CHAPTER 2
CHARACTERISTICS OF FRAGILE STATES

There is a widespread consensus that state fragility relates to the poor record of state institutions in providing basic services, due either to a lack of capacity or failure to confer the due priority to fulfil basic state functions.

The Sub-Saharan African countries whose state institutions are fragile present markedly different sets of social, structural and economic characteristics. Such heterogeneity is hardly surprising, as each country has experienced its own socioeconomic and historical path. Though there may be some common underlying root causes, such as the process of formation of colonial states (see chapter 3), the drivers of state fragility are country specific.

An agreed list of fragile countries does not exist. As mentioned in chapter 1, for operational purposes the list of countries in a situation of fragility adopted in OECD (2009) is used here, confining the analysis to Sub-Saharan Africa. The list is the result of "a compilation of three lists: the bottom two quintiles of the CPIA 2007, the Brookings Index of State Weakness in the Developing World 2008 and the [. . .] (IFP) 2007 index [. . .]. [This represents] a change from the 2005, 2006 and 2007 Reports. [. . .] The two additional indexes that reflect the DAC definition of fragility and conflict (consideration of both the capacity and legitimacy of the state, and inclusion of the security dimension) aims to make the list more robust".[1]

This list includes five additional Sub-Saharan African countries – Equatorial Guinea, Ethiopia, Kenya, Rwanda and Uganda – not previously regarded as fragile. The political turmoil that followed the 2007 presidential elections, for instance, made Kenya part of this group. Other countries have long been classified as fragile according to the World Bank definition, which was initially established in the 1970s, while some – such as Côte d'Ivoire and Zimbabwe – have gradually shifted from being regarded as success stories to situations of fragility.

1. FRAGILE STATES SHARE SOME COMMON FEATURES

1.1 AN INABILITY TO MOBILISE DOMESTIC RESOURCES AND A DEPENDENCE ON EXTERNAL RESOURCES

Fragile countries are unable to mobilise domestic resources and to draw substantial fiscal revenues from taxation. Sub-Saharan African fragile countries' government revenues excluding grants rarely account for more than 20% of GDP (table 2.1). Only 4 countries of 29 – Angola, Equatorial Guinea, Republic of Congo and São Tomé and Príncipe – have a high ratio of government revenues over GDP, but this is not due to their capacity to levy taxes, but rather to their endowment of natural resources (see table 2.7 later in this chapter).

[1] OECD 2009, p. 21. See also chapter 1, footnote 2.

Table 2.1: Taxation, government revenues and ease of doing business in Sub-Saharan African fragile countries

Country	Government revenues (% of GDP)[(1)]	Tax revenues (% of GDP) [(2)]	Ease of Doing Business rank[(3)]
Angola	46.7	…	168
Burundi	18.6	…	177
Cameroon	18.8	…	164
Central African Republic	10.3	6.0	180
Chad	20.6	…	175
Comoros	12.7	…	155
Congo, Dem. Rep. of	14.8	6.3	181
Congo, Rep. of	42.7	8.5	178
Côte d'Ivoire	19.2	14.9	161
Djibouti	…	…	153
Equatorial Guinea	38.3	…	167
Eritrea	22.8	…	173
Ethiopia	12.8	10.7	116
Gambia, The	21.4	…	130
Guinea	14.3	…	171
Guinea-Bissau	14.6	…	179
Kenya	22.2	18.3	82
Liberia	23.6	…	157
Mauritania	…	…	160
Niger	15.2	…	172
Nigeria	16.0	…	118
Rwanda	13.6	…	139
São Tomé and Príncipe	40.1	…	176
Sierra Leone	10.8	11.0	156
Somalia	…	…	n.c.
Sudan	…	…	147
Togo	17.0	13.9	163
Uganda	12.6	13.0	111
Zimbabwe	6.0	…	158
Sub-Saharan African fragile countries	20.2	11.4	
Sub-Saharan African nonfragile countries	25.4	22.4	
Sub-Saharan Africa	24.5	17.7	

Note: ... denotes not available; n.c. denotes not classified; [(1)] data exclude grants and refer to 2007; [(2)]: data, refer to compulsory transfers to the central government for public purposes, data for last year available; [(3)] data refer to 2009.

Sources: IMF 2009a, World Bank 2008a, World Bank 2009.

Gupta and Tareq (2008) argue that, although there has been an increase in Sub-Saharan Africa's average government revenues to GDP ratio in the last 25 years, most of it is connected to royalties or corporate taxes on oil and mining companies, while nonnatural resource revenues have been growing at around 1% since 1980.[2] In some fragile countries the share of trade taxes in total taxes is very high, with peaks above 20% for Angola and Nigeria.[3] Data on tax revenues are available for only a few countries: the average tax to GDP ratio for the nine countries for which data are available stands at around 11%, with a minimum of 6% for the Central African Republic and the Democratic Republic of Congo. With such a limited tax base, an adequate public goods provision is hardly an option, to say the least.

[2] According to Stümer (2008), the Democratic Republic of Congo collected tax revenues from the extractive sector of $16.4 million in 2006, whereas in 2004 the minerals' value was around $1 billion. The German Federal Institute for Geosciences and Natural Resources maintains that mineral commodities worth an additional $1 billion have been smuggled out of the country.

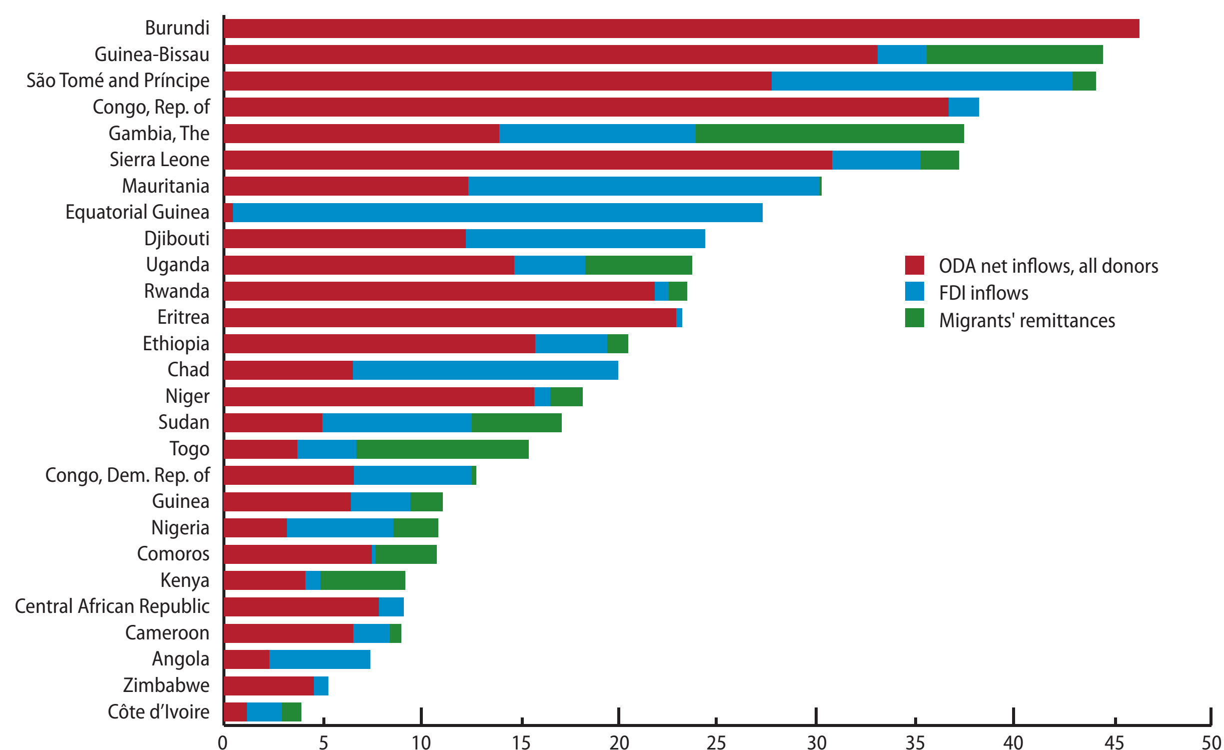
[3] Data on trade taxes over total taxes are available to our knowledge only for some fragile states: Angola (22.2%), Kenya (8.0%), Nigeria (22.2%) and Uganda (9.0%). See Volkerink 2009.

