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**Sharing Ghana's economic growth:
The challenges of the North-South divide and the accumulation of FDI & external debt**

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Against the backdrop of the changing landscape of foreign and domestic policies, the chapter gives a critical review of Ghana's shared growth agenda. Based on an assessment of poverty reduction between 1992-2006 and on a simulation of growth since 2006, two key questions arise. First, in view of a continual and increasing role of FDI and external debts, will Ghana be able to negotiate favourable conditions with its foreign partners without compromising on the need to complement the low domestic savings with savings from abroad? Second, giving the expansion of extractive industries and their suppliers in the southern regions, how will poorest population groups benefit from growth, particularly those in the northern regions?

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References

1. An abridged history of development policies since independence

Since Ghana in 1957 became the first African country to gain independence from colonial rule, living standards have swung up and down in response to productivity shocks of the country's resource base, to trends in the terms of trade and, last but not least, to changing development policies. Policies have shown blends of socialist, militarist and liberal points of view and booked mixed successes (Aryeetey and Kanbur, 2008; Agyeman-Duah, 2008).

The inheritance from the colonial period consisted of an export-oriented economy with a strong emphasis on peasant cocoa farming, gold mining and logging. The hinterlands provided cheap labour and the development of infrastructure focused on north-south (rail-) roads for transporting export products to the coast. The struggle for independence was peaceful and the new Government, inspired by socialism, proceeded with large-scale investments in infrastructures, including the Akosombo dam and the Tema harbour. These investments aimed at fostering economic growth through import substitution and rapid industrialisation.

The economic growth in the early days of independence failed to protract and stagnated in the mid-sixties. The problems of a centrally led economy, in combination with a growing intolerance of criticism and with rumours about military expenses cuts, triggered a first military coup in 1966. The coup marked the start of a period in which military and civil rule alternated three times and the economy gradually deteriorated. The situation reached its lowest ebb during the 1981-1983 drought and the repatriation of more than a million migrants from Nigeria. In avoidance of a complete collapse, Ghana embarked on an Economic Recovery Program in 1983. This program was among the first structural adjustment programs in Africa. It received substantial support from international development partners and its success made Ghana a front-runner and frequently quoted model (Leechoor, 1994).

After a decade of adjustment policies, another major development took place, namely the transition to democracy in 1992. The National Democratic Congress NDC ruled until 2000, when the New Patriotic Party NPP won the elections and also ruled for two four-year terms. During the 2008 elections, as many as eight candidates were running for the presidency and, in a close call, the NDC candidate won in the second round. In 2012, months before elections, the President suddenly died. The Vice-President took over smoothly and in December 2012 Ghana had its fourth consecutive democratic elections. It was again a close call in favour of NDC. The victory has been contested by the opposition in court, signifying that peace and democracy in Ghana are no longer in its infancy.

The prolonged adjustment programmes and the peaceful transition to democratic rule have had their beneficial impact on the Ghanaian economy. Evidence point to a sustained growth and a substantial reduction of poverty over the past 20 years. It may be noticed that over the years, economic policies gradually shifted away from structural adjustment, bringing poverty reduction and Millennium Development Goals MDGs to the frontline. Ghana, again as one of the frontrunners, embarked on a Growth and Poverty Reduction Strategy GPRS 2002-2005 and GPRS II 2006-2009 (NDPC, 2003, 2005).

In recent years, external developments have been encouraging and Ghana has good prospects for continual economic growth as previous issues of "The State of the Ghanaian Economy" bear witness. Buoyant cocoa and gold prices improved Ghana's terms of trade and increased its export earnings and, last but not least, the offshore oilfield that was discovered in 2007 started to generate substantive additional export earnings from 2011 onwards. This implies an important turn of the boundary conditions of the Ghanaian economy.

To address the changing perspectives, in 2010 the Government embarked on the Ghana Shared Growth and Development Agenda GSGDA (NDPC, 2010).

