.8*	*1.2*	*2.1*	*2.6*	*1.6*
172	*Luxembourg*	*24.6*	*2.0*	*1.7*	*2.8*	*2.4*	*1.8*	*1.8*	*1.6*	*1.6*	*1.3*	*2.3*	*3.4*	*1.9*
	AVERAGE (178 countries)	***70.6***	***6.0***	***5.2***	***6.1***	***5.5***	***6.2***	***5.8***	***6.2***	***5.8***	***5.8***	***5.7***	***6.4***	***5.8***

* FSI-value refers to the level of states fragility, in different phases: alert (120-91), warning (90-61), stable (60-31), sustainable (30-0).

Source The Fund for Peace (2014, datasheet)

3.6.3 Basel Anti-Money Laundering (ALM) index

The overall score is calculated by aggregating 14 indicators where by the 5 groups of indicators are given a weight (which reflect their importance for representing AML): Money laundering/Terrorist Financing Risk (65%), Financial Transparency & Standards (15%), Corruption Risk (10%), Public Transparency & Accountability (5%), and Political & Legal Risk (5%).

In Table 3.8 below AML-scores, which annually ranks countries according to their risk regarding to money laundering/terrorism financing, are shown for a couple of the countries analysed in this study. The Basel AML Index (indicated by the overall score) is focused on anti-money laundering/counter terrorism frameworks and other related factors as public (financial) transparency and juridical strength. We notice that the less developed (mostly African) partner countries are confronted with a high risk. Besides, we also can observe a relatively high ranking for Luxembourg, but this country scores also high on the Financial Secrecy Index. The composite index is based on weighted average of 14 external factors. The index heavily relies on updated Financial Action Task Forces (FATF) reports. The reason for the high ranking of the developing countries is that the Basel AML Index not only refers to an adequate AML/CTF[7] framework, but also includes other factors: 'high rates of perceived corruption, a lack of juridical strength, a lack of resources to control the financial system, and a lack of public and financial transparency' (Basel Institute on Governance, 2014, p. 4). An important remark to keep in mind is: 'The Basel AML Index does not assess the amount of illicit financial money or transactions, but is designed to assess the risk of money laundering, i.e. to indicate the vulnerability of a country to money laundering and terrorism financing based on selected indicators' (Basel Institute on Governance, 2014, p. 5).

7 Counter-terrorist financing

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven..**8**
Public Basel Anti-Money Laundering (AML) Index Scores* 2014, 14 of the 18 Belgian partner countries and Benelux Countries

Country	Overall scores (10 = high risk, 0 = low risk)	Rank
Mali	8.1	7
Mozambique	7.9	9
Uganda	7.8	11
Bolivia	7.3	24
Niger	7.1	30
Tanzania	7.0	32
Vietnam	6.8	38
Benin	6.6	44
Algeria	6.6	45
Luxembourg	6.0	74
Ecuador	5.6	89
Morocco	5.6	92
Senegal	5.4	100
Netherlands	5.0	121
South Africa	5.0	128
Peru	4.4	143
Belgium	3.9	156

* Overall scores (10 = high risk, 0 = low risk). Rank is based on 162 countries.
Source Basel Institute on Governance (2014, August 13)

4 | Fiscal situation

When estimating the size of GDP, defining the size of the informal or undeclared or underground economy within or on top of it, is sometimes or most of the time already a tremendous statistical effort. We could expect that defining the total revenue and spending of the state itself would be easier since it should be recorded in the accounts of the government. Also that is not the case. Several official and voluntary efforts exist to get harmonised figures on the level of government revenues and expenditures and its structure. Traditional differences between social contributions and direct and indirect taxes, or regrouping according to the level of the government exist. The most appealing is the work of the ICTD International centre for Tax and Development. This data collection seems to be struggling for harmonised statistics on the identified categories of state revenue (or spending) and risks to include only information that is available for most of the countries 'in order to maximise data coverage' (Prichard, Cobham & Goodall, 2014, p. 28-29). Sometimes the detail is missing, sometimes information at general government is only available, you never know that all possible levels and categories are included. Statistics have to grow to maturity in terms of detail, scope, accurateness and exhaustiveness. Availability depends on the structure of a country. The most viable solution to this problem is to rely on central government data for centralised countries (for which general government data is not available), but to rely on general government data for all countries with significant sub-national revenue sources. In principle this approach risks creating a new set of distortions by ignoring sub-national revenue sources in highly centralised countries. However, in practice sub-national tax revenue generally accounts for less than 5 per cent of total tax revenue, and often a significantly smaller proportion, in highly centralised (generally low-income) countries (Ibidem). A pragmatic approach is needed. We retain here again the information for the 18 preferred partner countries of Belgium.

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven.**.1**
General government and its subsectors

General Government		
Central Government	State Government	Local Government
Social Security Funds		

Source Prichard, Cobham and Goodall (2014)

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven..**2**
Government revenue, list of used variables

Name used	Original name of variable	Description
Total government revenue due to Social Contributions	Social contributions	Total social contributions
Total government revenue due to Grants	Grants	Total grants received by government
Total tax revenue	TotTax	Total tax revenue excluding social contributions and natural resource revenue
Total non-tax revenue	TotNonTax	Total non-tax revenue, incorporating both revenue reported as 'non-tax' and the resource component of reported tax revenue. Calculated as TotRev-TotTax. More appropriate than relying on reported 'non-tax revenue' as it captures all revenue that is 'non-tax' for analytical purposes, and overcomes major differences across and within countries in the classification of resource revenue between the tax and non-tax categories.
Total government revenue (excluding grants and social contributions)	Revenue excluding grants and social contributions	Total government revenue, excluding grants and social contributions. This is the suggested total revenue variable for econometric analysis, as it is most consistent and complete across countries.
Total government revenue (including social contributions, excluding grants)	Revenue excluding grants (including social contributions)	Total government revenue, excluding grants
Total government revenue (including social contributions, including grants)	Revenue including social contributions	Total government revenue including taxes, non-tax revenue, grants and social contributions

Source International Centre for Tax and Development (2014)

The government revenues in Table 4.3 are based on general government data as long as they are available. Otherwise central government data are used. We need to remark that only Ecuador does not receive any grants; besides the grants for Ecuador and Peru are very low. In addition there are not non-tax revenues shown for Peru and West Bank and Gaza. In general we can conclude that non-tax revenues are much more important in the Belgian partner countries compared to the mature and rich economies of the Benelux.

ICTD concludes that 'an important starting point is an acceptance that, for low-income countries in particular, the quality of government data is sufficiently limited, and difficulties of consistent classification sufficiently significant, that highly disaggregated data is not a realistic goal. This is reflected, for example, in the fact that most countries continue to report data to the IMF on a cash and budgetary basis, despite a formal shift in the IMF 2001 Government Finance Statistics Manual towards reporting on an accrual basis. The goal is thus not to have perfect data, but to have good enough data for analysis – by which we mean that it is generally consistent over time, free of obvious discontinuities, and that the classification of revenue to different sub-components of taxation is consistent at least at a relatively high level of aggregation.'(Prichard, Cobham & Goodall, 2014, p. 17). We provide the figures as they can be found in the ICTD database, as a percentage of GDP. We include for comparison the information contained in the data source for the Benelux countries, and discover the missing of social security contributions for Luxembourg in 2009 (according to Eurostat figures some 11% of GDP).

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven..**3**
Government revenue (central and general government data*) in % of GDP, Belgian partner countries and Benelux, 2010 unless other year is mentioned

	Total government revenue due to social contributions	Total government revenue due to grants	Total tax revenue	Total non-tax revenue	Total government revenue (excluding grants and social contributions)	Total government revenue (including social contributions, excluding grants)	Total government revenue (including social contributions, including grants)
Algeria	0.0	0.0	10.7	25.7	36.4	36.4	36.4
Benin	0.0	1.5	16.2	2.4	18.6	18.6	20.0
Bolivia (2009)*	1.8	1.0	20.8	8.1	28.9	30.7	31.7
Burundi	0.0	22.7	13.7	0.9	14.6	14.6	37.3
Congo, Dem. Rep.	0.0	14.6	13.0	5.7	18.7	18.7	33.3
Ecuador (2009)	3.9	0.0	13.9	8.3	22.3	26.2	26.2
Mali	0.0	2.9	14.6	2.7	17.3	17.3	20.1
Morocco	0.0	0.2	23.4	3.9	27.3	27.3	27.5
Mozambique	0.0	8.4	18.1	2.2	20.3	20.3	28.7
Niger	0.0	3.1	11.9	2.5	14.4	14.4	17.5
Peru (2007)*	1.5	0.0	16.3	3.0	19.3	0.0	0.0
Rwanda	0.0	12.6	11.6	0.5	12.0	12.0	24.6
Senegal	0.0	2.5	18.8	0.7	19.4	19.4	22.0
South Africa (2008)*	0.7	0.1	29.2	7.1	36.3	37.0	37.1
Tanzania	0.0	5.8	14.6	1.2	15.9	15.9	21.7
Uganda	0.0	2.5	11.7	0.6	12.2	12.2	14.7
Vietnam (2007)*	0.0	0.5	16.6	11.5	28.2	28.2	28.7
West Bank and Gaza (2005)	0.0	1.9	0.0	0.0	0.0	0.0	1.9
18 partners of Belgium**	**0.7**	**1.0**	**19.6**	**9.5**	**29.1**	**29.7**	**30.7**
Belgium*	14.2	0.0	29.4	5.3	34.7	48.9	48.9
Luxembourg (2009)*	11.3	0.0	26.3	4.6	31.0	42.3	42.3
Netherlands (2008)*	14.5	0.0	24.7	7.4	32.2	46.7	46.7
Benelux**	**14.3**	**0.0**	**26.4**	**6.6**	**33.0**	**47.3**	**47.3**

* The dataset of countries based on general government data are marked with an '*'.
** Calculated as a weighted average.
Source International Centre for Tax and Development (2014)

We provide the figures for each individual partner country and the aggregate for the total group. There are huge differences. There are also huge differences between size and economic development so that the total structure of those countries, aggregated and thus weighted by the size of those economies, is dominated by the structure of the large countries.

Special categories of revenue for developing countries are international grants. This for instance differs substantially between those countries, partly perhaps because no information is available, partly because lower relevance. Also substantial for some countries are non-tax revenues, sometimes outweighing tax revenues. The general picture is an almost absent revenue from social contributions, a substantial (almost 10% of GDP for the 18 partner countries in total) of non-tax reve-

nue, but situated in one country especially (Algeria) and already/still 19.6% of GDP of traditional tax revenue. Those percentages are hampered by missed GDP because of tax evasion since we are not sure how 'exhaustive' (including the shadow economy) the GDP figures are.