The lack of mobilisation of domestic resources lowers the pressure for good governance, for efficient government spending, and for an accountable state. Nor is the state induced to adopt development-oriented policies that could strengthen the economic system, and raise tax revenues[4]. A possible reason could be the small size of the ruling elites: the smaller its size, the lower its incentives to deliver national public goods and develop far-reaching policies that could boost the prospects for economic growth[5].

Low revenues in Sub-Saharan African fragile countries can be traced to their extraversion, or their political and economic relations outside the country (see chapter 3). These countries have historically – most notably in the colonial era, but also before – depended on external sources of revenues. For most fragile countries, the combined weight of aid, FDI and remittances is a large share of GDP, well above the Sub-Saharan African average, but the composition differs even substantially among countries (figure 2.1). Official development assistance (ODA) is the main inflow for most. Burundi, the Republic of Congo, Eritrea, Guinea-Bissau, Liberia and Sierra Leone have aid as a share of GDP[6] close to or greater than government revenues as a share of GDP. Remittances play a crucial role, especially in Liberia and Togo[7]. For other countries, such as Chad, Equatorial Guinea, The Gambia, Mauritania, São Tomé and Príncipe and Sudan, external revenue is generated by the export of a few natural resources, such as oil and minerals, and by resource-seeking FDI.

These external sources lower the incentives of governments to mobilise resources locally, through general taxation. For the political elite, taxation could produce the (unintended) effect of triggering a dynamic through which the citizens would hold the government accountable for its spending. Extraversion blunts this dynamic.

Figure 2.1: External flows, 2003-07 (simple average)



Note: Data for Somalia are not available; data on remittances are not available for Angola, Central African Republic, Chad, the Democratic Republic of Congo, Djibouti, Eritrea and Zimbabwe; data on Liberia are outliers and have thus not been included in the figure.

Source: ERD elaboration on OECD and AfDB (2009).

4 Tilly, 1990.

5 Adam and O'Connell 1999.

6 Foreign aid in 2007 represented on average 15% of fragile countries' GDP. But in several countries, aid represents more than 20%, reflecting very high aid dependence. Aid flows tend to be more volatile than domestic revenues and remittances, hampering medium-term planning and the efficient allocation of government expenditures as noted by Gupta and Tareq (2008).

7 Note that Liberia is not shown in figure 2.1 but remittances count for more than 100% of GDP (107% according to OECD and AfDB 2009). Note also that remittances are likely to be underestimated, because data consider only official remittances. Some recent estimates claim that informal remittances are very high (World Bank 2008b). World Bank (2008b) finds that in Sudan they might be as much as 85% of total remittances and in Ghana around 65%.

The main implication of such a financing mechanism is that fragile countries rely mostly on the primary sector, which in turn means that they have a poorly diversified export basket and are characterised by paucity of investments in human development and infrastructure.

Box 2.1: Copper boom and bust in Zambia

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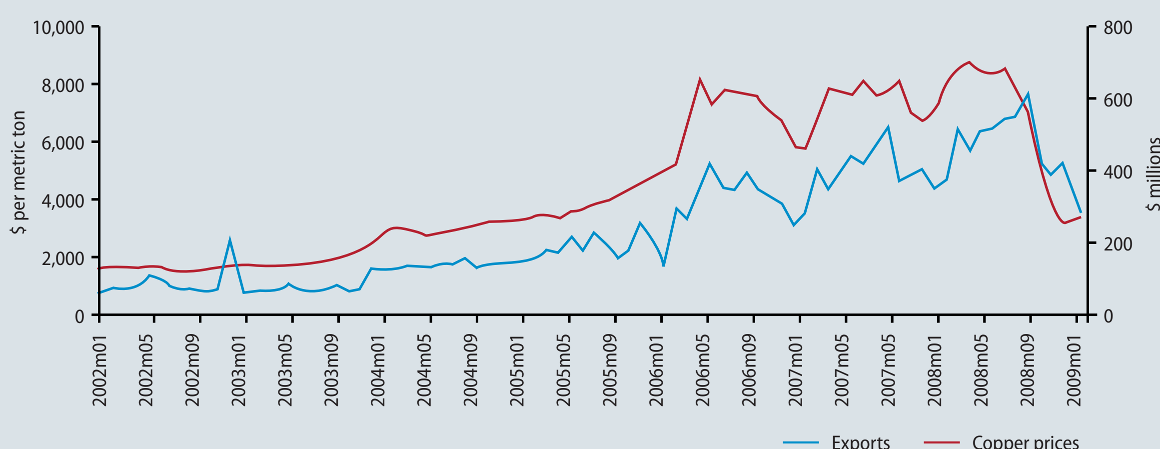
With China and India's ballooning demand for copper, copper prices surged from $1,800 per metric ton in 2002 to $8,000 in 2008 (box figure 1). The boom had major repercussions on the Zambian economy, where copper exports constitute more than 60% of total exports. Exports increased from $61 million in 2002 to $600 million in 2008, and GDP growth was steady at an average of 5.6%, owing also to FDI flows, low inflation and sound macroeconomic fundamentals. In July 2008 the copper price fell, reaching $3,000 per metric ton in October, and exports fell to $270 million in April 2009, with GDP growth in 2009 expected to be below 4%.[8] The substantial decline in copper exports caused a series of mine closures, including two plants of the Luanshya mine, the largest mine in the country. Overall, 8,000 jobs were lost in the copper sector by December 2008.[9]

Box figure 1: Zambian exports and copper prices, 2002-09



Source: IMF International Financial Statistics and Direction of Trade Statistics.

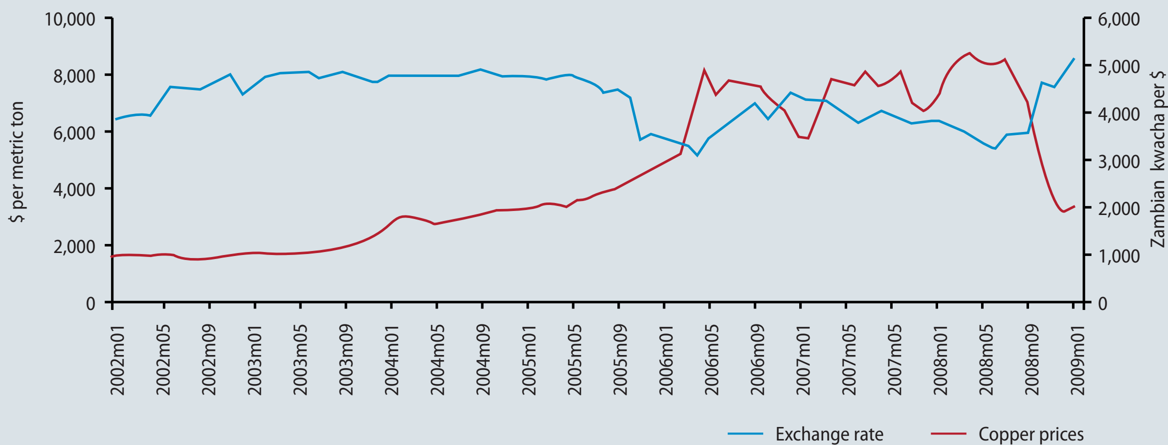
MONETARY IMPACT

The boom and bust amplified the volatility of the Zambian currency, which is mainly market determined and displays a close relationship to the copper price (box figure 2).