2. Sharing Ghana's growth: Poverty reduction and the North-South divide

Its record in development policies over the last decades, including the peaceful transition to a sustained democracy, has made Ghana a role model for other African countries. Indeed, this record and the recent improvement of the economic boundary conditions are creating a new window for accelerated growth (Dagher et al, 2011). By the same token, it can help the Government in its efforts to improve the living standards of all Ghanaians, meeting the targets for the year 2015 and beyond as set by the MDGs. For example, Ghana is on track as regards the first MDG to halve, between 1990 and 2015, the proportion of the population with consumption levels below the national poverty line. Starting from some 50% poverty around 1990, survey evidence indicated a decrease to less than 30% in 2006. The 25% target for 2015 has probably been reached in recent years. Nevertheless, other MDG targets like the reduction of maternal and child mortality by three quarters and the halving of malnourishment are more difficult to meet. These indicators are not fully at par with improvements in the overall economy. The low responsiveness of these indicators to economic growth may be explained from the North-South divide and the problems of creating effective and inclusive safety nets like the national health insurance NHIS and the provision of free basic education FCUBE (Aryeetey and McKay, 2007).

The Table below summarizes the progress in poverty reduction in the various parts of the country over the period 1992 to 2006. In addition, the table summarizes the regional scores on primary school attendance and on literacy rates in the year 2008. The picture that emerges is illustrative of the North-South dimension of development in Ghana.

Table: Population, poverty and educational attainment in Ghana

	<i>Population</i>		<i>poverty incidence</i>		<i>primary school</i>	<i>literacy males</i>	<i>literacy females</i>	
	million	growth %	headcount %		% attendance	%	%	
	2010	2000-2010	2006	1999	1992	2008	2008	2008
Ashanti	4.894	3.1	15.1	37.7	48.0	86	84	73
Brong Ahafo	2.283	2.3	29.5	35.8	65.0	72	63	50
Central	1.885	1.7	20.3	27.7	41.2	73	77	57
Eastern	2.324	1.0	19.9	48.4	44.3	73	83	63
Greater Accra	4.408	4.3	11.8	15.2	25.8	84	98	96
Northern	2.285	2.3	70.4	83.9	88.4	51	40	22
Upper East	1.013	1.0	51.4	43.7	57.0	69	43	30
Upper West	0.644	1.1	87.9	88.2	66.9	61	50	28
Volta	1.900	1.5	52.3	69.2	63.4	69	75	51
Western	2.587	3.0	18.4	27.2	59.6	69	78	57
North*	3.942	1.7	68.4	76.6	71.0	57.0	42.5	25.0
Middle	9.077	2.5	26.5	33.5	50.9	78.6	77.0	62.5
South	11.204	2.8	17.5	26.3	42.4	76.5	86.6	73.5
Ghana	24.223	2.5	28.7	39.5	51.7	74.1	75.8	61.5

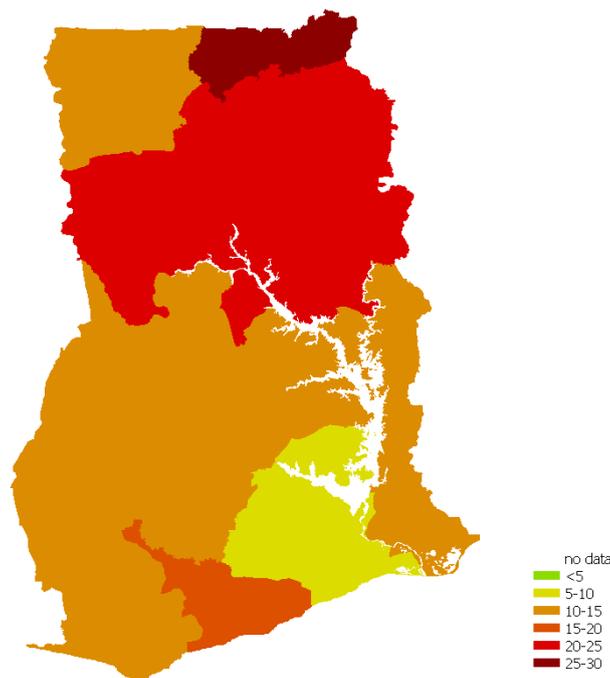
* North = Northern, Upper East and Upper-West Region, Middle=Ashanti, Brong Ahafo and Volta region, South = Central, Eastern, Western and Greater-Accra region.