For the development of fragile states, aid is the largest and most reliable resource. Fragile low income development countries heavily depend on aid, in fragile middle-income countries the sum of remittances and FDI are larger than aid. The OECD however, points to a declining trend of Official Development Assistance (ODA): a fall of 2.4% by 2011. It is an alarming trend giving the fact that the poorest fragile states often depend on ODA: from 55% to GDP to less than 0.5% of GDP. In contrast with the middle-income fragile countries, low-income fragile countries have little access to foreign direct investment (FDI) given that these countries are often considered less credit-worthy. Besides, the UN estimated that at least 20% of domestic revenue through taxes is needed to achieve the Millennium Development Goals (MDG) by 2015. Furthermore, the revenues rely heavily on one or two typical resources instead of a balanced mix. Besides, grants and trade tax are in general the most important sources for domestic revenue instead of direct tax (which just is very important for a sustainable development of a state). However, on average only 14% of GDP of fragile states consist of domestic revenue. In particular to reduce dependency on aid and to finance human development and recovery, an increase of tax revenue in fragile states is highly needed. Until now, most of the domestic revenue relies on non-renewable natural resources. In addition, major tax exemptions are given to multinational enterprises, which erode tax revenues and undermine tax fairness and tax compliance of the citizens. Besides, weak capacity of institutions makes them vulnerable for illicit financial flows. Both OECD countries and fragile countries need to take steps to comply with global standards of money laundering, tax evasion and bribery. In order to build the needed capacity to combat illicit financial flows, a key role is given to the donor agencies. So far however, only 0.07% of ODA to fragile states supports their tax systems (OECD 2014f, p. 11-12, 49-50).

In developing countries, where the government is confronted with a very strict budget, a lot of scepticism has risen (by many tax experts) about the net benefit of taxing informal sector, given the low revenue yields, high administrative costs and the questionable value of taxing low-income individuals (Joshi, Prichard & Heady, 2012, p. 10).

Joshi, Prichard and Heady (2012) presume themselves that the debate of taxation of the informal sector is too much emphasised on the limited revenue potential, high administrative costs and potential adverse effects on small firms. Based on a growing number of recent arguments, they argue to take into account more indirect benefits from taxing the informal economy in relation to economic growth, tax compliance and governance. Besides, they argue that the evolution of the effectivity of the taxation needs to be analysed on a broader scope (and thus not need to be limited in developing a less distortionary tax regime and tax simplification). Encouraging tax compliance demands not only lowering costs but also strengthening the potential benefits of formalisation of the economy, from increased security to new economic opportunities. To achieve this kind of successful tax reform, political support from political leaders, tax administrations and taxpayers will be needed.

5 | Financial flows and development and illicit financial flows

5.1 Definitions

There is a huge potential of misconception of the term of illicit. It probably cannot be considered as synonym with illegal. Blankenburg and Khan (2012, quoted in Hearson, 2014, p. 1) make the distinction between illicit financial flows strictly defined as illegal in the way they are created, transferred and used. A larger definition of illicit refers to all flows that 'have a negative impact on an economy if all direct and indirect effects in the context of the specific political economy of the society are taken into account'. It created huge problems of normative interpretation, as is demonstrated by Hearson. Is a flow illicit when it breaches the spirit, and not the letter of the law? Is it illicit when it aims at lobbying for tax concessions made within the legal powers to give those? And is it illicit or illegitimate when it tries to avoid a state itself that is considered as 'illicit' or 'illegitimate'?

Those definition problems goes back to the definitions we used above for describing the underground economy, and within it between illegal activities, tax evasion and tax avoidance. We favoured a large definition, including also tax expenditures or 'non-taxation', obtained for several reasons, better or worse. They all influence the tax base, the '*assiette fiscale*' and could lead to 'base erosion'. We adhere here a long tradition in Belgium of Max Frank (1987) to include in studies on fraud also all kind of other forms of non-taxation.

Illicit (or illegal) financial flows aim to transfer financial capital out of a country; in contravention of (inter)national laws, trough in general several illegal practices like money laundering, bribery by international companies and tax evasion, and mispricing (OECD, 2014a, p. 16). They partly can be called 'tax-motivated illicit financial flows' which certainly will undermine the development of the economy in developing countries (Hearson, 2014).

The origin or source of illicit financial flows can be related to illicit trade activities (OECD, 2014, Concept note IFF, p. 1).

The intended use of these flows can also differ: to finance illegal activities such as terrorism on the one hand, or to finance legal activities such as legal consumption on the other hand (OECD, 2014a, p. 16).

We have to remark that until now the limited literature on this subject, mostly focuses on outflows of corrupt profits, particularly those of 'kleptocrats'.[8] Much less is known about the financial outflows due to tax evasion, which however seems to be the most omnipresent of all kind of illicit financial flows (OECD, 2014a, p. 16).

According to Kar and Cartwright-Smith (2008) there is an important difference between illicit financial flows and flight capital. The term flight capital or capital flight states that the underlying problem is totally caused by the developing countries where the money comes from. In contrast, illicit financial flows states that this phenomenon is caused by both the developed countries and the developing countries.

8 'Kleptocracy is a form of political and government corruption where the government exists to increase the personal wealth and political power of its officials and the ruling class at the expense of the wider population, often without pretence of honest service. This type of government corruption is often achieved by the embezzlement of state funds' (OECD, 2014a, p. 91).

5.2 Institutions involved

It is telling that most of the evidence on illicit financial flows nowadays comes from NGO's, illustrating their pioneer role to put those problems again on the agenda. The expert on Money laundering, P. Reuter (February, 2015) highlighted in a recent presentation the absence of much academic research on the issue. As with the estimate of the size of the underground economy, there is also a need of more official efforts to estimate those flows. World Bank and IMF are important providers of basic information used by the NGO's mentioned hereafter. Combined with the recent interest of OECD for those issues, this is probably not at all unthinkable. But the road will be long. In the overview hereafter one official organisation is mentioned UNECA, that presented recently a report on IFF including some of the Belgium partner countries.

International Centre for Taxation and Development (ICTD) is a research institute focusing on the political economy of taxation in poorer parts of the world. It is a global policy network that works together with a couple of partners, for instance Institute of Development Studies (IDS). By 2010, the institute is established as a consortium of organisations and individuals interested in tax and development issues. It is funded by the UK Government's Department for International Development (DFID) and with additional funding from the Norwegian Agency for Development Cooperation (NORAD). The dataset in their Working Paper 'The ICTD Government Revenue Dataset' (Prichard, Cobham & Goodall, 2014) includes data based on six major cross-country databases (IMF, Governmental Finance Statistics, World Bank Development Indicators, OECD Tax Statistics, OECD Revenue Statistics in Latin America dataset, CEPAL, Tax Statistics, and the EEO African Fiscal Performance) and on data coming from all available IMF Article V Reports. The extra benefits of these IMF-data are twofold: '(1) more complete data coverage (particularly for low income countries) which full some gaps in existing international datasets, (2) it is the only consistent source that disaggregates the resource and non-resource components of tax revenues […].' In addition, 3 datasets developed by researchers have been included in the survey of possible sources: Keen and Mansour (2009), which is based on IMF Article IV reports, the Michigan Ross School of Business World Tax Database (WTD) and the Oxford Latin America Economic History Database (OxLAD). For the most part these latter datasets have not been included in the final version of the ICTD GRD (Prichard, Cobham & Goodall, 2014, p. 20-22).

U4 Anti-Corruption Resource Centre is a NGO that assist donor practitioners in more effectively addressing corruption challenges through their development support. They have partners over the whole world, for instance the Belgian Federal Public Service Foreign Affairs Directorate-General for Development Cooperation (FPS DGD).

Global Financial Integrity (GFI) is a non-profit, Washington, DC-based research and advisory organisation, which produces high-quality analyses of illicit financial flows, advises developing country governments on effective policy solutions, and promotes pragmatic transparency measures in the international financial system as a means to global development and security. By 2005 the organisation was launched by Raymond Baker, an international 'entrepreneur-turned-scholar'.

Tax Justice Network (TJN) is a political independent international network launched in 2003. Based on high-level research, advocacy and analysis on the international aspects of financial regulation; on the role of tax in society; and on the impact of tax avoidance and tax evasion, tax competition and tax havens, they try to create an framework that enhance the understanding of the debate and to promote the needed reforms, in particular in poor countries.

The Fund for Peace (FFP) is an independent, non-partisan, non-profit research and educational organisation that works to prevent violent conflict and promote sustainable security.

Basel Institute on Governance is an independent not-for-profit competence centre working around the world with the public and private sectors to counter corruption and other financial crimes and to improve the quality of governance.

United Nations Economic Commission for Africa (UNECA) is established in 1958 by the Economic and Social Council (ECOSOC) of the United Nations (UN) as one of the UN's five regional commissions. UNECA is made up by Member States and plays a major role in the African institutional landscape. Its mandate is to promote economic and social development of its member states, foster intra-regional integration and promote international cooperation for the development of Africa.

5.3 Measurement

As became clear from the definition, there is no real difference between capital flight and illicit financial flows. It implies also that although the recent interest, the measurement has a long tradition, not only in academia but also in the World Bank and the IMF. But the statistics were on 'capital flight'. Those official organisations are also the providers of the building blocks of the new calculations. This implies also that the methodologies used go back to a longer tradition. We give here a stylised version of methodologies in use.

Most of the methodologies are estimates based on existing international accounts so that they probably suffer from the weaknesses of those data.[9]

1. The Hot Money Narrow Model (HMN)
   This is the simplest definition of capital flight and is based on the BOP. Capital flight is defined as **unrecorded** flows between a country and the rest of the world. In the balance of Payments the 'missing money' between inflows and outflows is reported as 'net errors and omissions'.

   Capital flight = all funds coming in (credit)–all funds going out (debt)

   Following the bookkeeping principle, credits should offset debts, however when this is not the case, there is some discrepancy, called 'Net Errors and Omissions' (NEO) which indicates the existence of illicit financial flows. The model has been used in the past and has been used from 2012 on in the Global Financial Integrity estimates of illicit financial flows.

2. The World Bank Residual Model (WBR)
   This refers to one of the first methodologies developed by the World Bank. It is based again on Balance of Payments (BOP)-data.

   Capital flight = (increase in foreign debt+increase in foreign direct investment)–(the current account deficit+additions to country's foreign reserves).
   Or:
   Capital flight = (sources of funds)–(uses of funds).

   Capital flight occurs when sources of funds (via the increase of the net external debt of direct foreign investment) exceeds the uses of funds for financing the current account deficit or the increase of foreign reserves (Claessens & Naudé, 1993).
   This methodology has been originally used by Global Financial Integrity until 2011 as the CED- parameter (change in external debt) (Kar & Freitas, 2012). Later on it has been replaced

9 Overview of methodologies based among others on Fontana, 2010.

by a more conservative estimate of the Hot Money Narrow Model that considers the unexplained leftovers in the Balance of Payments (BOP) to be illicit flows, although this also can include accidental errors.
The World Bank Residual model calculates the difference between sources and used funds for each country in order to estimate illicit financial flows. The raw data themselves however remains to be suffering from similar weaknesses as the HMN-figures. The World Bank Residual Model seems to offer however more robust estimates while the Hot Money Model is more conservative: the HMN estimate seems to be 32.5% lower than the WBR estimate (Kar & Spanjers, 2014, p. 5).