During the boom, the increase in export receipts from mining caused an appreciation of the currency, exacerbated by the simultaneous surge of aid, portfolio and foreign direct investment (FDI) flows. Between July and November 2005 the Zambian kwacha appreciated 30% in nominal terms, and this increase disrupted some of the country's major nontraditional exports. Most affected were cotton, tobacco and coffee, which experienced profit losses above 30% in just one crop year.[10] With the copper bust, the value of the currency depreciated by 40% in the three months from October to December 2008. The depreciation was also due to a substantial portfolio outflow, as demonstrated by a 5% monthly reduction in the Lusaka stock exchange index.[11] While favouring the competitiveness of nontraditional exports, the currency depreciation raised domestic prices. Given the currency depreciation and the global increase in food prices, inflation in the country rose from 8.5% in January 2008 to 16% in December 2008, with the bulk of the increase registered by prices of food products, which constitute 20% of the country's total imports. The Bank of Zambia tried to offset the depreciation through foreign exchange sales. Yet, the manoeuvre led to a 23% decrease in foreign exchange reserves, and the risk of reserve depletion has been escalating.[12]

[8] IMF 2009.
[9] Ndulo et al. 2009.
[10] Weeks et al. 2007; Weeks 2008; Fynn and Haggblade 2007; Export Board of Zambia 2007.
[11] Ndulo et al. 2009.
[12] Ndulo et al. 2009.

Box figure 2: Copper prices and the Zambian kwacha, 2002-09



Source: IMF International Financial Statistics.

FISCAL IMPACT

Copper exports contribute little to the Zambian government budget. In the mid-1990s the state-owned enterprise, Zambia Consolidated Copper Mines (ZCCM), was privatised, given the enormous losses the company was registering in a period of low commodity prices. With the privatisation reform, the industry was split in six different units under the control and management of transnational corporations. The government of Zambia was left with between 15% and 20% in each unit, directly controlled by the state company ZCCM-International Holding. Yet, ZCCM-IH received no revenue from the copper boom, because it still had to repay debts accumulated in the early 1990s.

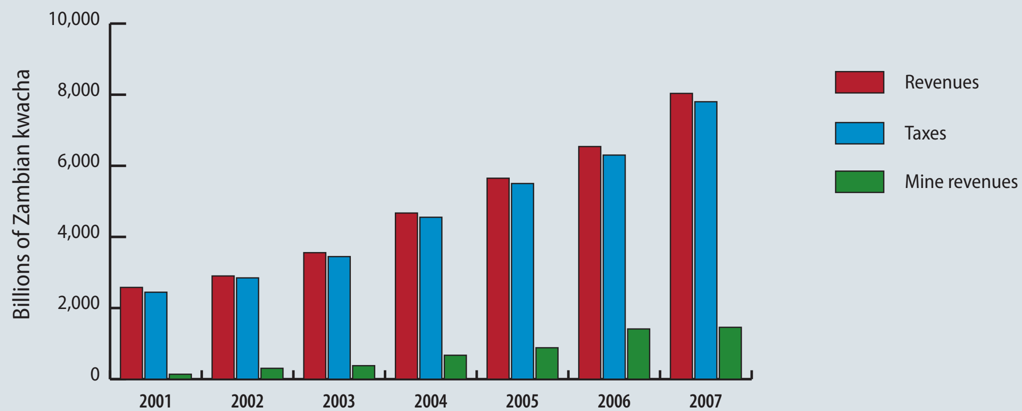
The taxes paid by the mining companies were almost negligible until 2007 (box figure 3). The companies managed to secretly negotiate very favourable agreements with the Zambian government (Development Agreements), which set low royalties (0.6% as opposed to 3%), lower export taxes (15% as opposed to 25%) and a series of concessions and deductions, like carry-forward losses for a period of 20 years.[13] When the agreements were disclosed in 2007, international organisations and local nongovernmental organisations forced the government to revise the tax regime, and a new law was enacted at the end of 2007. Yet, the expected 9% increase in the budget from the new taxes did not realise, and the fiscal revenues increased only by 3% in 2008.[14]

The fall of copper prices in July 2008 reopened the debate on the mining taxes, and new concessions were given to the companies in January 2009. These remove the windfall tax that fell due when copper prices were above a specific level and also allow companies to write off 100% of any investment as tax depreciation in the year when the expenses occur.[15]

The copper bust and consequent mine closures have raised the question of whether to increase government's share in the mines as a way to extend the scope of macroeconomic management during booms and busts. Yet, the proposal finds adamant opposition of the mining companies and the World Bank. As expressed by Obiageli Ezekwesili, World Bank vice president for Africa, "the populist reaction is to say let's take a stake, but do you want to risk capital in a sector where the private sector can take risks? (…) this is an industry better left to the private sector to run".[16]

[13] Fraser and Lungu 2007
[14] Green 2009
[15] Green 2009
[16] Reuters, 2009

Box figure 3: Tax, government revenues and mine revenues in Zambia, 2001-07



Source: World Bank (2008) and Zambian Revenue Authority.

1.2 RELIANCE ON PRIMARY PRODUCTS

Most fragile countries are characterised, on average, by a very low population density: 15 out of 29 countries have fewer than 40 inhabitants per square kilometre, while the population density in nonfragile countries stands at around 84. Moreover, in these countries the majority of the population lives in rural areas – in Burundi as much as 90% (see table 2.6 later in this chapter). This proportion implies a high rate of employment in the agricultural sector.

The share of agriculture in GDP is substantial, especially for fragile countries not endowed with natural resources (figure 2.2).[17] In addition, the contribution of agricultural products to exports is large, and agriculture is still the main source of export revenues for countries such as Burundi, Ethiopia, The Gambia and Sierra Leone.

Figure 2.2: Shares of agriculture, industry and services on GDP, 2006

Source: World Bank (2008a).

[17] Note that agricultural incomes are difficult to tax. See Volkerink 2009.

Sub-Saharan African countries' agriculture suffers from low productivity, rudimentary technology, small holding and difficulty in getting to markets. Moreover, the lack of information, the extensive market power of a few actors and the incomplete markets expose fragile countries to market failures.[18]

According to Ng and Aksoy (2008), the bulk of Sub-Saharan African countries are net food importers (table 2.2). All fragile countries but five (Cameroon, Côte d'Ivoire, Kenya, Somalia and Sudan) belong to this group, and they suffer from a high prevalence of undernourishment.[19] In addition, many of them are net oil importers.

Table 2.2: List of Sub-Saharan African food importer and exporter countries

Food importers (1)	
Angola	**Liberia**
Benin	Malawi
Burundi	Mali
Cape Verde	**Mauritania**
Central African Rep.	Mauritius
Chad	Mozambique
Comoros	**Niger**
Congo, Dem. Rep. Of	**Nigeria**
Congo, Rep. Of	**Rwanda**
Equatorial Guinea	**São Tomé and Príncipe**
Eritrea	Senegal
Ethiopia	Seychelles
Gabon	**Sierra Leone**
Gambia, The	Tanzania
Ghana	**Togo**
Guinea	**Uganda**
Guinea-Bissau	**Zimbabwe**
Lesotho	

Food exporters	
Botswana	Namibia
Burkina Faso	**Somalia**
Cameroon	South Africa
Côte d'Ivoire	**Sudan**
Kenya	Swaziland
Madagascar	Zambia

Note: countries belonging to the operational definition of fragile countries are in bold; (1) Food is defined as raw food in Standard International Trade Classification (SITC) Rev. 2, excluding all cash crops, processed food and seafood; a country is considered food importer if the difference between exports and imports is negative on the 2004/05 average.