Source: GSS (2002, 2012) for population and population growth; GSS (2007) for poverty incidence, GSS (2009) for primary school attendance and literacy rates.

Whereas migration patterns lead to a gradual concentration of population in the middle and the southern regions, households in northern regions remain persistently much poorer. Over the reported period of 15 years, poverty in the North has barely reduced, in spite of significant overall progress. Educational indicators support the conclusion: primary school attendance as well as literacy rates are persistently and substantially lower in the North than elsewhere. The fact that in the North of the country only one quarter of women is able to read and write as compared to three quarters in the South is telling in that regard. The persistence of poor living conditions in the North is remaining a true challenge for Ghana.

The spatial dimension of poverty can further be illustrated by looking at health indicators. For example, the next figure shows the prevalence of underweight in children under five years of age, where underweight is determined by using an international weight-for-age score. The picture is based on the outcomes of the 2008 Demographic and Health Survey (GSS, 2009). It appears that underweight is most prevalent in the Upper East at 30% followed by the Northern region with 24%. As compared to a similar survey a few years earlier (GSS, 2007) progress has been made, namely from 32 to 30% in Upper East and from 30 to 24% in Northern region, but these levels are still high compared to the average of 14% in the South.

Prevalence of underweight children under five years of age (% per region)



Source: GSS(2009)

3. Sharing Ghana's growth: Accumulation of FDI & external debt

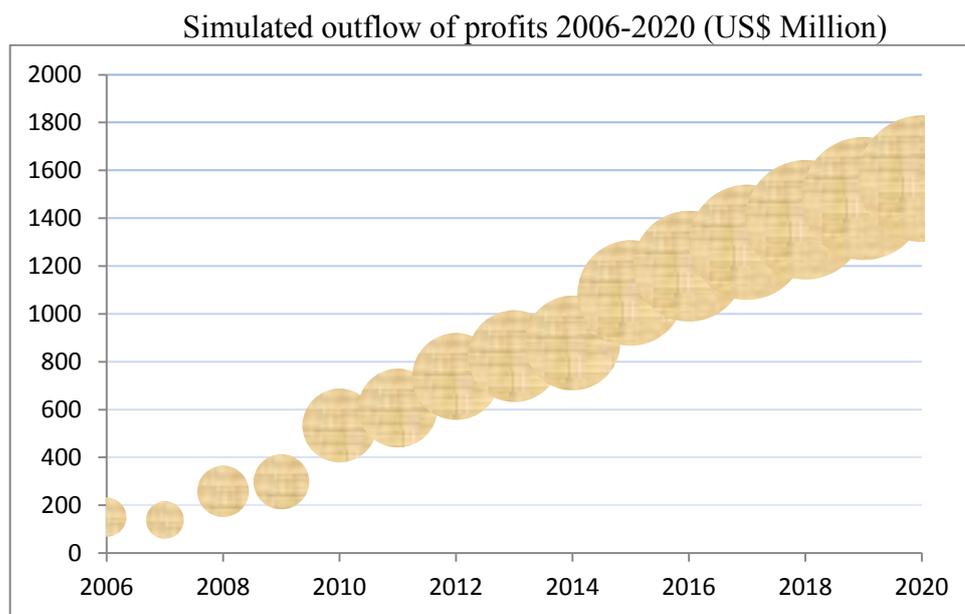
“The state of the Ghanaian economy in 2011” indicated that trends in Foreign Direct Investment FDI since 1994 have led to an estimated accumulated FDI in the economy of around US\$ 21 Billion by the year 2011 ending (ISSER, 2012, Table 6.8). Three quarters of this concerns FDI in construction and manufacturing, including sizeable investments in mining and, since 2007, in the oil industry. Agriculture has a share of less than 6% in FDI, but due to recent foreign interests in large-scale plantations and biofuel production (‘land