3. Models based on Trade data: trade misinvoicing
   Trade misinvoicing is a transaction of goods between unrelated parties to transfer illicit money flows abroad. Businesses collude with an unrelated party abroad to shift money between countries by a kind of transfer mispricing. An example is a buyer who only pays a standard price to the seller although it is billed at a higher price. The seller will deposits the price difference on behalf of the buyer at a banking account in a secrecy jurisdiction.
   Illicit financial flows are measured as the difference between a country claimed it imported or exported and what the rest of the world stated it exported or imported to this country. These basic statistics can be found in the IMF-database called Direction of Trade Statistics (DOTS). Again alternative methodologies are thinkable. 'Trade misinvoicing is a method for moving money illicitly across borders which involves deliberately misreporting the value of a commercial transaction on an invoice submitted to customs. It can be seen as a form of trade-based money laundering'.[10]
   The Global Financial Integrity uses a Gross Excluding Reversals (GER) definition, what means that only outflows because of export or import mispricing are taken into account. In theory via mispricing also inflows are thinkable, but GFI did not want to include them by netting outflows with inflows. The outflows are a real missed flow for funding for the country involved, and that need not to be compensated (if there are) with inflows that on the contrary could add to illicit activities (Kar & Spanjers, 2014, p. 4).

4. Transfer mispricing:
   Transfer mispricing refers to completely legal transaction of goods between two related subsidiaries of a MNE. Following the 'arm's length'-principle (OECD-guideline) correct prices must be charged as if they are unrelated companies. When this is not the case, in particular to avoid taxes, this is called 'transfer mispricing' or 'abusive transfer pricing'. An example is that one subsidiary producing goods in a high tax country will sell their goods at loss to the other subsidiary in a low tax country, which then sells the goods and realises the profits. It is however difficult to prove this kind of price manipulation and to check if it is within the OECD guidelines.

5. Other missing money: unrecorded remittances

6. The 'Walker Gravity model'
   The model estimates directly financial flows from illegal activities. It is an estimation of the total amount of proceeds of crime within a country. Walker multiplied the proceeds of crimes by their market price and took into account an estimated percentage (by conducting surveys) for money laundering, in order to calculate the total amount of IFF. The flows between countries were estimated based on 2 hypothesis: the distance between any 2 countries, and the attractiveness of a country to 'dirty' money. This explains why the model is called nowadays the 'Walker Gravity Model'.

10 Source: http://www.gfintegrity.org/issue/trade-misinvoicing/

7. Surveys

   In first attempts to estimate unrecorded money disappearing from the developing countries (quoted in Kar & Spanjers, 2014, p. iii) a survey was used involving '885 interviews in some 25 countries'. The GFI decided from the beginning not to use that methodology any further. They prefer methodologies that were already in use by among others the World Bank, based on existing macro-economic sources.

8. The composite model

   In the past many studies on capital flight or illicit financial flows are made according to different methodologies or even variants of it, illustrating the strengths but also the weaknesses of each indicator. They risk being also different by scope, so that presenting different estimates will not contribute to transparency. Sometimes they are only a part of a larger total, so they need to be aggregated. The above mentioned overview makes it clear that different components of a narrow or larger definitions of capital flight or illicit financial flow is at stake. Parts can be directly measured from the balance of payment, other need to be additionally estimated on other sources.

   We provide hereafter the results of more recent studies on capital flight or illicit financial flows and they all combined several methodologies. Since measuring illicit financial flows need to be calculated for two main flows: funds flowing through the financial system and funds manipulated trough export and import transactions. There is no overlap between these two flows because they are based on two difference administrative data, balance of payment statistics and trade statistics.

   Most existing estimates of illicit financial flows come from non-governmental organisations (NGO's), particularly Global Financial Integrity (GFI) (OECD, 2014a). Between many estimates and sources on illicit financial flows the work of the Global financial Integrity has been the most consistent and persistent. December 2014 a 6th annual report on illicit financial flows from developing countries has been published. Global Financial Integrity estimates the flow because of misinvoicing of external trade and the leakages from the balance of payments. For the leakages in the balance of payments before 2011 they used as well the World Bank Residual model as the Hot money Narrow model. Since 2014 they prefer the more conservative HMN instead of WB Residual model (Kar & Spanjers, 2014, p. 5)

Two major sources of illicit financial flows are identified: through misinvoicing in external trade and through leakages in the balance of payments. (Kar & Spanjers, 2014, p. 3).

Global Financial Integrity uses two sources to calculate illicit financial outflows. The studies show that between 2003 and 2012, the major source 'Trade Misinvoicing outflows' account for 77.8% of the total illicit financial flows, while 'Illicit Hot Money Outflows' account for the other 22.2%. The cumulative amounts (in billions of nominal USD) are respectively 5,101.1 and 1,486.0, summing up to an amount of 6,587.1. Statistically defined, the first component refers to outflows due to deliberate trade misinvoicing, the latter refers to outflows due to leakages in the balance of payments (Kar & Spanjers, 2014, p. 7-8). They calculate gross illicit financial outflow based on a combination of Trade misinvoicing (GER)-model and HMN-model. 'The methodology used by the Washington, DC-based Global Financial Integrity to estimate 'illicit financial flows,' in contrast, sets to zero the values of capital flight and its components (BoP leakages, export and import misinvoicing) when they are negative (it are inflows) (see Kar & Cartwright, 2010), on the grounds that these 'reversals' should not be deducted from the measure of illicit flows' (Boyce & Ndikumana, 2012, p. 7).

Other recent estimates of capital flight are made by Boyce and Ndikumana (2012) based again on a combination of trade misinvoicing and the WBR-model. Boyce and Ndikumana (2012) calculate for

the period 1970–2010 the real capital flight for the last 30 years and the cumulated stock of capital flight for a number of developing countries.

The net capital flight (CF) includes:
- capital flight using the World Bank Residual model;
- net export misinvoicing and import misinvoicing;
- unrecorded remittances.

In contrast with GFI, net illicit flows are calculated which can lead to positive or negative values. According to the authors this computation of a 'net' measure of unrecorded capital flows is the standard practice in the economics literature.

To show the size of illicit financial flows, we use the estimations of gross financial outflows made by GFI (Kar & Spanjers, 2014) and the size of net capital flight calculated by Boyce and Ndikumana (2012). Although the estimated size of IFF by GFI (Kar & Spanjers, 2014) are in line with the estimated capital flight (as sum of licit and illicit flows) by Boyce & Ndikumana (2012) for the 33 Sub-Saharan African countries for the period 2000-2010, there are three important differences mentioned between these two estimates (Kar & Spanjers, 2014). First of all Kar and Spanjers (2014) only calculated gross outflows, while Boyce and Ndikumana (2012) consider net flows, thus subtracting inflows from outflows. Second, both calculations are based on a different methodology: World Bank Residual WBR-model (Boyce & Ndikumana, 2012) instead of Hot Money Narrow (HMN)-model (Kar & Spanjers, 2014). Last but not least, Boyce and Ndikumana (2012) included unrecorded remittances (which account for 12.8 of their estimated capital flight), while Kar and Spanjers (2014) didn't do that.

Of relevance for the Belgian partner countries is finally the recent UNECA approach for estimating IFF published by the High Level Panel on Illicit Financial Flows. It is similar to the Trade Mispricing Model. 'The ECA analysis takes the discrepancy between the data reported on the imports and on the exports of the same flow and subtracts the differences between CIF (cost of insurance and freight) and FOB (free-on-board) values and the ad valorem equivalent of the delays in the export/import process (High Level Panel on Illicit Financial Flows from Africa, n.d., p. 94). The approach nets of the IFF estimates. To estimate IFF at product level, ECA uses data from UN Comtrade. In their study IFF are shown for 10 sectors, classified according to the so-called Harmonised System of industries at two-digit level (HS2).

5.4 Gross illicit financial flows and its components

The following tables and figure give an overview of the latest estimates for illicit financial outflows as the sum of hot money outflows and trade misinvoicing outflows (Kar & Spanjers, 2014).

In contrast with other academic literature, the study of Kar and Spanjers (2014) only calculates gross illicit outflows, so that illicit inflows cannot be net out. The decline in 2010 can possible be explained by the effect of the recent financial crisis on global trade. In the report of the High Level Panel on Illicit Financial Flows from Africa (2015), where a decline of illicit financial flows from Africa by 2009 was shown (at the background of raising trend of IFF), the authors assumed that this 'strange' phenomena was caused by the financial crisis. This phenomena cannot only be observed for the considered Belgian partner countries, but also for the Sub-Saharan African countries. However, for all developing countries together such a recession dip cannot be observed.
In 2012 almost 1 trillion USD is the gross figure for all developing countries. The total for the 18 partner countries of Belgium is 46 billion USD or some 3.5% of GDP, of which some 2/3 is related with South-Africa.

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven..**1 Gross illicit financial outflows estimates [1] for Belgian partner countries and regions of developing countries: 2003-2012 (in billions of USD, nominal)**

Country	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Cumula-tive [2]	Average [2]
Algeria	0.5	0.8	0.2	2.3	1.3	3.4	3.2	1.4	0.2	2.6	15.8	1.6
Benin	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.4	0.0
Bolivia	0.2	0.6	0.4	0.1	0.1	0.0	0.5	0.8	0.0	1.4	4.0	0.4
Burundi	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.8	0.1
Congo, Democratic Republic of	0.5	0.5	0.5	0.5	0.2	0.0	0.3	0.3	0.0	0.1	3.0	0.3
Ecuador	0.0	0.9	2.0	1.2	1.2	6.1	1.2	0.4	1.6	1.9	16.4	1.6
Mali	0.3	0.1	0.2	0.2	0.2	1.0	0.3	0.9	0.6	0.3	4.1	0.4
Morocco	0.6	0.9	3.5	0.7	0.6	0.4	1.8	0.5	0.2	0.8	10.0	1.0
Mozambique	0.1	0.0	0.0	0.4	0.1	0.0	0.0	0.6	0.0	0.0	1.2	0.1
Niger	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.5	0.2	0.2	1.4	0.1
Peru	0.7	0.7	0.9	0.9	0.5	1.4	2.9	0.0	1.0	0.0	9.0	0.9
Rwanda	0.0	0.2	0.0	0.1	0.2	0.1	0.3	0.4	0.5	0.6	2.6	0.3
Senegal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South Africa	0.0	2.5	3.4	9.8	18.6	19.7	19.6	4.1	15.3	29.1	122.1	12.2
Tanzania	0.3	0.1	0.7	0.0	0.1	0.4	0.3	1.4	0.6	0.7	4.6	0.5
Uganda	0.3	0.5	0.8	0.5	0.7	1.0	1.4	1.2	0.0	0.6	7.1	0.7
Vietnam	0.0	0.9	0.4	0.0	0.6	1.0	9.0	3.7	5.5	6.9	28.0	2.8
Partners of Belgium (excl. West Bank and Gaza)	3.6	9.0	13.3	16.8	24.5	34.6	41.0	16.4	25.9	45.6	230.6	23.1
Sub-Saharan Africa	12.1	20.3	38.2	51.1	67.0	73.4	75.0	58.0	65.2	68.6	528.9	52.9
Asia	131.2	167.1	184.7	201.3	227.3	263.4	267.3	368.1	371.4	473.9	2,655.6	265.6
Developing Europe	68.1	73.9	85.9	95.9	131.7	168.1	175.1	170.3	250.9	166.5	1,386.4	138.6
MENA	6.0	22.7	57.8	51.1	42.6	131.8	118.6	74.2	109.2	113.4	727.4	72.7
Western Hemisphere	80.0	96.9	122.3	103.3	124.9	156.7	112.3	151.4	172.0	168.8	1,288.8	128.9
All Developing Countries [2]	297.4	380.8	489.0	502.8	593.5	793.4	748.3	821.9	968.7	991.2	6,587.1	658.7

[1] Calculations based on the methodology Hot Money Model (HMN) + Gross Excluding Reversals (GER). '(.)' indicates no available data, whereas '(0)' indicates a value of 0.