Source: ERD elaboration on Ng and Aksoy (2008).

The dependence on food imports, not matched by exports of less volatile nonagricultural products (such as manufacturing), is a structural factor that can increase the vulnerability of Sub-Saharan African countries.[20] This is especially true in times of higher food prices, such as those prevailing through June 2008. In fact, although systematic estimates of the impact of food price increases on fragile countries are not available,[21] preliminary evidence suggests that they are among the most affected. Most countries identified

18 WFP 2009.

19 Undernourishment in Sub-Saharan African fragile states afflicts 35% of the population and in nonfragile states, 23%. See table 1.3 in chapter 1.

20 Sarris and Rapsomanikis 2009.

21 The bulk of research comprises country case studies and regional or global analysis of food crisis and food price shocks (Wodon and Zaman 2008; Aksoy and Isik-Dikmelik 2008; Ivanic and Martin 2008; Dessus 2008).

in the most recent *State of World Food Security* as at risk of deteriorating food security because of high food prices are Sub-Saharan African fragile ones (19 out of 26 Sub-Saharan African countries).[22] In July 2009, 18 of 30 countries in food crisis requiring external assistance from FAO were Sub-Saharan African fragile countries.[23]

For some food items, such as dairy, cereal and oils, the prices soared very high,[24] and even when they started declining, they remained substantially above historical values. This trend implied higher import bills, substantially widening the current account deficit, and affected even such variables as the exchange rate, the reserve position of the national bank and the level of external indebtedness.[25] The spike in primary commodity prices, which together with a decline in the unit price of manufactures induced an improvement in the terms of trade of food after a long downward trend common to most commodities, came, however, with high exchange rate volatility and heightened uncertainty, limiting opportunities for producers to access credit markets and invest in technologies.

The food price developments affect poor urban households and rural households differently, depending on access to markets and the availability of technology and capital. Landless and women-headed rural households are most affected by the increase in food prices. A 50% increase in the price of maize in Malawi, Zambia and Uganda increases the number of food-insecure households about 5% on average.[26] The population below the poverty line increases 3.5% if food prices rise 50%.[27]

Fragile countries, moreover, suffer disadvantages in *ex ante* conditions. Their constraints in coping with the growth of food prices include, for instance, high poverty, a low capacity of consumption smoothing at the household level because of high food share expenditures, preexisting extreme levels of food insecurity, a high reliance on food imports and some macroeconomic constraints in adopting price stabilisation measures (low endowments of food buffer stocks and shortages of foreign reserves and adverse pressures on exchange rates).

1.3 CONCENTRATED EXPORTS

The export diversification index for Sub-Saharan African fragile countries is less than half that for nonfragile countries (table 2.3), revealing the high degree of concentration of their exports.

With few exceptions, Sub-Saharan African fragile countries export mainly primary products: primary products – both fuel and non fuel – accounted on average for more than 80% of their exports in 2006. Fuels alone represented 26.2% of export revenues, with some countries such as Angola, Chad, the Republic of Congo, Equatorial Guinea and Nigeria above 90% thanks to fuel revenues. Basic food items, which are included in the basket of primary commodities, generate of a sizeable share of total export revenues, which stands on average at 27%, with peaks above 80% for The Gambia, Guinea-Bissau and São Tomé and Príncipe. For other countries, such as the Democratic Republic of Congo, Guinea and Sierra Leone mineral products represent the predominant primary commodities which are exported. Eritrea, Liberia and Togo represent exceptions to this picture, as the exports of manufacturing products generated in 2006 more than half of their export revenues.

The concentration of destination markets is also high: 15 Sub-Saharan African countries earn more than half of their export revenues from exports to a single geographical area. Specifically, nine countries derive more than half of their revenues from exports to Europe. For three countries – namely Djibouti, Togo and Zimbabwe – intra-African trade is predominant, accounting for more than half of total exports (table 2.4).

[22] FAO 2008a.

[23] FAO 2009.

[24] Note that world price changes are not always fully or symmetrically passed through to domestic markets, because of exports restrictions, taxes, high transport costs and high marketing margins. For an evaluation of the effect on domestic prices, timing of the pass-through is also relevant. In some cases there is only a short-run divergence between domestic and world prices, but in most cases the profit opportunities persist for a long time, with far more disruptive consequences.

[25] FAO 2008b.

[26] Sarris and Rapsomanikis 2009.

[27] Wodon and Zaman 2008.

Table 2.3: Export concentration in fragile countries

Country	Export diversification index[1]	Exports (% of GDP)[2]	Primary commodities, excluding fuels[3]	Fuels[4]	Food, basic[5]	Metals[6]	Manufactured goods[7]
Angola	1.1	72.7	2.0	97.5	0.1	1.8	0.4
Burundi	2.6	9.6	97.0	0.0	42.0	50.8	2.9
Cameroon	3.3	24.7	33.2	61.6	11.6	4.9	3.0
Central African Republic	5.5	13.6	95.5	0.2	1.1	60.7	1.7
Chad	1.1	12.8	4.5	94.6	0.0	0.0	0.6
Comoros	4.9	15.2	...	...	...	...	...
Congo, Dem. Rep. of	7.6	80.7	83.4	12.6	1.4	73.0	2.7
Congo, Rep. of	1.4	34.3	7.6	90.3	0.2	4.2	0.6
Côte d'Ivoire	7.7	49.0	43.5	36.9	34.6	0.5	19.4
Djibouti	5.9	...	16.9	0.7	11.6	2.7	15.1
Equatorial Guinea	1.3	88.6	1.4	94.5	0.0	0.0	3.7
Eritrea	2.1	6.4	43.6	0.0	27.5	6.2	52.0
Ethiopia	4.7	14.2	93.9	0.0	70.5	6.8	6.0
Gambia, The	6.6	44.2	85.9	0.0	80.7	0.9	14.1
Guinea	3.2	30.1	89.4	5.5	8.8	78.0	3.1
Guinea-Bissau	1.2	27.9	82.3	0.5	80.0	0.6	17.0
Kenya	21.9	25.9	57.3	7.3	38.8	2.8	35.4
Liberia	3.5	34.2	15.8	14.6	0.4	0.7	69.1
Mauritania	3.9	...	93.1	...	28.3	64.7	0.0
Niger	1.4	17.4	87.4	1.5	22.6	60.1	9.8
Nigeria	1.3	43.4	3.6	95.0	1.5	0.3	0.8
Rwanda	4.1	9.6	92.3	0.7	54.7	34.0	6.5
São Tomé and Príncipe	3.9	13.3	95.1	0.0	91.7	0.0	4.9
Sierra Leone	7.3	23.2	90.4	0.1	9.1	80.4	7.3
Somalia	6.6	...	86.4	0.2	55.0	10.3	9.1
Sudan	1.2	...	10.8	87.5	5.4	3.1	1.2
Togo	9.3	41.9	45.5	0.8	20.1	11.2	51.1
Uganda	10.4	14.1	77.1	4.4	50.3	15.0	18.5
Zimbabwe	10.8	31.1	69.8	1.1	8.4	29.5	29.1
Sub-Saharan Africa	7.4	36.1	58.5	22.6	23.8	24.1	18.9
Sub-Saharan African fragile countries	5.0	31.1	57.3	26.2	27.0	21.5	13.8
Sub-Saharan African nonfragile countries	11.1	40.3	60.2	13.3	19.0	26.6	26.4