grabbing’) this share may increase in the near future. Already in 2009, more than 2% of Ghana’s rainfed land belonged to foreigners (Cotula et al., 2009).

To get an idea of the significance of FDI, one needs an estimate of the total capital stock employed in the Ghanaian economy. As a rule let us suppose that about 70% of the GDP accrues to labour and the remaining 30% to capital, like in the 2006 Social Accounting Matrix SAM of the next section. At the GDP of close to US\$ 35 Billion in 2011, the total remuneration of capital can then be estimated to be some US\$ 10 Billion. Finally, by applying an assumed return on capital of 15%, this would amount to a total stock of US\$ 67 Billion.

With the qualification that these figures are no more than indicative, still they suggest that the foreign involvement in the economy is substantial. At an estimated share of US\$ 21 Billion in a total stock of US\$ 67 Billion, foreign ownership of domestic capital could well be around one third of the total and, in view of the involvement of foreign companies in Ghana’s recent economic growth, this share may be expected to increase over time.

To illustrate this point the figure below simulates the domestic income that leaves the country between 2006 and 2020 as a result of increased foreign owned capital. These are outcomes of a simulation model described below and assume given trends and given reinvestment patterns. Although such figures are no more than indicative, the eight-fold increase in a 15 year period show that it is far from imaginary that the outflow of profits can become a burden on Ghana’s balance of payments.



Source: Author’s computations using Van den Boom (2013)

Another salient feature of FDI in Ghana is the distribution over the 10 regions (ISSER, 2012, Figure 6.8). As the previous SGER indicated, 83% of all foreign financed investment projects that came into Ghana in the period 1994 to 2011 was implemented in Greater Accra, followed by Ashanti with 6% and practically no FDI was done in the three northern regions (1%), nor in Brong-Ahafo or Volta region (2%). This is one more showcase of the bias in regional development that was illustrated above.

The development of Ghana’s external debt is also point of concern for sustainable growth, although a recent Debt-Sustainability-Analysis by the IMF and the World Bank indicated that Ghana’s liquidity and solvency prospects are relatively good (IMF/WB, 2011). Yet, in spite of high close to double-digit economic growth during 2006 to 2011, the external

debt to GDP ratio almost doubled from 11.6% in 2006 to almost 20% in 2010 and 2011. It should also be kept in mind that the 2006 figure is net of the US\$ 4 Billion debt relief that Ghana received in 2006 under the Highly-Indebted-Poor-Country HIPC initiative. Without this relieve the situation would be much worse. Currently, additional loans from new development partners are considered, while the Government intends to issue bonds in foreign exchange using Ghana's recently acquired status of lower middle income country. Examples are a possible US\$ 3 Billion loan from China and a planned € 1 Billion bond. Though external debt can be an important and necessary means to finance the gap between high investment and low domestic savings, the appetite to borrow and to spend is putting high demands on the improvement of public spending efficiency (ISSER, 2012, p. 52).

4. Social Accounting Matrix 2006 and simulation of the economy 2006-2011

In order to generate a consistent and detailed empirical simulation framework for the Ghanaian economy, we employ an applied general equilibrium approach (Ginsburgh and Keyzer, 2002), proceeding in three steps. The first step is the construction of a Social Accounting Matrix SAM for the year 2006, the base-year of the revised GDP figures (GSS, 2010, 2011, 2012). The second step is the calibration of a welfare/equilibrium model so that the outcomes replicate the 2006 SAM. The final step is the iterative adjustment of driving forces from 2007 onwards so as to simulate the economy for subsequent years (for details and technical specificities see Van den Boom, 2013).