[2] The cumulative amount stands for the aggregate of outflows in the period 2003-2012, the average is calculated as the arithmetic mean of outflows in the same period.

[3] Based on the IMF's classification of a 'developing country' which includes some large countries like Russia. A similar study of Eurodad (Griffiths, 2014) is based on the World Bank' system classification of a 'developing country' which is more strictly and by consequent yield lower amounts of IFF (e.g. 634 instead of 969 by 2011).

Source Report data Appendix 3 [Excel sheet] Kar and Spanjers (2014)

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven..**2 Gross illicit financial outflows estimates** [1] **for Belgian partner countries: 2003-2012 (in percentage of GDP)**

Country	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Cumula-tive	Average
Algeria	0.7	0.9	0.2	1.9	1.0	2.0	2.3	0.9	0.1	1.3	9.6	1.2
Benin	1.7	2.9	0.8	0.0	0.0	0.0	0.1	3.0	0.0	0.0	3.8	0.5
Bolivia	2.1	7.1	3.9	0.9	0.9	0.0	2.6	4.1	0.0	5.1	17.5	2.2
Burundi	2.0	2.1	10.0	10.5	3.8	0.0	7.0	0.6	6.2	5.5	43.7	5.5
Congo, Democratic Republic of	5.6	5.2	4.5	3.2	1.0	0.0	1.7	1.7	0.0	0.5	12.7	1.6
Ecuador	0.1	2.4	4.8	2.6	2.4	9.9	1.9	0.6	2.0	2.3	26.4	3.3
Mali	6.3	2.6	3.3	3.7	2.6	11.1	3.6	9.6	5.5	3.2	42.6	5.3
Morocco	1.1	1.6	5.9	1.0	0.8	0.5	2.0	0.6	0.2	0.8	11.8	1.5
Mozambique	1.8	0.0	0.0	5.1	1.3	0.0	0.2	6.1	0.2	0.0	12.9	1.6
Niger	0.5	2.8	3.6	0.0	2.4	1.8	0.0	9.3	2.7	3.5	23.3	2.9
Peru	1.3	1.0	1.3	1.0	0.5	1.1	2.4	0.0	0.6	0.0	6.9	0.9
Rwanda	1.6	10.4	1.4	4.4	4.8	3.1	5.5	7.9	8.2	8.6	43.7	5.5
Senegal	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
South Africa	0.0	1.2	1.4	3.8	6.5	7.2	6.9	1.1	3.8	7.6	38.3	4.8
Tanzania	2.9	0.7	5.0	0.3	0.3	1.9	1.4	5.9	2.6	2.5	19.9	2.5
Uganda	5.1	6.6	9.1	4.7	5.7	7.1	9.8	7.3	0.2	3.2	47.0	5.9
Vietnam	0.0	1.9	0.7	0.0	0.7	1.1	8.5	3.2	4.0	4.4	22.7	2.8
Partners of Belgium (excl. West Bank and Gaza)	**0.8**	**1.5**	**2.0**	**2.3**	**2.9**	**3.7**	**4.4**	**1.5**	**2.1**	**3.5**	**22.4**	**2.8**

[1] Calculations based on the methodology Hot Money Model (HMN) + Gross Excluding Reversals (GER). '(.)' indicates no available data, whereas '(0)' indicates a value of 0.
[2] The cumulative amount stands for the aggregate of outflows in the period 2003-2012, the average is calculated as the arithmetic mean of outflows in the same period.
[3] Based on the IMF's classification of a 'developing country' which includes some large countries like Russia. A similar study of Eurodad (Griffiths, 2014) is based on the World Bank' system classification of a 'developing country' which is more strictly and by consequent yield lower amounts of IFF (e.g. 634 instead of 969 by 2011).

Source Report data Appendix 4 [Excel sheet] Kar and Spanjers (2014)

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven..**3 Trade misinvoicing outflows (GER) for Belgian partner countries and regions of developing countries: 2003-2012 (in billions of USD, nominal)** [1]

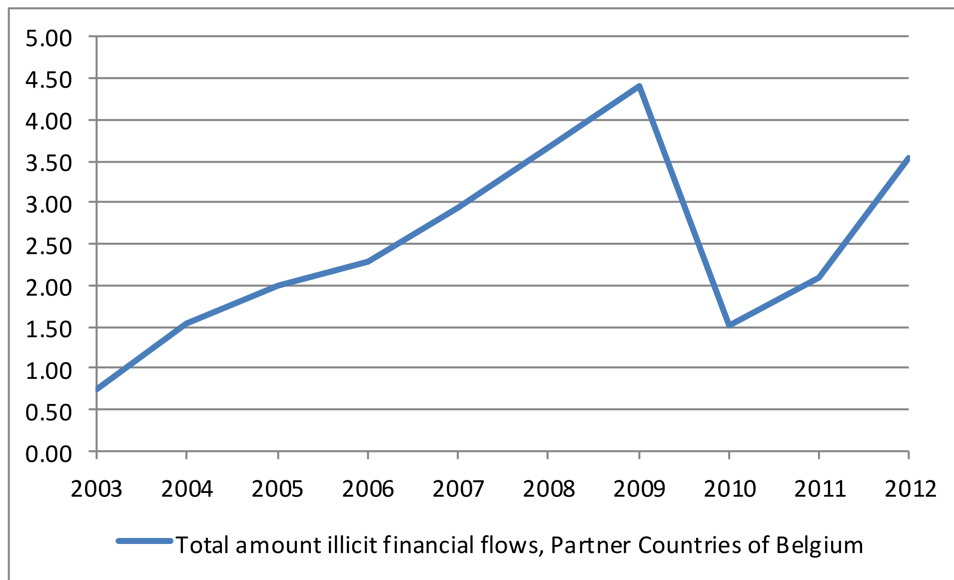
Country	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Cumula-tive	Average
Algeria	0.5	0.8	0.0	0.3	0.0	0.0	1.0	0.0	0.0	0.0	2.6	0.3
Benin	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.4	0.0
Bolivia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.0
Burundi	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.5	0.0
Congo, Democratic Republic of	0.5	0.5	0.5	0.4	0.0	0.0	0.3	0.3	0.0	0.0	2.7	0.3
Ecuador	0.0	0.9	2.0	1.2	1.2	6.1	1.0	0.4	1.6	1.8	16.2	1.6
Mali	0.3	0.1	0.1	0.2	0.2	1.0	0.3	0.9	0.5	0.3	3.9	0.4
Morocco	0.3	0.6	3.1	0.2	0.6	0.0	1.3	0.4	0.0	0.5	6.9	0.7
Mozambique	0.1	0.0	0.0	0.4	0.1	0.0	0.0	0.6	0.0	0.0	1.1	0.1
Niger	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.5	0.2	0.2	1.3	0.1
Peru	0.7	0.7	0.9	0.5	0.4	1.2	2.3	0.0	0.0	0.0	6.7	0.7
Rwanda	0.0	0.2	0.0	0.1	0.2	0.1	0.3	0.4	0.5	0.6	2.6	0.3
Senegal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South Africa	0.0	2.5	3.4	9.8	18.6	19.7	16.6	3.6	15.3	28.9	118.4	11.8
Tanzania	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.3	0.2	0.7	0.1
Uganda	0.2	0.3	0.4	0.5	0.7	1.0	1.2	1.2	0.0	0.6	5.9	0.6
Vietnam	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	0.1
Partners of Belgium (excl. West Bank and Gaza)	**2.6**	**6.7**	**10.7**	**13.7**	**22.1**	**29.1**	**24.3**	**8.5**	**18.6**	**35.3**	**171.7**	**17.2**
Sub-Saharan Africa	8.0	18.5	18.0	33.4	47.9	49.9	41.0	33.9	54.4	59.0	363.8	36.4
Asia	124.5	160.4	169.8	184.4	211.9	242.1	197.6	272.3	334.1	354.0	2,251.1	225.1
Developing Europe	52.5	63.5	69.8	86.1	107.2	133.3	152.3	147.5	223.8	144.9	1,180.7	118.1
MENA	3.0	19.9	11.7	11.7	10.5	19.4	20.6	21.1	26.2	32.6	176.5	17.7
Western Hemisphere	69.5	84.8	100.0	96.8	118.0	149.5	103.1	119.5	148.3	139.4	1,129.0	112.9
All Developing Countries [2]	257.5	347.1	369.2	412.4	495.5	594.1	514.5	594.3	786.7	729.9	5,101.1	510.1

[1] '(.)' indicates no available data, whereas '(0)' indicates a value of 0.

[2] Based on the IMF's classification of a 'developing country' which includes some large countries like Russia. A similar study of Eurodad (Griffiths, 2014) is based on the World Bank' system classification of a 'developing country' which is more strictly and by consequent yield lower amounts of IFF (e.g. 634 instead of 969 by 2011).