Note: [1] ... denotes not available data; data refer to 2007 and rank from 0 to 100; [2] exports are an arithmetic average of export flows from 2003 to 2007; [3] data are expressed as percentage of total merchandise exports and refer to 2006; *primary commodity* includes SITC 0, 1, 2, 4, 68, 667, 971; [4] data are expressed as percentage of total merchandise exports and refer to 2006; *fuels* corresponds to SITC 3; [5] data are expressed as percentage of total merchandise exports and refer to 2006; *food basic* includes SITC 0, 22, 4; [6] data are expressed as percentage of total merchandise exports and refer to 2006; *ores, metals, precious stones and nonmonetary gold* includes SITC 27, 28, 68, 667, 971; [7] data are expressed as percentage of total merchandise exports and refer to 2006; *manufactured goods* includes SITC 5 to 8 excluding 667 and 68.

Source: ERD elaboration on World Bank (2008a); OECD and AfDB (2009); UNCTAD, Handbook of Statistics, online database.

The products that fragile countries export outside Africa – mainly fuels[28] – differ from what they export within the region, which include manufacturing products. Hence, their exports within Africa are more diversified than their exports to the rest of the world. So, an expansion of intra-African trade could reduce the impact of commodity price volatility, and thus the vulnerability of fragile countries to trade-related shocks.

The relationship between state fragility and export concentration can be traced back to resource endowments: abundant natural resources can reshape the interests and behaviours of an incumbent government, inducing excessive reliance on natural resources, limiting the expansion of the manufacturing sector and deteriorating governance[29]. Chauvet and Collier (2008) find that resource rents significantly reduce the chances of achieving a sustained turnaround out of a situation of state fragility. A doubling of resource rents as a share of GDP roughly doubles the time taken. Furthermore, because of low export diversification, fragile states may be more prone to "Dutch disease," which occurs when the exchange rate appreciates as a result of capital inflows, making exports less competitive.

Table 2.4: Fragile countries' export destination, percentage, average 2004-06

Country	Africa	Eastern, Southern and South-Eastern Asia	Western Asia	Developed economies - America	Developed economies - Europe
Angola	1.7	41.0	0.0	39.6	11.0
Burundi	15.2	10.2	1.2	0.8	49.1
Cameroon	9.5	14.1	1.1	6.5	64.0
Central African Republic	7.1	14.1	5.8	4.9	66.0
Chad	0.6	19.3	0.0	75.5	4.5
Comoros	1.6	16.4	6.1	18.3	50.1
Congo, Rep. of	2.5	61.7	0.4	23.9	8.4
Congo, Dem. Rep. of	6.8	14.1	0.0	10.9	58.9
Côte d'Ivoire	28.9	5.0	0.8	11.9	45.0
Djibouti	87.4	2.0	7.0	0.6	2.9
Equatorial Guinea	0.2	36.2	0.2	30.9	27.4
Ethiopia	9.7	11.8	11.9	6.9	40.7
Gambia, The	9.9	47.3	0.3	1.7	38.2
Guinea	1.9	8.6	0.0	6.3	45.4
Guinea-Bissau	17.5	70.6	…	7.9	3.7
Kenya	42.7	10.6	2.3	6.9	29.3
Liberia	5.4	10.9	1.2	9.6	71.9
Mauritania	16.8	11.5	0.6	1.5	53.1
Niger	27.4	0.7	0.1	16.2	45.9
Nigeria	9.0	5.0	0.7	49.9	22.1
Rwanda	2.8	35.5	0.3	3.2	19.2
São Tomé and Príncipe	4.2	7.5	3.0	1.7	79.3
Sierra Leone	2.7	3.4	0.3	10.8	78.1
Somalia	5.0	10.4	83.3	0.2	0.7
Sudan	3.3	61.1	7.1	1.1	3.1
Togo	64.1	13.8	0.3	0.8	15.5
Uganda	20.8	7.9	4.4	4.4	51.3
Zimbabwe	56.9	9.1	1.5	6.6	23.3

Note: ... denotes not available data.

Source: UNCTAD, Handbook of Statistics, online database.

[28] Because oil is mostly exported outside the region, intra-African trade for fragile oil exporters is on average lower than for nonoil exporters.

[29] See chapter 4 and Collier (2009) for further analysis of these mechanisms.

1.4 LOW HUMAN DEVELOPMENT

The low public investment in human development is reflected in poorly functioning education and health care systems. In fact, although many fragile states have decreased their military expenditure, this decline has not been matched by an increase in health and education expenditures (table 2.5).

Table 2.5: Public expenditure as percentage of GDP

	Health expenditure[1]		Education expenditure[2]		Military expenditure[3]	
Country	1995	2006	1991	2006	1990	2006
Angola	3.3	2.3	...	2.6	1.3	3.7
Burundi	1.1	0.7	3.5	5.1	3.4	4.7
Cameroon	0.9	1.5	3.2	3.3	1.5	1.4
Central African Republic	1.4	1.4	2.2	1.4	1.6	1.1
Chad	2.0	1.3	1.6	1.9	...	0.9
Comoros	2.8	1.8	...	3.8	...	...
Congo, Dem. Rep. of	0.2	1.6	...	...	...	1.9
Congo, Rep. of	1.8	0.9	7.4	1.8	...	1.2
Côte d'Ivoire	1.2	0.9	...	4.6	1.3	1.5
Djibouti	4.3	5.1	3.5	8.3	5.9	4.2
Equatorial Guinea	3.3	1.2	...	0.6	...	...
Eritrea	2.6	1.7	...	2.4	...	24.1
Ethiopia	2.7	3.0	2.4	5.5	8.5	2.1
Gambia, The	1.7	2.5	3.8	2.0	1.1	0.6
Guinea	0.7	0.7	2.0	1.7	2.4	2.0
Guinea-Bissau	1.6	1.5	...	5.2	...	3.9
Kenya	2.0	2.2	6.7	7.1	2.9	1.6
Liberia	1.4	3.6	...	...	7.2	0.8
Mauritania	2.0	1.5	4.6	2.9	3.8	3.0
Niger	1.8	2.1	3.3	3.4	...	1.0
Nigeria	1.1	1.2	0.9	...	0.9	0.6
Rwanda	1.6	6.6	...	4.9	3.7	1.9
São Tomé and Príncipe	9.1	9.0	...	...	...	...
Sierra Leone	1.1	1.7	...	3.8	1.4	2.1
Somalia	1.2	1.2	...	...	...	...
Sudan	0.5	1.4	6.0	...	3.5	4.4
Togo	1.5	1.5	...	3.6	3.1	1.6
Uganda	1.6	1.9	1.5	5.2	3.0	2.0
Zimbabwe	4.5	4.4	7.7	4.6	4.4	1.9
Sub-Saharan Africa	2.0	2.6	4.0	4.4	2.8	2.3
Sub-Saharan African fragile countries	1.7	2.0	3.8	3.6	3.1	2.9
Sub-Saharan African nonfragile countries	2.5	3.5	4.3	5.5	2.5	1.5

Note: ... denotes not available data.

Source: [1] WHO (2008); [2] UNESCO Institute of Statistics (2008); [3] SIPRI (2008).