The 2006 SAM provides an empirical snapshot of the Ghanaian economy at both micro- and macro-level. It builds on the 2005 SAM (Breisinger, Thurlow and Duncan, 2007), which is adapted on two main points. First, the production structure is adjusted to the new GDP series. These series involved an upward correction of GDP by as much as 70%, while the share of the service sectors increased from 36% to almost 50%. The second major adjustment concerns the extension from 2 (rural-urban) to 10 population groups, each representing one of Ghana's regions. Income and expenditure patterns have been estimated from the fifth round Ghana Living Standards Survey (GSS, 2007), while regional population growth is taken from Population Census 2000 & 2010, as in the Table above. Finally, the macro indicators are taken from various official publications.

The 2006 SAM is detailed and, by construction, it is consistent. The detail is reflected in the social stratification of population groups I (10 regions), the economic classification of production sectors J and goods K (20 agricultural goods, 17 industrial goods and 9 services). For each population group and each sector, the SAM equates the income to the expenditure. The SAM keeps track of the inter-sectoral linkages and the trade and transport requirements, while assuring that the ensemble of accounts moves within the three boundaries of the economy, namely the Government budget, the balance-of-payments and the savings-investment account.

The table below provides a summary of the Ghanaian economy in 2006.

Overview of the Ghana Social Accounting Matrix SAM 2006 (revised national accounts series)

A. SAM in million cedi

	GHANA - I	GHANA - J	GHANA - K	LABOUR	GOVERNMENT	FOREIGN	SAVEINVEST	GHANA
GHANA - I		5104		12302	677	1519		19602
GHANA - J			27992					27992
GHANA - K	17457	10182	6887		955	4627	3369	43477
LABOUR		12302						12302
GOVERNMENT	453	265	895			848		2461
FOREIGN		139	7703					7842
SAVEINVEST	1691				829	848		3369
GHANA	19602	27992	43477	12302	2461	7842	3369	119534

B. SAM in dollar per capita (2006 population 21,940,000; exchange rate 0.9235 cedi to the dollar)

	GHANA - I	GHANA - J	GHANA - K	LABOUR	GOVERNMENT	FOREIGN	SAVEINVEST	GHANA
GHANA - I		252		607	33	75		967
GHANA - J			1382					1382
GHANA - K	862	503	340		47	228	166	2146
LABOUR		607						607
GOVERNMENT	22	13	44			42		121
FOREIGN		7	380					387
SAVEINVEST	83				41	42		166
GHANA	967	1382	2146	607	121	387	166	5900

Source: Van den Boom (2013).

From Panel A of the table it follows that Ghana's GDP at basic prices was 17,810 million cedi in 2006, namely the gross output value of 27,992 (row GHANA-J and column GHANA-K) less the value of 10,182 for intermediate inputs (row GHANA-K and column GHANA-J). As shown in Panel B, this is equivalent to an average per capita income of US\$ 879 (i.e. 1382 less 503), slightly less than US\$ 2.50 per capita per day.

Looking at the allocation of the 2006 GDP (column GHANA-J), it appears that most consisted of labour income (12,302 million or 69%) and non-labour capital income (5,104 million or 29%) while relatively small taxations on profits (265 million or 1.5%) and remunerations due to foreign ownership (139 million or 0.8%) make up the balance.

The accounts of the ensemble of households (GHANA-I) shows that households receive a small net transfer from the government (transfer 677 less taxes 453), but a substantive income from overseas remittances (1,519 million). It also shows that the private savings are fairly low (1,619 million) comprising less than 9% of total income. As the savings and investment account (SAVEINVEST) indicates, these private savings constitute about half of the total cost of fixed capital formation (1,691 out of 3,369). The remaining half is financed in equal proportions by the Government (829) and by foreign investors (848).