Source Report data Appendix 4 [Excel sheet] Kar and Spanjers (2014)

Figure Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven..**1** **Gross illicit financial outflows estimates for Belgian partner countries*, 2003-2012 (in % of GDP)**



* Weighted average (weight = GDP) of IFF for Belgian partner countries (West Bank and Gaza excluded).
Source Total for partners of Belgium, see Table 5.3

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven.**.4**
The components of trade misinvoicing (GER) for developing countries: 2003-2012, cumulative (in millions of USD, nominal)

Country	Import misinvoicing		Export misinvoicing		Total trade misinvoicing inflows	Total trade misinvoicing outflows	Gross trade misinvoicing
	Over-invoicing (a)	Under-invoicing (b)	Over-invoicing (c)	Under-invoicing (d)	(b+c)	(a+d)	(a+b+c+d)
Algeria	1,040.2	21,033.8	44,640.1	1,538.7	65,673.9	2,578.8	68,252.7
Benin	0.0	32,946.1	2,805.6	396.7	35,751.7	396.7	36,148.4
Bolivia	418.4	3,241.2	13,649.8	0.0	16,891.0	418.4	17,309.4
Burundi	462.2	35.7	156.0	24.4	191.7	486.5	678.2
Congo, Democratic Republic of	2,676.4	468.8	7,398.3	0.0	7,867.1	2,676.4	10,543.5
Ecuador	7,921.6	427.9	388.1	8,246.6	816.1	16,168.1	16,984.2
Mali	3,885.9	0.0	13,824.0	0.0	13,824.0	3,885.9	17,709.9
Morocco	1,639.0	8,358.2	2,542.7	5,265.6	10,900.9	6,904.6	17,805.4
Mozambique	445.6	4,262.7	2,093.7	666.1	6,356.4	1,111.8	7,468.2
Niger	1,188.6	242.4	3,186.2	86.3	3,428.6	1,274.9	4,703.5
Peru	6,743.5	3,138.6	34,133.9	0.0	37,272.5	6,743.5	44,016.0
Rwanda	2,323.9	62.1	723.7	236.6	785.8	2,560.6	3,346.4
Senegal	0.0	11,484.4	2,690.5	7.8	14,174.9	7.8	14,182.7
South Africa	23,334.6	6,744.0	2,908.0	95,041.4	9,652.0	118,376.1	128,028.0
Tanzania	737.7	627.5	8,212.9	0.0	8,840.5	737.7	9,578.2
Uganda	5,921.4	0.0	6,675.5	0.0	6,675.5	5,921.4	12,596.9
Vietnam	0.0	77,046.5	24,630.4	1,454.6	101,677.0	1,454.6	103,131.6
Partners of Belgium (excl. West Bank and Gaza)	**58,739.0**	**170,120.1**	**170,659.4**	**112,964.8**	**340,779.5**	**171,703.7**	**512,483.2**
Sub-Saharan Africa	*156,799.8*	*260,137.7*	*268,149.8*	*204,310.1*	*528,287.5*	*361,109.9*	*889,397.4*
Asia	*796,487.9*	*4,769,072.8*	*1,273,829.5*	*1,454,577.1*	*6,042,902.3*	*2,251,065.0*	*8,293,967.3*
Developing Europe	*264,874.8*	*1,093,418.1*	*1,684,714.5*	*915,795.9*	*2,778,132.7*	*1,180,670.7*	*3,958,803.4*
MENA	*118,370.8*	*577,153.2*	*1,696,558.4*	*58,175.8*	*2,273,711.6*	*176,546.5*	*2,450,258.1*
Western Hemisphere	*595,150.8*	*845,359.5*	*416,005.9*	*533,890.5*	*1,261,365.4*	*1,129,041.2*	*2,390,406.6*
All Developing Countries	*1,932,894.4*	*7,546,675.2*	*5,346,751.4*	*3,168,212.2*	*12,893,426.6*	*5,101,106.6*	*17,994,533.2*

Source Report data Appendix 4 [Excel sheet] Kar and Spanjers (2014)

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven..**5 Illicit hot money outflows (HMN) [1] for developing countries: 2003-2012 (in millions of USD, nominal) [1]**

Country	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Cumula-tive	Average
Algeria	.	.	189.2	1,962.0	1,300.6	3,378.4	2,131.3	1,406.0	186.7	2,619.9	13,174.1	1,646.8
Benin	0.0	10.1	0.0	0.0	0.0	0.0	5.8	0.0	0.0	.	15.9	1.8
Bolivia	173.5	625.4	374.5	105.0	111.7	0.0	453.5	802.3	0.0	960.8	3,606.8	360.7
Burundi	13.9	19.5	84.3	0.0	37.3	0.0	108.6	0.0	0.0	0.0	263.5	26.4
Congo, Democratic Republic of	0.0	0.0	0.0	17.4	169.5	0.0	0.0	0.0	0.0	148.3	335.3	33.5
Ecuador	0.0	0.0	0.0	0.0	0.0	0.9	130.7	0.0	0.0	148.6	280.1	28.0
Mali	0.0	26.3	29.1	37.4	0.0	0.0	74.1	0.0	53.4	.	220.3	24.5
Morocco	297.1	282.0	407.1	520.6	0.0	412.2	521.0	159.5	243.4	229.2	3,072.1	307.2
Mozambique	0.0	0.0	0.0	0.0	0.0	0.0	22.9	0.0	19.9	0.0	42.8	4.3
Niger	14.6	0.0	0.0	0.0	18.1	57.4	0.0	0.0	.	.	90.1	11.3
Peru	0.0	0.0	0.0	407.2	138.5	122.7	596.2	0.0	1,019.8	0.0	2,284.4	228.4
Rwanda	0.0	8.6	0.0	0.0	0.7	19.5	0.0	13.6	0.0	0.0	42.5	4.2
Senegal	0.0	0.0	3.1	0.0	0.0	0.0	0.0	3.7	0.0	.	6.8	0.8
South Africa	0.0	0.0	0.0	0.0	0.0	0.0	3,048.9	516.4	0.0	203.6	3,768.9	376.9
Tanzania	339.8	95.7	704.4	0.0	0.0	389.9	247.8	1,295.8	317.0	490.0	3,880.4	388.0
Uganda	164.1	270.3	449.6	10.8	22.5	0.0	286.7	0.0	0.0	0.0	1,204.0	120.4
Vietnam	0.0	914.6	396.7	0.0	577.9	1,045.0	9,022.0	3,690.0	5,477.0	5,470.0	26,593.1	2,659.3
Partners of Belgium (excl. West Bank and Gaza)	**1,003.0**	**2,252.5**	**2,637.8**	**3,060.5**	**2,376.9**	**5,426.0**	**16,649.6**	**7,887.4**	**7,317.2**	**10,270.3**	**58,881.2**	**6,222.4**
Sub-Saharan Africa	*4,147.1*	*1,752.9*	*20,258.8*	*17,745.5*	*19,134.2*	*23,506.8*	*33,971.0*	*24,112.0*	*10,816.1*	*9,670.8*	*165,115.1*	*16,511.5*
Asia	*6,696.5*	*6,656.0*	*14,981.0*	*16,911.5*	*15,377.2*	*21,275.9*	*69,763.0*	*95,741.3*	*37,351.5*	*119,828.6*	*404,582.5*	*40,458.3*
Developing Europe	*15,647.5*	*10,397.4*	*16,121.9*	*9,827.3*	*24,550.0*	*34,861.3*	*22,782.4*	*22,796.0*	*27,108.7*	*21,686.3*	*205,778.7*	*20,577.9*
MENA	*2,983.8*	*2,841.3*	*46,104.2*	*39,400.3*	*32,100.8*	*112,460.9*	*98,018.3*	*53,078.3*	*83,052.5*	*80,777.9*	*550,818.2*	*55,081.8*
Western Hemisphere	*10,447.7*	*12,129.2*	*22,345.5*	*6,503.2*	*6,850.4*	*7,200.0*	*9,276.2*	*31,909.3*	*23,670.1*	*29,400.6*	*159,732.1*	*15,973.2*
All Developing Countries [2]	*39,922.6*	*33,776.7*	*119,811.4*	*90,387.7*	*98,012.6*	*199,305.0*	*233,810.8*	*227,637.0*	*181,998.8*	*261,364.2*	*1,486,026.8*	*148,602.7*

[1] Also referred to as 'Leakages in the Balance of Payments'. '(.)' indicates no available data, whereas '(0)' indicates a value of 0.

[2] Based on the IMF's classification of a 'developing country' which includes some large countries like Russia. A similar study of Eurodad (Griffiths, 2014) is based on the World Bank' system classification of a 'developing country' which is more strictly and by consequent yield lower amounts of IFF (e.g. 634 instead of 969 by 2011).

Source Report data Appendix 5 [Excel sheet] Kar and Spanjers (2014)

5.5 Capital flight

In Table 5.6 we see that the total considered group of Belgian partner countries are net creditors to the rest of the world given the fact that the accumulated stock of capital flight (132.4 billion USD) by far exceeds the external liabilities (68.1 billion USD). South Africa however is a net debtor against the rest of the world. The total capital flight (38.5 billion USD) is lower than the debt of 45.2 billion USD. If the acquired interest would have been included (total stock of capital flight of 66.2 billion USD) then it is however not the case anymore. In addition, the situation is less outspoken compared to the total region of the 33 retained SSA-countries in this study. In appendix 1 an overview of the capital flight per year is shown for the period 1970-2010.

Table 5.7 compares this cumulated capital flight with the GDP per capita. Cumulated over decades it is in many occasions (Burundi, Rwanda, and Democratic Republic Congo) more than the yearly average GDP. It implies that as a capital stock it is more than 100% of GDP. As an annual average it is in the considered countries between 0.7 to 2.3% of GDP.

Table 5.8 provides the components of cumulative estimates of Boyce and Ndikumana. The national figures should draw our attention since the subtotals for the total of Belgian partner countries is already influence by some 'netting' for the unadjusted residual measure (-33.8 billion for South Africa, + 16.8 for Mozambique for instance). The major form of capital flight is situated in trade mispricing. Table 5.8 clearly illustrates the difference between export misinvoicing (capital outflow) and import misinvoicing (capital inflow). Of the total cumulated capital flight of the 7 considered partner countries of some 132.4 billion 2010 USD, some 5.4 billion is related to the direct estimates on the BoP, some 91.7 is net trade misinvoicing and finally some 35.3 billion are unrecorded remittances. Those unrecorded remittances are similar to underreporting of export earnings.

In Table 5.9 is shown that by 2010 around 2 billion USD of capital flight was caused in the considered limited group of Belgian partner countries. However this number is probably strongly underestimated due to the missing data for South Africa. When data of South Africa are included, a much higher amount of capital flight can be observed: for example, by 2007 a total amount of 10 billion USD was shown. In addition we need to remark that the amount of capital flight heavily fluctuates in the considered short period 2005-2010, influenced as they are by several components and the effect of netting outflows and inflows.