As a result, we saw in chapter 1 that Sub-Saharan African fragile countries lag behind the rest of the continent on adult literacy: adult literacy stands at 59.2% compared with 66.4% in the rest of Sub-Saharan Africa (see table 1.1). The poor human development record is also confirmed by the under-five mortality rate, which stands at 138 per 1,000 in fragile countries, much higher than the 98 recorded on average in the other Sub-Saharan African countries.

Scant public investments in education and health care not only contribute to the poor human development record but also produce an uneven impact on males and females. Gender inequality in fragile countries is higher than in the rest of Sub-Saharan Africa, as the fragility of state institutions can adversely influence women's condition. The difference between the HDI and Gender-related Development Index – a proxy for gender inequality – is on average nearly twice as large for Sub-Saharan African fragile countries than for nonfragile countries.[30] The difference would probably be even larger, as data are missing for two countries – Somalia and Sudan – that presumably are characterised by a poor record in terms of gender equality. Little to no public funding to the health sector drives up maternal mortality, which is much higher than in nonfragile countries (see table 1.1). The failure to provide adequate funding to social service delivery hits all of the population, at the same time widening inequalities between men and women.

Fertility rates in fragile countries are higher and go down more slowly than in nonfragile countries (table 2.6). Fertility rates matter because families with many children are unlikely to be able to afford schooling costs. Families with fewer children, by contrast, may be better able to offer them a better education.

[30] ERD elaboration on UNDP (2008).

Table 2.6: Population

Country	Population density [1]	Share of population ages 0-14 [2]	Share of rural population [2]	Total fertility rate, average 1975-80 [3]	Total fertility rate, average 2000-05 [3]	Distribution of young women who have given birth [4]			
						No education	Primary education	Secondary education	Higher education
Angola	13	46.5	46.0	7.2	6.7	…	…	…	…
Burundi	318	45.0	89.7	6.8	6.8	…	…	…	…
Cameroon	39	41.2	44.5	6.4	5.0	24.5	43.0	32.2	0.3
Central African Republic	7	43.0	61.8	5.8	4.9	71.8	21.4	6.6	0.2
Chad	8	47.3	74.2	6.7	6.4	…	…	…	…
Comoros	330	42.0	62.3	7.2	4.0	…	…	…	…
Congo, Dem. Rep. of	27	47.3	67.3	6.6	6.7	…	…	…	…
Congo, Rep. of	11	47.1	39.4	6.3	5.6	…	…	…	…
Côte d'Ivoire	59	41.9	54.6	7.4	5.0	…	…	…	…
Djibouti	35	…	…	…	…	…	…	…	…
Equatorial Guinea	18	44.4	60.9	5.7	5.9	…	…	…	…
Eritrea	46	44.8	80.2	6.5	5.5	…	…	…	…
Ethiopia	77	44.5	83.7	6.3	5.5	73.6	20.4	5.6	0.3
Gambia, The	166	40.1	45.3	6.5	4.7	…	…	…	…
Guinea	37	43.7	66.5	6.9	5.7	79.4	12.3	8.0	0.2
Guinea-Bissau	59	47.5	70.3	7.1	7.1	…	…	…	…
Kenya	64	42.8	79.0	7.5	5.0	10.3	70.2	18.3	1.2
Liberia	37	47.1	41.2	6.9	6.8	…	…	…	…
Mauritania	3	43.0	59.4	6.4	5.8	…	…	…	…
Niger	11	49.0	83.0	8.2	7.9	86.9	10.1	3.0	0.0
Nigeria	159	44.3	51.0	6.9	5.7	53.7	21.0	24.0	1.3
Rwanda	384	43.5	79.8	8.5	5.9	24.4	69.9	5.4	0.3
São Tomé and Príncipe	162	39.5	41.2	6.4	4.0	…	…	…	…
Sierra Leone	80	42.8	58.6	6.5	6.5	…	…	…	…
Somalia	13	44.1	64.3	7.2	6.4	…	…	…	…
Sudan	16	39.2	58.3	6.5	4.4	…	…	…	…
Togo	118	43.5	59.2	7.0	5.3	…	…	…	…
Uganda	152	50.5	87.3	7.1	7.1	12.1	68.0	18.0	1.9
Zimbabwe	34	40.0	63.6	7.1	3.6	…	…	…	…
Sub-Saharan Africa	87	43.0	62.1	6.6	5.2				
Sub-Saharan African fragile countries	86	44.1	63.3	6.8	5.7				
Sub-Saharan African nonfragile countries	84	41.1	60.2	6.3	4.5				

Note: … denotes not available data; [1] individuals per square kilometre, data refer to 2006; [2] data refer to 2006; [4] data refer to most recent year available.

Source: [1],[2] and [3] World Bank (2008a); [4] World Bank, Demographic and Health Surveys, various years and countries.

1.5 POOR SOFT AND HARD INFRASTRUCTURE

Underdeveloped physical infrastructure is another common feature of fragile countries in Sub-Saharan Africa. Fragile countries have only 8 metres of paved roads per square kilometre, nonfragile countries 18 (table 2.7).

Table 2.7: Infrastructure and geographical characteristics

Country	Density of paved roads[(1)]	Mobile telephone lines[(2)]	Resource-rich[(3)]	Share of the population without access to improved water sources[(4)]	Land-locked[(5)]	Number of land borders
Angola	4.3	29.1	Yes	49	No	3
Burundi	46.2	2.9	No	29	Yes	3
Cameroon	10.5	24.5	Yes	30	No	6
Central African Republic	0.0	3.0	No	34	Yes	5
Chad	0.2	8.5	Yes	52	Yes	5
Comoros	361.7	4.8	No	15	No	0
Congo, Dem. Rep. of	1.2	34.2	No	29	Yes	9
Congo, Rep. of	2.5	10.5	Yes	54	No	4
Côte d'Ivoire	20.1	36.6	Yes	19	No	5
Djibouti	…	5.3	No	8	No	3
Equatorial Guinea	0.0	43.4	Yes	57	No	2
Eritrea	7.4	1.7	No	40	No	3
Ethiopia	4.5	1.5	No	58	Yes	5
Gambia, The	64.0	46.8	No	14	No	1
Guinea	17.7	21.3	Yes	30	No	6
Guinea-Bissau	26.7	17.5	No	43	No	2
Kenya	15.4	30.2	No	43	No	5
Liberia	5.9	15.0	No	36	No	3
Mauritania	0.8	41.6	No	40	No	4
Niger	3.0	6.3	No	58	Yes	7
Nigeria	31.4	27.3	Yes	53	No	3
Rwanda	101.0	6.5	No	35	Yes	4
São Tomé and Príncipe	227.0	19.1	Yes	14	No	0
Sierra Leone	12.6	13.2	Yes	47	No	2
Somalia	4.1	6.9	No	71	No	3
Sudan	1.7	21.3	Yes	30	No	8
Togo	41.8	18.1	No	41	No	3
Uganda	67.5	13.6	No	36	Yes	5
Zimbabwe	47.3	9.2	No	19	Yes	4
Sub-Saharan Africa	11.4	25.7				
Sub-Saharan African fragile countries	7.8	17.9				
Sub-Saharan African nonfragile countries	18.5	36.9				

Note: … denotes not available data; [(1)] metres of paver roads per square kilometre, data refer to the most recent year available; [(2)] number of telephone lines per 1,000 people; data refer to 2007; [(3)] a country is classified as resource-rich if primary commodity rents (oil and non oil) are above 10% of GDP; [(4)] data refer to 2007; [(5)] classification by the IMF.

Source: [(1)] World Bank (2008a); [(2)],[(3)] and [(5)] IMF (2009a); [(4)] UNDP (2008).