As regards the Government budget it stands out that more than one third of the total revenues consists of the net official payments from abroad (848 million), another one third concerns indirect taxes (895 million), while personal and company taxation (453 and 265 million) constitute a respective 20% and 10% of the revenues.

The balance-of-payments account FOREIGN is a further confirmation of the basic features of the Ghanaian economy in 2006. The deficit on the trade balance was sizeable (3,076 million or 17% of GDP) with a strong dependence of the total import bill on official transfers and on overseas remittances (respectively 848 and 1,519 million) and a supplementary inflow of foreign capital (848 million).

After having constructed the 2006 SAM, the second step of our empirical simulation framework for the Ghanaian economy concerns the calibration of a welfare/equilibrium model so that the 2006 SAM is its base-year solution. Subsequently, through an iterative adjustment of driving forces, the economy is simulated from 2007 onwards. The approach describes a General Equilibrium with transfers in which both consumers, producers and traders maximize their own objective (utility, profit) and in which price signals are computed that reflect scarcity in terms of the efforts of the producers and the wants of the users. Moreover, the outcomes have a welfare interpretation in the sense that the relatively poor regions in the North have a lower weight in the social welfare function (Van den Boom, 2013). Consistency and detail are the salient feature of the approach, reflecting that the outcomes assure that all balances hold, both at micro- and at macro-level. This avoids the inconsistency of partial models and the lack of detail of macro models (e.g. Mends-Brew et al., 2012).

The following variables are driving the model.

- Population growth and internal migration between regions

- Human capital formation by region
- Gross fixed capital formation and distribution by sector
- Government expenses on public administration and defence
- Taxation of profits by sector; indirect taxation by good; subsidies health and education
- World market prices for imports and exports by commodity

In addition, results critically depend on the following parameters:

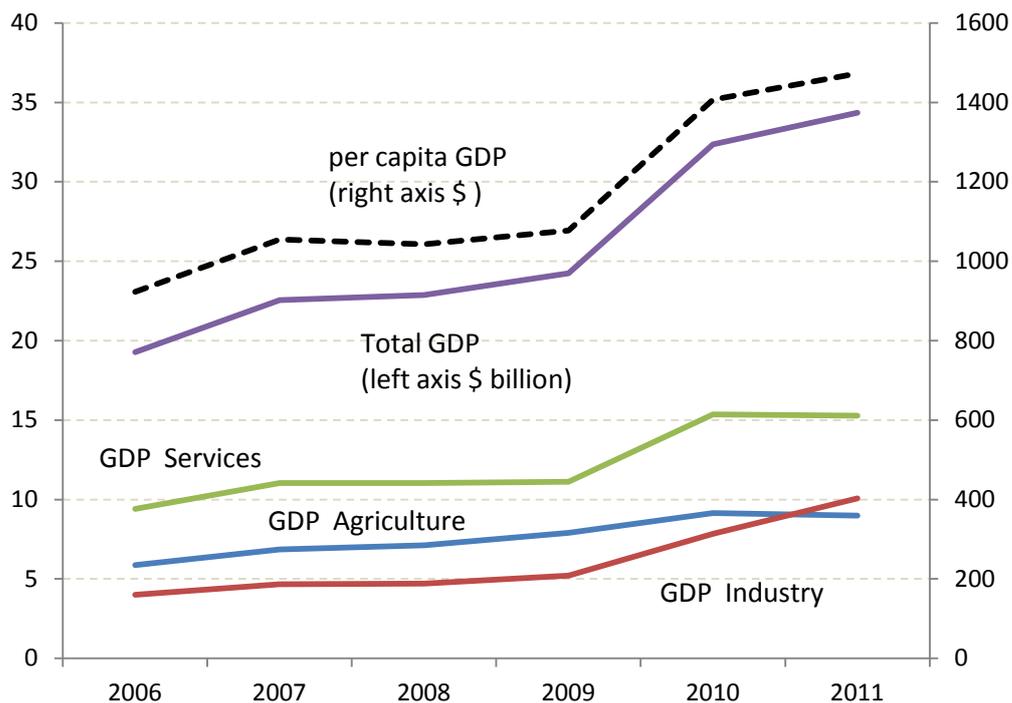
- Ownership of capital by sector (population groups, government, foreign)
- Government share in domestic saving and shares by population groups
- Size and composition of the trade deficit (remittance, aid, savings/FDI, profit outflow)