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven..**6**
Capital flight by country (countries are ranked by amount of total capital flight), 1970-2010

Country	Total capital flight 1970-2010 (billion, constant 2010 USD)	Ratio to GDP 2010 (in %)	Stock capital flight in 2010 (billion USD)*	Debt stock in 2010 (billion USD)	Net assets in 2010 (billion USD)
South Africa	38.5	10.6	66.2	45.2	21.1
Congo, Democratic Republic	33.9	258.4	50.6	5.8	44.8
Mozambique	20.7	224.9	26.1	4.1	22
Tanzania	14.7	64	26.9	8.7	18.3
Rwanda	9.3	165.6	18	0.8	17.2
Uganda	8.4	49	10.3	3	7.3
Burundi	6.9	339.4	7.6	0.5	7.1
Belgian partner countries (total/weighted average)*	**132.4**	**29.89**	**205.7**	**68.1**	**137.8**
33 Sub-Saharan African Countries (total/weighted average)	**814.2**	**78.7**	**1065.8**	**188.6**	**877.2**

* Stock of capital flight consist of the total capital flight including the interest that could had been gained by investing it (assuming modest interest rate measured by the short-term United States Treasury Bill rate).
Source Boyce and Ndikumana (2012)

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven..**7**
Capital flight relative to GDP, the population and capital formation, 1970-2010

Country	Total capital flight: 2010 values and ratios (1970-2010)			Annual average over 1970-2010		
	Total real capital flight, (billion 2010 USD)	Total real capital flight per capita (2010, USD)	GDP per capita (2010, USD)	Capital flight/GDP (%)	Capital flight per capita (USD)	Capital fight/capital formation (%)
Burundi	6.9	820.7	241.8	2.0	26.1	154.3
Congo, Democratic Republic	33.9	513.4	198.7	1.2	26.1	59.3
Mozambique	20.7	885.6	393.7	2.3	34.2	110.1
Rwanda	9.3	876.9	529.4	1.8	46.5	69.2
South Africa	38.5	769.9	7,271.7	1.4	30.9	7.9
Tanzania	14.7	327.1	526.6	0.7	22.2	6.2
Uganda	8.4	252.1	514.5	0.7	9.9	29.0
Belgian partner countries (total/weighted average)*	**132.4**					
33 Sub-Saharan African Countries (total/weighted average)	**814.2**	**1,072.8**	**1,364.0**	**2.6**	**115.2**	**50.0**

* Weight = GDP (2010) of total group of considered countries.
Source Boyce and Ndikumana (2012)

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven..**8**
Adjustment for trade misinvoicing and unrecorded remittances, 1970-2010 (billion, constant, 2010 USD)

Country Name	Total capital flight	Unadjusted 'residual' measure [2]	Export misinvoicing	Import misinvoicing	Total trade misinvoicing	Unrecorded remittances [3]
Burundi	6.9	3.4	2.3	0.1	2.4	1.1
Congo, Democratic Republic	33.9	9.5	25.5	-10.3	15.3	9.1
Mozambique	20.7	16.8	2.1	-3.1	-1	4.9
Rwanda	9.3	-1.6	7.4	2.3	9.7	1.2
South Africa	38.5	-33.8	127.9	-69.6	58.4	13.9
Tanzania	14.7	7.5	2.9	-0.9	2.1	5.1
Uganda	8.4	3.6	-0.7	5.5	4.8	0.0
Belgian partner countries (total)	**132.4**	**5.4**	**167.4**	**-76**	**91.7**	**35.3**
33 Sub-Saharan African Countries	**814.2**	**505.4**	**385.2**	**-180.3**	**204.8**	**104.0**

[1] An important remark we need keep in mind is that the data series 1970-2010 consist of missing values for some countries and for some periods.
[2] Unadjusted 'residual' measure of capital flight based on World Bank Residual Model whereby capital outflow=(Change in stock of external debt+net FDI)–(current account deficit+net additions to stock of foreign reserves).
[3] 'Workers remittances are often under-reported in the official BoP statistics of developing countries' (Boyce & Ndikumana, 2012, p. 4).
Source Boyce and Ndikumana (2012)

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven..**9**
Capital flight for some partner countries, 2005-2010 (billion, constant 2010 USD)

Country	2005	2006	2007	2008	2009	2010
Burundi	0.4	0.5	0.3	0.2	0.8	-0.0
Congo, Democratic Republic	-0.1	0.8	3.0	1.7	-0.4	1.8
Mozambique	-0.7	1.8	0.2	0.1	0.1	0.7
Rwanda	-0.2	-0.1	0.1	-0.2	-0.3	-0.3
South Africa	1.0	NA	5.9	3.7	NA	NA
Tanzania	0.3	-0.3	-0.5	-1.1	-0.2	-0.2
Uganda	0.3	4.1	1.0	0.9	0.1	-0.2
Belgian partner countries (total)	**1.1**	**6.7**	**10.0**	**5.3**	**0.2**	**1.9**
33 Sub-Saharan African Countries	**45.1**	**40.4**	**74.1**	**52.6**	**27.6**	**27.7**

Source Boyce and Ndikumana (2012)

5.6 Comparing Gross and net illicit financial flows

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven.**.10**
Illicit financial flows according to different studies, in % of GDP

Country	GFI (2012)*	GFI (2005-2012, average)*	Boyce and Ndikumana (2010)**	High Level Panel on Illicit Financial Flows from Africa (n.d.).
Algeria	1.28	1.20		N.A.
Benin	0.00	0.48		N.A.
Bolivia	5.10	2.19		N.A.
Burundi	5.55	5.46	-0.31	5
Congo, Democratic Republic of	0.54	1.58	8.85	3
Ecuador	2.29	3.30		N.A.
Mali	3.17	5.33		1
Morocco	0.80	1.47		N.A.
Mozambique	0.00	1.61	7.68	2
Niger	3.50	2.91		3
Peru	0.00	0.86		N.A.
Rwanda	8.57	5.47	-5.65	3
Senegal	0.00	0.02		3
South Africa	7.62	4.78		5
Tanzania	2.54	2.49	-0.66	3
Uganda	3.16	5.88	-0.95	5
Vietnam	4.44	2.83		N.A.
Partners of Belgium (excl. West Bank and Gazainian Territories)	**3.53**	**2.80**	**0.43**	**N.A.**

* Gross illicit outflows. Calculations based on the methodology Hot Money Model (HMN) + Gross Excluding Reversals (GER). '(.)' indicates no available data, whereas '(0)' indicates a value of 0.
** Capital flight as the sum of licit and illicit financial flows.
Source High Level Panel on Illicit Financial Flows from Africa (n.d.), Boyce and Ndikumana (2012), Kar and Spanjers (2014)

If we compare the IFF estimates for the Belgian partner countries, we see major differences between GFI (Kar & Spanjers, 2014) and Boyce and Ndikumana (2012). It should not surprise us, because they refer exactly to the difference between gross and net figures. On the other hand, the estimates of IFF by the High Level Panel on IFF from Africa (2014) seem to be in line with GFI for the considered partner countries. In the Table 5.10 above a comparison of these 3 kind of IFF estimations is shown.

Since the estimates are based on sometimes very volatile variables in the balance of payments (a rest term 'errors and omissions' is for instance more volatile than the main items in a balance of payments), but even that is not completely true), it probably is better to use 'smoothened' figures by calculating averages over a certain period. The efforts in the past on calculating flows of capital flight, calculated over a certain period, cumulated in a kind of 'stock' of outstanding licit or illicit capital flight, could be used for further calculations of the return of this stock. The total of all those flows is more robust. They reflect finally the real situation over a longer period and the cumulative effect of it is a real illustration of 'capital accumulation'. We come back to in in a second paper on the 'illicit wealth of nations' (Pacolet & Vanormelingen, 2015).

5.7 Foreign direct investment and official development assistance

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven..**11 Foreign direct investment, net inflows, 18 partners countries of Belgium, (BoP, million current USD), 2003-2012**

Country name	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Algeria	633.7	881.9	1,156.0	1,841.0	1,686.7	2,638.6	2,747.1	2,300.0	2,571.3	1,500.4
Benin	44.7	63.8	-8.8	-12.4	139.0	48.0	-18.7	53.5	161.1	158.6
Bolivia	197.4	65.4	-238.6	280.8	366.3	512.3	423.0	622.0	858.9	1,060.0
Burundi	0.0	0.0	0.6	0.0	0.5	3.8	0.3	0.8	3.4	0.6
Congo, Dem. Rep.	391.3	409.0	166.6	237.7	1,793.7	1,672.7	-278.0	2,728.8	1,596.0	2,891.6
Ecuador	871.5	836.9	493.4	271.4	194.2	1,006.3	321.5	166.7	640.5	591.3
Mali	132.3	101.0	160.2	148.2	206.1	266.4	797.7	26.9	556.1	310.5
Morocco	2,312.7	787.1	1,670.6	2,460.8	2,825.8	2,466.3	1,970.3	1,240.6	2,521.4	2,842.0
Mozambique	336.7	244.7	122.4	185.4	416.7	559.1	899.3	1,258.2	2,846.3	5,238.3
Niger	14.9	26.3	49.7	40.3	98.9	281.9	631.3	795.9	1,065.8	793.4
Peru	1,335.0	1,599.0	2,578.7	3,466.5	5,491.0	6,923.7	6,430.7	8,454.6	8,232.6	12,244.2
Rwanda	4.7	7.7	8.0	30.6	82.3	103.3	118.7	42.3	106.2	159.8
Senegal	52.5	77.0	167.9	289.6	351.0	453.9	330.1	266.1	338.2	337.7
South Africa	783.1	701.4	6,522.1	623.3	6,586.8	9,885.0	7,624.5	3,693.3	4,139.3	4,626.0
Tanzania	364.3	226.7	935.5	403.0	581.5	1,383.3	952.6	1,840.1	1,229.4	1,706.9
Uganda	202.2	295.4	379.8	644.3	792.3	728.9	841.6	543.9	894.3	1,205.4
Vietnam	1,450.0	1,610.0	1,954.0	2,400.0	6,700.0	9,579.0	7,600.0	8,000.0	7,430.0	8,368.0
West Bank and Gaza	18.0	48.9	36.2	18.6	19.6	51.5	300.5	153.6	235.3	179.6
18 Partners of Belgium	**9,144.9**	**7,982.5**	**16,154.4**	**13,329.1**	**28,332.3**	**38,564.1**	**31,692.4**	**32,187.2**	**35,426.2**	**44,214.3**

Source Data World Bank, indicator Net official development assistance received

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven.**.12 Net official development assistance received, net inflows, 18 partners countries of Belgium, (current million USD), 2003-2012**