Unreliable road infrastructure[31] hampers communication and transport between the centre and the periphery, worsening the urban bias in public expenditure, and can be a disincentive to regional integration.

[31] Transport costs in Africa are 136% higher than in other regions, with a wide disparity between countries and products. This is likely to be even higher in Uganda, where "in the early 2000s the rate of effective taxation of exports due to transport costs was 40%, [. . .] much higher than the average of 15% for ACP countries" (UNCTAD 2009, p. 38).

In the last few years, China has been investing heavily in African infrastructure, especially in fragile countries, to improve the quality of as well as the access to natural resources. Intertwined with its aid programmes, Chinese investment projects are rapidly rebuilding ports, dams and roads in postconflict countries, such as Angola and the Democratic Republic of Congo.[32]

But without investments in soft infrastructure – in policies and regulations, and in border procedures and customs administration – transport costs will continue to present a problem for fragile countries.

Sub-Saharan African fragile countries lag behind in telecommunication as well. Fixed telephone lines have been stagnating in the last 10 years, while the growth rate of mobile phone subscribers has been very high. Thus, these countries are taking the lead in the shift from fixed to mobile[33] because mobile lines need lower initial investments, generally sustained by foreign companies. Despite these changes, the number of mobile lines per 1,000 inhabitants is half that in nonfragile countries (see table 2.7) and less than 3% of the population uses the Internet, compared with 4.2% of Africa and 23% of the world[34].

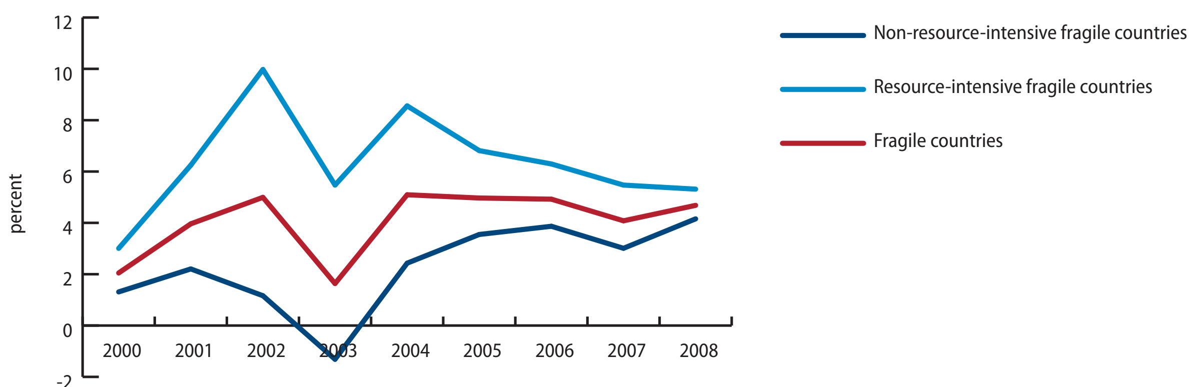
These common features – the inability to mobilise domestic resources, the dependence on external resources, low human capital development, poor infrastructure and the reliance on primary products and concentrated exports – make it possible to identify a group of countries in a situation of fragility. However, along other dimensions, the differences between fragile countries prevail.

2. FRAGILE COUNTRIES PRESENT MANY ELEMENTS OF HETEROGENEITY

During the recent episode of sustained growth in Sub-Saharan Africa, Angola grew at double-digit rates while Zimbabwe shrank. But Zimbabwe has high literacy and low infant mortality, the opposite of Angola (see table 1.1).

Several indicators provide a sense of the differences between fragile countries. Economic growth rates, for example, have gone up since the mid-1990s all over the continent. Fragile countries as a group followed this trend, growing at around 4% a year between 2000 and 2008. But different subgroups grew at very different rates: resource-rich fragile countries grew at 6.3%, peaking at 10% in 2002 and 8.5% in 2004 (figure 2.3). Fragile countries that are not resource rich grew at 2.3%. Individual countries' rates also differ substantially by year and on average.[35]

Figure 2.3: Real GDP growth of fragile countries, resource-intensive fragile countries and non-resource-intensive fragile countries, 2000-08



Source: ERD elaboration on IMF (2009b).

The real per capita income, on average $600 in 2008 in Sub-Saharan African fragile countries, ranges between $100 for the Democratic Republic of Congo to $4,500 for Equatorial Guinea (table 2.8). The ratio between the two extremes within the group of fragile Sub-Saharan African countries is not far from the ratio of the average of this group of countries to that of the OECD member countries and represents a rather telling example of the degree of heterogeneity in the group of fragile countries.

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32 See box 6.2 *Is China filling the gap?* in chapter 6. According to Stümer (2008, p.2) "in the Democratic Republic of Congo, China will build infrastructure including 2,400 miles of road, 2,000 miles of railway, 32 hospitals, 145 health centres and two universities worth $6 billion in return for imports of copper and cobalt",

33 See International Telecommunication Union 2009. Note that the increase in mobile phones has been led by Nigeria with 11 million lines, but Kenya and Côte d'Ivoire have also contributed greatly.

34 See International Telecommunication Union 2009.

35 See IMF 2009a.

But GDP and GDP per capita are not the only dimensions to look at. It is important to consider additional aspects in order to get a better view of the economic and social situation and sustainability and thus to implement appropriate policy measures.[36] For instance, the components of the human development index capture important aspects of heterogeneity.

Life expectancy at birth varies substantially across Sub-Saharan Africa: in São Tomé and Príncipe, people expect to live more than 60 years at birth, in line with the average for developing countries – but citizens of Mauritania and Zimbabwe have a life expectancy around 40 years. The average life expectancy in fragile countries as a group, however, does not differ much from that in nonfragile countries.[37]

Table 2.8: Macroeconomic characteristics

Country	External debt, % of GDP[(1)]	Reserves, months of imports[(2)]	Sectoral composition of GDP[(3)]				Real GDP per capita[(4)]
			Agriculture	Industry	Manufact.	Services	
Angola	9.9	5.1	8.9	69.7	4.3	21.4	1,456
Burundi	150.5	4.5	54.0	19.0	…	27.0	113
Cameroon	4.9	5.4	19.9	33.2	18.1	46.9	687
Central African Republic	55.6	2.5	55.8	15.5	7.5	28.7	223
Chad	12.0	8.3	20.5	54.8	5.3	24.7	410
Comoros	61.2	7.3	45.2	11.8	4.2	…	366
Congo, Dem. Rep. of	52.3	0.9	45.7	27.7	6.5	26.6	101
Congo, Rep. of	122.6	4.0	4.2	73.5	4.9	22.3	1,188
Côte d'Ivoire	53.7	3.6	22.7	26.3	18.3	51.0	528
Djibouti	…	…	4.0	17.0	…	79.0	…
Equatorial Guinea	1.1	12.1	2.7	94.3	8.6	3.0	4,621
Eritrea	66.2	-2.2	17.5	23.0	8.7	59.5	162
Ethiopia	11.3	1.8	47.3	13.5	5.3	39.2	180
Gambia, The	46.0	5.1	29.0	15.0	…	56.0	383
Guinea	77.6	1.1	12.9	37.5	3.7	49.6	515
Guinea-Bissau	257.0	8.0	61.8	11.5	7.2	26.8	141
Kenya	18.8	4.1	27.1	18.8	11.5	54.1	485
Liberia	571.8	-6.0	54.0	19.0	…	27.0	134
Mauritania	…	…	13.1	47.8	…	39.1	…
Niger	16.0	5.6	41.0	17.0	…	43.0	190
Nigeria	2.4	12.1	33.0	39.0	…	28.0	626
Rwanda	16.8	7.0	41.0	21.2	8.5	37.8	315
São Tomé and Príncipe	105.8	4.9	17.0	21.0	…	63.0	783
Sierra Leone	17.7	5.5	46.4	25.0	…	28.6	247
Somalia	…	…	…	…	…	…	…
Sudan	…	…	32.3	28.5	6.2	39.2	…
Togo	85.1	5.3	44.0	24.0	…	32.0	222
Uganda	12.3	9.2	32.3	18.4	9.1	49.2	352
Zimbabwe	20.1	0.9	19.0	24.0	…	57.0	…
Sub-Saharan Africa	50.2	5.0	26.0	30.1	10.6	43.8	1,128
Sub-Saharan African fragile countries	73.9	4.6	30.4	30.3	8.1	39.2	601
Sub-Saharan African nonfragile countries	18.9	5.4	19.7	29.4	12.9	50.1	1,811

Note: … denotes not available data; [(1)] and [(2)] data refers to 2007; [(3)] data refer to 2006, except for Niger (2003) and Burundi, Togo and Zimbabwe (2005); [(4)] data refer to 2008.