Based on these drivers and parameters the following outcomes are simulated:

- Gross production, intermediate demand and GDP growth by sector
- Wages, capital income, transfers, remittances and consumption by population group
- Imports by commodity (both in values and in quantities)
- Private consumption and exports by commodity (both in values and in quantities)
- Savings (government, foreign and by population group)
- Prices at specific stage (producer/ import price, final product price, user/export price)

The figure below illustrates one key outcome of the simulation. It summarizes the growth and composition of GDP since 2006 within the changing boundary conditions that prevailed.

Growth and composition of Ghana's GDP 2006-2011



Source: Van den Boom (2013)

It shows the high growth of the Ghanaian economy since 2006, on average close to double-digit. At an estimated income that averaged about US\$ 4 per capita per day in 2011, Ghana is now well above the official international threshold for low-income countries. Yet, as discussed above, Ghana's middle-income status conceals the persistence of poverty in certain population groups, especially in the northern parts of the country.

Another noteworthy observation is the rapidly changing landscape in terms of contributions to GDP by the various sectors. Notably, with services continuing to be the largest income earner, growth in agriculture seems to stagnate over the past couple of years, while the total income in the industrial sector is overtaking the total income from agriculture, which is primarily due to the sectoral growth in connection with oil. Given the predominance of agriculture in terms of employment and the concentration of poverty amongst small-scale farmers, these trends may have important implications for Ghana Shared Growth and Development Agenda GSGDA.

Various scenarios could be developed to look at the implications of different policies regarding the use of oil windfalls (Breisinger et al., 2010). An empirical elaboration of such scenarios with simulation results is beyond the scope of this chapter. Instead we discuss a few basic principles that underlie successful policies.

The showcase in this regard is Norway (Larsen 2006). The success is usually attributed to the combination of fiscal austerity on the one hand and an adaptive oil fund on the other. The fiscal austerity avoids consumptive overspending that may be difficult to reverse, while the adaptive oil fund absorbs most of the oil revenues and is invested abroad to generate a permanent revenue. It should be kept in mind though that a simply copying of the Norway recipe is unlikely to work in the case of Ghana, notably because per capita oil production in the two countries is incomparable. At production levels between 1.6 and 3 million barrels per day and a population of less than 5 million, one Norwegian ‘produces’ more than thousand times more oil than one Ghanaian. Because of this Norway can afford free health care and free education and has an accumulated US\$ 640 billion sovereign investment fund from oil revenues.

Nonetheless, lessons can be drawn as regards the preferred fiscal policies to ensure that Ghana’s oil revenues contribute effectively to growth and sustained development. For example, in 2011, the Ghana parliament approved the establishment of a kind of permanent income funds, which in 2012 had an accumulated value of almost US\$ 70 million, inclusive of a heritage fund of 55 and a stabilization fund of 15 million. Clearly, the yield on these funds can only provide a very modest permanent support to the budget.

The more significant question regards the part of the oil windfalls that accrues directly to the Government budget. The question arises how this is affecting consumption and savings by the Government. Given the 2012 all-time high budget deficit, it may be optimistic to assume that Government uses all oil revenues for savings (i.e. to increase the fixed capital formation) rather than for consumption (i.e. to increase the cost of public administration and defence). Clearly, the more oil revenues are used for consumption, the more it will impede upon the growth prospects for the Ghanaian economy.