Country name	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Algeria	238.1	316.2	346.6	239.9	394.3	325.1	318.6	198.3	190.3	144.5
Benin	299.8	393.8	346.9	399.3	474.4	641.5	682.1	689.1	690.3	511.3
Bolivia	938.4	785.4	643.1	850.0	475.8	627.9	725.3	741.0	721.8	658.6
Burundi	227.8	364.0	364.0	430.9	479.0	522.2	561.4	629.9	574.9	522.7
Congo, Dem. Rep.	5,417.0	1,919.0	1,881.7	2,197.3	1,356.7	1,766.0	2,356.9	3,486.2	5,534.4	2,859.4
Ecuador	174.9	153.3	225.8	187.8	217.3	230.6	207.9	157.1	158.8	149.4
Mali	559.2	587.8	721.3	865.8	1,018.7	964.1	984.4	1,088.6	1,280.6	1,001.3
Morocco	572.8	770.0	732.3	1,102.2	1,221.3	1,451.2	929.6	992.5	1,455.7	1,480.4
Mozambique	1,048.0	1,242.9	1,297.2	1,639.3	1,776.6	1,996.4	2,012.4	1,951.5	2,085.0	2,096.9
Niger	479.8	547.6	522.2	544.4	544.3	612.3	469.3	744.5	649.5	901.9
Peru	516.9	463.5	450.5	463.4	307.0	463.0	441.2	-255.9	604.8	393.8
Rwanda	335.2	490.1	577.4	603.1	722.6	933.5	933.6	1,032.2	1,264.0	879.0
Senegal	456.8	1,069.7	698.0	865.0	869.7	1,068.5	1,016.2	927.7	1,060.1	1,080.2
South Africa	655.7	629.1	690.2	715.0	807.5	1,125.2	1,074.5	1,030.5	1,403.2	1,067.2
Tanzania	1,725.4	1,772.4	1,499.1	1,883.3	2,821.6	2,331.5	2,933.2	2,958.2	2,445.8	2,831.9
Uganda	997.7	1,216.0	1,192.2	1,586.4	1,737.3	1,641.5	1,784.7	1,723.5	1,577.8	1,655.2
Vietnam	1,771.9	1,846.3	1,913.5	1,844.5	2,510.9	2,551.9	3,731.7	2,940.1	3,595.5	4,115.8
West Bank and Gaza	1,041.8	1,160.8	1,015.7	1,360.3	1,717.1	2,470.1	2,816.6	2,518.7	2,442.0	2,001.4
18 Partners of Belgium	**17,457.1**	**15,728.0**	**15,117.5**	**17,777.9**	**19,452.1**	**21,722.3**	**23,979.4**	**23,553.8**	**27,734.4**	**24,350.9**

Source Data World Bank, indicator Net official development assistance received

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven.**.13 Net official development assistance received and foreign direct investment combined, net inflows, 18 partners countries of Belgium, (current million USD), 2003-2012**

Country name	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Algeria	871.8	1,198.1	1,502.6	2,080.9	2,081.0	2,963.7	3,065.8	2,498.4	2,761.6	1,644.9
Benin	344.6	457.6	338.1	387.0	613.4	689.5	663.3	742.6	851.4	669.9
Bolivia	1,135.8	850.9	404.4	1,130.7	842.1	1,140.2	1,148.3	1,363.0	1,580.8	1,718.6
Burundi	227.8	364.1	364.5	430.9	479.5	526.1	561.7	630.7	578.2	523.3
Congo, Dem. Rep.	5,808.2	2,328.0	2,048.3	2,435.0	3,150.4	3,438.7	2,078.9	6,215.0	7,130.4	5,751.0
Ecuador	1,046.4	990.2	719.2	459.2	411.4	1,236.9	529.3	323.8	799.3	740.8
Mali	691.5	688.8	881.5	1,014.0	1,224.7	1,230.5	1,782.1	1,115.5	1,836.8	1,311.8
Morocco	2,885.4	1,557.1	2,402.9	3,563.0	4,047.1	3,917.5	2,899.9	2,233.2	3,977.0	4,322.3
Mozambique	1,384.7	1,487.6	1,419.6	1,824.7	2,193.2	2,555.5	2,911.7	3,209.7	4,931.2	7,335.2
Niger	494.7	573.9	571.9	584.7	643.2	894.2	1,100.6	1,540.4	1,715.3	1,695.2
Peru	1,851.9	2,062.5	3,029.2	3,930.0	5,798.0	7,386.7	6,871.8	8,198.7	8,837.5	12,638.0
Rwanda	339.9	497.8	585.4	633.7	804.9	1,036.9	1,052.3	1,074.5	1,370.2	1,038.8
Senegal	509.3	1,146.7	865.9	1,154.6	1,220.7	1,522.4	1,346.4	1,193.8	1,398.3	1,417.8
South Africa	1,438.8	1,330.5	7,212.3	1,338.3	7,394.3	11,010.2	8,699.0	4,723.8	5,542.4	5,693.2
Tanzania	2,089.6	1,999.1	2,434.6	2,286.3	3,403.1	3,714.7	3,885.8	4,798.2	3,675.2	4,538.8
Uganda	1,199.8	1,511.4	1,572.0	2,230.7	2,529.6	2,370.3	2,626.3	2,267.3	2,472.1	2,860.6
Vietnam	3,221.9	3,456.3	3,867.5	4,244.5	9,210.9	12,130.9	11,331.7	10,940.1	11,025.5	12,483.8
West Bank and Gaza	1,059.8	1,209.7	1,052.0	1,378.8	1,736.7	2,521.6	3,117.1	2,672.3	2,677.3	2,181.0
18 Partners of Belgium	**26,602.0**	**23,710.5**	**31,271.9**	**31,107.0**	**47,784.4**	**60,286.4**	**55,671.8**	**55,741.0**	**63,160.5**	**68,565.1**

Source Data World Bank, indicators Foreign Direct Investment and Net official development assistance received

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven..**14**
ODA flows from donor country Belgium (disbursement), in current prices (million USD)

Recipient(s)/ time period	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Algeria	11.3	14.5	13.2	13.0	10.3	11.1	10.3	7.0	6.6	7.6
Benin	13.4	13.1	14.2	14.9	21.9	25.6	29.0	28.4	25.6	24.2
Bolivia	17.3	10.3	10.5	14.9	17.8	24.8	20.9	23.6	16.9	13.2
Burundi	25.1	21.3	33.3	26.3	58.2	52.2	56.9	63.9	56.2	65.2
Congo, Dem. Rep.	265.3	151.7	221.6	209.8	174.4	177.0	648.8	173.2	131.1	144.9
Ecuador	17.8	15.8	21.7	19.1	17.9	12.1	11.7	12.1	14.9	15.0
Mali	9.2	9.5	13.3	19.4	23.4	19.6	18.7	19.6	15.6	29.7
Morocco	13.3	17.2	10.3	12.7	15.2	22.4	20.7	28.8	15.5	13.8
Mozambique	10.6	12.2	12.8	23.4	25.9	23.1	34.0	33.5	11.9	30.9
Niger	8.7	15.2	18.9	15.9	21.9	26.3	34.8	23.6	17.6	25.0
Peru	9.6	16.0	16.8	15.4	29.8	21.8	15.6	16.8	15.2	17.8
Rwanda	18.8	27.3	36.1	42.5	65.2	82.2	70.3	76.5	53.5	47.6
Senegal	12.2	16.8	22.8	22.8	20.9	19.3	17.7	24.0	17.7	23.9
South Africa	14.7	18.2	24.8	14.8	20.8	18.1	15.3	17.2	17.8	20.0
Tanzania	17.6	6.3	14.7	13.8	18.5	21.2	22.5	25.7	22.8	13.3
Uganda	8.1	13.3	14.9	15.0	17.0	22.2	28.3	14.2	21.6	15.7
Vietnam	14.4	16.3	19.8	19.5	27.8	24.2	22.2	23.0	25.4	29.8
West Bank & Gaza Strip	13.2	16.9	15.8	19.7	30.3	22.7	24.3	30.0	33.5	33.5
18 Belgian partner countries	500.5	411.8	535.3	532.8	617.3	625.8	1,102.1	640.9	519.3	571.1
All Developing Countries	902.5	1,308.2	1,356.5	1,237.6	1,376.1	1,585.1	2,051.4	1,739.2	1,432.7	1,307.3
All Recipients, Total	1,463.3	1,963.4	1,976.9	1,950.7	2,385.6	2,609.6	3,003.9	2,807.4	2,314.9	2,299.6

Source OECD QWIDS (Query Wizard for International Development Statistics)

5.8 Methodological criticisms

The pioneering work of GFI has been correcting itself step by step. There is also external critique[11] but many of the mentioned weaknesses are also mentioned by the original studies themselves. For instance the GFI methodology is now based on official statistics, with all the measurement errors present in it, missing information, and lack of 'transparency' of the applied methodology on those bases. P. Reuter (2015) says for the OECD seminar on IFF 'that the work is less and less documented' but that can be as a consequence of the repetition of previous estimated. Those are the same weakness that can be attributed to for instance the estimates of F. Schneider for almost the complete world, of the undeclared or underground economy. Methodological weaknesses are that the focus is too much on estimating a global figure, so that national evidence and reliability is missing. P. Reuter mentions it as a critique already on the High level panel for Africa on their report on illicit flows from some African states. Here also the documentation on the national situations is missing. Greater transparency of the studies on making the unrecorded economy more transparent is warranted.

Other weaknesses are the reliability of official data to define informal or illegal or illicit phenomena; the difficulty to disentangle different forms of illicit flows, for instance the issue of mispricing

11 See a.o. UK Department for International Development (DFID), Fuest and Riedel (2009), Hearson,(2014, p. 25).

to define the exact price for misinvoicing, the matter if gross or only net figures should be used, and the issue to how to translate the missed flows of funds in missed tax earnings since that also cannot be easily translated due to the complexity of taxes, or as indicated, already the emergence of non-taxation (see above).[12] Certainly poor country fail to report complete official statistics, and by consequence report underestimations of illicit financial flows. No model provides an exhaustive measurement of all kind of illicit financial flows: corruption money, criminal money, tax evasion, tax avoidance. Most models (The 'Walker gravity model' is an exception) do not take into account illicit flows resulting from illegal activities. Converting the cumulating of flows in outstanding stocks requires also a proper treatment of acquired interest on the assets held abroad (Eggerstedt *et al.*, 1993, in Fontana, 2010, p. 3)'.

On the critique of only gross or only net illicit financial flows, we could comment that there is some rational in the argument of GFI that only the outgoing flow should be considered. It could be argued that the potential inflows might compensate the outflows but on the contrary those inflows also are illicit so it is not clear how easily they could be taxed in the local economies. On the contrary they could add to the further development of an illicit economy in all its dimensions of fraud, money laundering, and illegality. Boyce and Ndikumana (2012) provide net figures, which may explain why their estimates are much lower than those of Global Financial Integrity.

In sum, then, it is clear that most of the large figures cited in association with illicit financial flows should be treated with caution, as they generally are by their original authors. That said, policymakers and tax officials appear to have no doubt that tax-motivated illicit flows are a significant problem for developing countries and that the sums involved are large. As GIZ (2010, 12)[13] concludes: 'These studies certainly reveal the importance of the issue and might even provide a rough indication of the size of the problem. However, it should be noted that underlying definitions and assumptions differ widely and the estimates are, therefore, neither comparable nor reliable.'

12 We documented those fiscal expenditures extensively for the Belgian tax system (Pacolet, De Wispelaere & Vanormelingen, 2014)). It is also highly criticized by the OECD and nevertheless seems to get more and more popular in developing countries.

13 GIZ : the German Agency for International Cooperation.

6 | Conclusions

In the future of this research we will look for further information on where the illicit financial flows come from and where they go to (Pacolet & Vanormelingen, 2015). In a recent report from the High level panel on illicit financial flows from Africa it is illustrated how they in certain countries are concentrated in certain industries or activities and go to certain countries. This is based on information collected by the UNECA. For the moment we want to highlight in those conclusions the consequences of the total flows.