Source: [(1)] OECD and AfDB (2009); [(2)] and [(4)] IMF (2009a); [(3)] World Bank (2008a).

[36] Fitoussi et al. 2009.

[37] See table 1.1 in chapter 1.

More than 70% of all incoming FDI to Sub-Saharan African fragile countries from 2000 to 2007 went to just five countries: Angola, Chad, Equatorial Guinea, Nigeria and Sudan, all well-endowed with natural resources.[38].

There is no clear pattern in the main macroeconomic variables. Some fragile countries have very low foreign reserves (less than 90 days of import coverage).[39] In April 2009, Ethiopia, Guinea and Zimbabwe had reserves for one month of imports, whereas oil exporters had half a year. The low reserves make these countries more vulnerable to external shocks. And in the long run, they lack resources to expand manufacturing and diversify their economies.

Nor is there a common pattern for external debt.[40] Thanks to the large revenues, oil exporters have contained external debt, and debt distress indicators are largely under control. For example, the ratio of debt to gross national income and the ratio of total debt to exports of goods and services have improved substantially in Angola and Sudan since 2000.[41] Resource-poor fragile countries, such as Guinea-Bissau and Liberia still have a large debt burden, undermining their future development.

The level and development of macroeconomic indicators can be used to compute a country's economic vulnerability index.[42]

Table 2.9: Overall vulnerability rank

	Rankings		
Country	Naudé (2009)	African Development Bank	European Commission DG Development
Angola	High	High	Low
Burundi	High	Very high	Medium
Cameroon	Medium	Low	Low
Central African Republic	Low	High	High
Chad	Medium	Moderate	Low
Comoros	Low	n.c.	Medium
Congo, Dem. Rep. of	High	High	High
Congo, Rep. of	Low	n.c.	Low
Côte d'Ivoire	High	High	Medium
Djbouti	n.c.	n.c.	High
Equatorial Guinea	Low	Low	Low
Eritrea	Low	Very high	Medium
Ethiopia	Low	Moderate	Medium
Gambia, The	Low	High	High
Guinea	Medium	n.c.	Medium
Guinea-Bissau	Medium	Moderate	Medium
Kenya	Medium	High	Medium
Liberia	High	High	High
Mauritania	n.c.	n.c.	High
Niger	Low	Very high	Medium
Nigeria	High	High	Low
Rwanda	Low	High	Medium
São Tomé and Príncipe	Medium	High	High
Sierra Leone	Low	High	Medium
Somalia	n.c.	n.c.	n.c.
Togo	Medium	Very high	Medium
Uganda	Low	Low	Medium
Zimbabwe	n.c.	n.c.	High

Note: n.c. denotes not classified; vulnerability indexes combine into a synthetic measure the external and fiscal position of a country, and the degree of diversification of its export basket.

Source: Naudé (2009) and European Commission DG Development, personal communication.

38 OECD 2008.

39 The group of Sub-Saharan African countries has on average 5.2 months of reserves, the nonfragile 5.0 months. So there is no significant difference between the two groups although there are differences within the group.

40 On average Sub-Saharan African fragile countries have official debt that is 73.9% of GDP, whereas nonfragile countries stand at 18.9%.

41 Reisen 2007.

42 Economic vulnerability is only one aspect of a country's vulnerability, because economic factors are only one aspect of many. But economic factors have the advantage of being more easily measured than social aspects. Structural vulnerability, which includes such elements as political instability, dysfunctional institutions and conflicts, is discussed in chapter 5. In fragile countries these elements are predominant, but serious measurement problems make them difficult to evaluate. Table 2.9 reports economic vulnerability measures only for countries in situation of fragility; the background paper by Allen and Giovannetti, (2009), in volume 1b, reports the complete list, which includes all Sub-Saharan African countries for which enough data are available. The ranking is not available for countries such as Somalia, where there was only one of the components of the economic index.

Countries are vulnerable economically when they are particularly sensitive to external shocks. So, in the following, we evaluate the exposure to shocks and the capacity to react. We want to check whether fragile countries – in line with expectations – are more vulnerable to shocks than other Sub-Saharan African countries. As with Naudé (2009), we consider diversification, external indebtedness, openness of the economy, cross-border liabilities, capital to risk-weighted assets and rate of credit growth to the private sector.[43] More precisely for each fragile country with data (hence, excluding Mauritania, Somalia, Sudan and Zimbabwe), we analyse:

- Openness, measured as the share of exports over GDP.
- Concentration of exports, measured as the Herfindal-Hirschman Index – the more diversified the basket of exports, the less vulnerable the country.
- External indebtedness, measured as external debt as a share of GDP.
- Regulatory capital to risk-weighted assets.
- Cross-border liabilities.
- Growth of credit to the private sector.

We compute the ranking for countries as a simple average to avoid distortions. We rank all Sub-Saharan African countries – fragile and nonfragile – according to a criterion where a low rank means low vulnerability and a high rank means high vulnerability. We then divide the countries into roughly three equal groups from low to high (table 2.9). Countries in fragile situations, according to our operational definition, are spread equally among the three groups.[44]

3. IN SUMMARY

The key role of state functions for human and economic development is reflected by some common characteristics of fragile countries analysed in this chapter. Low ability to mobilise domestic resources and to promote economic diversification and moving-up in value chains, high dependence on external financial resources as well as low level of human capital and persistency of underdeveloped and internally disconnected infrastructures are all "symptoms" of state fragility. Behind these common features, however, there is also a high degree of heterogeneity due to history, different endowments, geography, ethnical and religious cohesion and the group of fragile countries includes very different situations in terms of outcomes and degree of vulnerability.

The different features of fragility – both commonalities and heterogeneities – combine in different ways and, furthermore, change over time. Hence, to try and categorise fragile countries, even in subgroups, is difficult, because it involves ample subjective assessments.

[43] Guillaumont and Guillaumont Jeanneney (2009) refer to structural vulnerability using an economic vulnerability index that combines the exposure to shocks – population size, distance from world market, concentration of goods exports, and relative share of value added in agriculture, forestry, and fishing – and the "size" of the shock itself. AfDB (2009) uses structural macroeconomic factors such as falling reserves, high concentration of foreign ownership in the banking system, inflationary expectations, and reductions in GDP growth, the terms of trade and the current account. The European Commission DG Development uses three sets of variables: dependence on export revenues, dependence on external financial flows and capacity to react.

[44] The rankings by the African Development Bank and the European Commission DG Development give similar results. Fragile countries are spread across the different groups even though the variables considered to rank countries according to their vulnerability are somehow different.