5. Implications for Ghana Shared Growth and Development Agenda GSGDA

As the brief history of economic policies, the tables and figures, the 2006 SAM and the simulation outcomes for 2007 to 2011 indicate, the Ghanaian economy is currently enjoying a period of high growth. Nonetheless, the evidence presented also bears out that the success is not without risk, posing challenges as regards the sustainability and the sharing of growth. The challenges concern the traditional challenges related to the terms of trade and to the accountability of governance, as well as new challenges related to the sharing of growth amongst Ghanaians mutually on the one hand and between Ghana and its foreign partners on the other.

One traditional challenge to development is Ghana’s vulnerability to changing terms of trade. This has been a feature of the Ghanaian economy ever since independence. It is the result of the trade structure with exported raw materials like cocoa, gold and timber -followed

in 2011 by oil- traded for imported manufactured goods like processed foods and machines. The economic history shows various instances of this vulnerability. For example, in the late 1990s, world prices of gold and cocoa exports plummeted and this coincided with a surge of the import bill. More recently in 2008 and 2011, the balance of payments have been put under pressure by prices hikes of wheat and rice imports. Such external developments have created various contingencies in the fiscal and monetary policies with associated risk of inflation and the need to cut investment and social sector programs under economic headwinds. Contrariwise, from time to time the economy of Ghana has also experienced periods of positive external shocks, markedly the steady increase over the past decade of the price of its main exports cocoa and gold. By the same token, an even more significant development is the windfall gain from the upcoming oil revenues. One challenge will be to avoid the symptoms of the Dutch disease by which an appreciation of the cedi due to the oil exports could have adverse effects on the competitiveness of the industries unrelated to the oil sector and of agriculture.

Another challenge that threatens the economic prospects of Ghana concerns the transparency and accountability of governance. Overspending, the mounting cost of public administration and defence in 2012, the limited fiscal austerity and reported cases of corruption continue to threat macro-economic stability. Clearly, a failure to make improvements in this regard is at the risk of losing the domestic support for the public cause. In this respect the management of the windfalls from oil revenues will be yet another test of the progress that Ghana is making on its shared growth agenda GSGDA.

As regards the new challenges regarding the sharing of growth there are two area of particular interest. First, in view of the changing economic boundary conditions with a continual and increasing role of FDI and external debts, will Ghana be able to negotiate favourable conditions with its foreign partners without compromising on the need to complement the low domestic savings with savings from abroad? In this context, the sharing rules that come with the concessions given to foreign companies should be cautiously examined, especially in the mining, oil and gas industries. By the same token, the managing of external debts would require careful comparison of the alternatives. As the concessional loans and grants from traditional donors tend to lose grounds and Ghana's public debt consists more and more of commercial loans, solvency can becomes an issue (Dzorgbo, 2011). Unless Ghana will resist the temptation of short-term consumptive deficit spending, debt servicing may become a true burden to the economy. As the current crisis in Europe is showing, the economic and social cost associated with the writing-off of public debts cannot be overestimated. On the other hand, having reached the middle-income status, resorting to dept relief like in 2006 HIPC may no longer be an option for Ghana.

Second, giving the expansion of extractive industries and their suppliers in the southern regions, the question arises how poor farm households would benefit from growth, particularly those in the northern regions? In that regard the fiscal management of the current oil windfalls is critical (Breisinger et al., 2010). An equitable development will require efforts to use large parts of these windfalls to develop infrastructures for agriculture and improved input supplies. Indeed, Ghana now has a unique window of opportunities to make growth more balanced across sectors e.g. by facilitating small-holder farming, small-scale industries and businesses and, by the same token, more evenly spread across population groups e.g. by equitable spending of oil money in direct support of the poorest. A balanced and shared growth will be more sustainable, not only from an economic point of view by improving productive capacities but also from a social point of view by the stability that comes with sharing the growth that the economy enjoys.

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