To get an indication of the harmful effect of IFF, we can compare the flows coming out of developing countries with the flows coming in due to Foreign Direct Investment (FDI) and Official Development Assistance (ODA). 'For all developing countries (definition Kar & Spanjers) illicit outflows were roughly 1.3 times the 789.4 billion USD of total FDI, and they were 11.1 times the 89.7 billion USD in ODA that these economies received in 2012' (Kar & Spanjers, 2014).

For the 18 partner countries of Belgium we see that the illicit flows coming out of these countries are less that total amount of ODA and FDI coming: 45 billion USD out versus 68 billion USD coming in by 2012. This is a less negative picture than for all developing countries. But phrasing it different, an amount of almost 2/3 of all the inflows via FDI and ODA leaves the 18 partner countries again in the form of illicit financial flows.

Africa has the highest average illicit outflows to GDP ratio (5.7%). However illicit flows from Africa are diminished in 2008 and 2009 mainly to contraction of trade. In addition there are a lot of regional initiatives (The Intergovernmental Action Group against Money Laundering in West Africa, the Eastern and Southern Africa Anti-Money Laundering Group and the African Tax Administrative Forum) to promote a standardisation of tax and fighting money laundering. However some countries, like Democratic Republic of Congo, do not participate in global initiatives against illicit financial flows (example given: the Financial Action Task Force) (AfDB, OECD, UND, 2014, p. 117).

In the UNECA report we can see for some of the African partner countries of Belgium the impact on the Millennium development goals (MDG). The illicit financial flows range from 1 to 6% of GDP. The impact is given on the MDG 4 to reduce the under-5 mortality rates by two thirds. In absence of illicit financial flows the reduction rates could in some countries be almost (Uganda) or more than doubled (Burundi). Translated in number of years needed to reach those targets, with or without IFF, the situation remains dramatic. To reach the MDG 4 at the current rate of decline it would take on average 29 years. If no IFF would exist, the number of years would be reduced to 16 years. Too long and a reason for more to fight against illicit financial flows.

Table Fout! Gebruik het tabblad Start om Heading 1 toe te passen op de tekst die u hier wilt weergeven..**1**
The impact of illicit financial flows and their impact on Millennium Development Goal 4 for Belgian partner countries in Africa

Country	Under-5 mortality rates in 2000 (per 1,000)	MDG 4 target under-5 mortality rates, (2000-2011)	Actual annual reduction in under-5 mortality rates (2000-2011)	Illicit financial flows (% of GDP)	Potential annual reduction in under-5 mortality absent IFFs	Number of years from 2000 to reach MDG 4 at current rate of decline	Number years from 2000 to reach MDG 4 if IFFs curtailed
Burundi	164	63	1.5	6	3.8	63	25
Congo, Democratic Republic	181	66	0.7	3	1.8	144	54
Mali	213	83	1.8	3	2.9	52	32
Mozambique	177	83	4.7	5	6.6	16	11
Niger	218	102	5.0	3	6.1	15	12
Rwanda	177	58	11.1	5	13.0	9	8
Senegal	119	50	6.4	1	6.8	13	12
South Africa	78	19	4.2	4	5.7	33	24
Tanzania	130	52	5.7	2	6.5	16	14
Uganda	144	62	4.1	3	7.5	20	16
Total	143	56	3.3		3.8	29	16

Source O'Hare *et al.* (2013, in High Level Panel on illicit financial flows from Africa, n.d.)

- APPENDICES -

appendix 1 Capital flight

a1.1 Capital flight for some partner countries, 1970-2010

Table a Fout! Gebruik het tabblad Start om Heading 6 toe te passen op de tekst die u hier wilt weergeven.**.1 Capital flight by country, 1970-2010 (billion, constant 2010 USD),**

Country	Burundi	Congo, Democratic Republic	Mozam-bique	Rwanda	South Africa	Tanzania	Uganda	Belgian partner countries (total)
1970	0.00	1.27	0.00	-0.11	-2.07	1.37	0.38	0.83
1971	0.00	0.05	0.00	0.03	-3.73	4.03	-0.16	0.22
1972	0.00	1.03	0.00	0.03	0.34	-0.19	-0.03	1.19
1973	0.00	3.68	0.00	0.08	-0.06	1.18	0.24	5.12
1974	0.00	3.28	0.00	0.06	-1.96	1.33	0.11	2.83
1975	0.00	-0.06	0.00	0.10	-6.99	0.90	-0.05	-6.11
1976	0.00	1.05	0.00	0.16	1.26	0.77	0.14	3.37
1977	0.00	-2.94	0.00	0.17	6.55	0.90	-0.70	3.98
1978	0.00	3.47	0.00	1.73	8.17	1.03	-0.20	14.19
1979	0.00	1.64	0.00	4.37	9.43	-0.04	0.72	16.12
1980	0.00	1.64	-0.65	1.84	6.55	1.42	0.57	11.37
1981	0.00	2.16	-0.62	0.01	-8.27	0.90	0.28	-5.55
1982	0.00	0.46	-0.62	0.10	-3.00	0.64	0.40	-2.01
1983	0.00	-0.35	-0.10	0.10	-3.82	1.14	0.20	-2.83
1984	0.00	0.60	2.94	0.16	-4.98	0.85	0.30	-0.13
1985	0.18	1.42	2.79	0.18	9.34	3.08	0.08	17.05
1986	0.20	0.67	0.42	0.21	10.35	-8.14	0.09	3.80
1987	0.28	0.83	2.34	0.26	2.44	0.18	0.52	6.86
1988	0.07	-0.67	0.20	0.21	0.39	1.11	-0.29	1.02
1989	0.35	-0.02	0.62	0.14	2.37	0.20	0.09	3.76
1990	0.24	1.63	2.33	0.16	4.09	0.07	0.25	8.78
1991	0.10	1.09	1.09	0.20	9.13	-0.26	-0.01	11.35
1992	0.23	0.87	0.96	0.05	6.25	0.00	0.07	8.44
1993	0.19	0.64	1.11	-0.03	2.54	-0.10	-0.01	4.34
1994	0.16	0.39	3.96	0.21	1.13	0.27	0.16	6.28
1995	0.50	1.13	0.96	0.14	-4.09	0.29	0.06	-1.00
1996	0.30	-1.05	0.47	0.02	-3.23	0.05	-0.09	-3.53
1997	0.11	-0.86	0.94	0.02	-9.70	-0.27	0.04	-9.72
1998	0.28	0.48	1.27	0.06	9.96	0.71	-0.02	12.74
1999	0.14	-1.41	-2.09	-0.06	10.46	0.57	-0.79	6.81
2000	0.18	2.95	-0.05	-0.04	17.97	0.55	0.19	21.76
2001	0.24	-0.90	1.31	-0.12	22.67	-0.32	0.52	23.39
2002	0.37	0.81	0.38	0.02	17.37	0.76	0.56	20.28
2003	0.37	1.66	-1.56	0.02	0.45	0.62	1.05	2.61
2004	0.20	0.39	-0.02	-0.14	.	1.02	-2.49	-1.04
2005	0.40	-0.08	-0.66	-0.16	1.00	0.33	0.26	1.10
2006	0.46	0.78	1.80	-0.13	.	-0.33	4.12	6.72
2007	0.32	3.01	0.24	0.05	5.91	-0.51	0.98	10.01
2008	0.17	1.72	0.07	-0.19	3.69	-1.06	0.91	5.31
2009	0.84	-0.41	0.13	-0.27	.	-0.22	0.14	0.21
2010	-0.01	1.81	0.73	-0.32	.	-0.15	-0.16	1.91
Total	6.88	33.87	20.71	9.32	38.49	14.67	8.43	132.36

Source Boyce and Ndikumana (2012)

appendix 2 CPA

Table a Fout! Gebruik het tabblad Start om Heading 6 toe te passen op de tekst die u hier wilt weergeven.**.1 Country Programmable Aid (CPA) * flows from donor country Belgium (disbursement), in current prices (million USD)**

Recipient/Year	2006	2007	2008	2009	2010	2011	2012	2013
Algeria	11.9	10.3	4.9	5.4	7.5	5.5	3.4	7.3
Morocco	6.2	9.1	9.1	17.6	16.9	23.6	13.6	10.0
Benin	9.4	10.3	16.0	19.2	21.7	22.0	19.2	17.0
Burundi	22.6	13.8	41.8	31.7	40.9	49.8	45.9	52.4
Democratic Republic of the Congo	62.6	65.3	80.2	109.1	91.8	95.4	79.5	75.9
Mali	11.4	17.5	19.2	15.6	13.4	14.9	10.4	15.7
Mozambique	7.5	12.8	9.8	10.6	22.6	16.5	2.3	9.8
Niger	15.4	14.2	18.5	18.5	28.5	15.6	12.6	14.8
Rwanda	28.7	34.8	53.7	72.2	61.2	63.9	44.2	38.3
Senegal	16.2	17.8	13.3	12.0	11.4	17.1	12.0	14.6
South Africa	12.4	6.4	10.2	7.7	4.2	5.5	4.5	4.8
Tanzania	11.3	12.1	11.7	14.0	17.6	18.4	19.9	9.9
Uganda	9.4	10.0	11.4	18.1	19.8	8.9	16.4	11.4
Bolivia	4.4	7.6	8.8	10.2	11.0	15.4	10.5	5.9
Ecuador	14.6	12.4	8.7	5.0	4.8	4.6	8.2	8.2
Peru	11.6	10.0	14.7	9.4	..	1.9	7.7	9.6
Viet Nam	10.1	9.6	16.8	14.4	10.8	..	15.4	23.0
West Bank and Gaza Strip	7.4	11.6	21.7	12.5	9.5	14.1	27.1	18.7
Belgian partner countries	**272.7**	**285.5**	**370.8**	**402.8**	**393.5**	**393.1**	**352.9**	**346.9**
Developing Countries, Total	**398.9**	**403.2**	**474.0**	**514.7**	**473.8**	**460.3**	**389.2**	**383.9**

* Concept used in OECD Report (2014f). 'While previous Fragile States Reports used ODA figures to track aid, this year's edition also uses the concept of country programmable aid (CPA), a subset of gross bilateral ODA, when aid is looked at as an 'inflow' and compared with other such inflows like FDI CPA is a subset of gross bilateral ODA. CPA tracks the proportion of ODA over which recipient countries have, or could have, significant say. It measures gross bilateral ODA but excludes activities that: (1) are inherently unpredictable (humanitarian aid and debt relief); (2) entail no cross-border flows (administrative costs, imputed student costs, promotion of development awareness, and costs related to research and refugees in donor countries); (3) do not form part of co-operation agreements between governments (food aid, aid from local governments, core funding to NGOs, ODA equity investments, aid through secondary agencies, and aid which is not allocable by country or region)' (OECD, 2014f, p. 28).

Source OECD StatExtracts

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