



THE SOCIO-ECONOMIC IMPACT OF
ACCRA BREWERY LIMITED IN GHANA

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EXECUTIVE SUMMARY

This report describes the results of a socio-economic impact assessment that has been carried out for Accra Brewery Ltd (ABL) on the economy of Ghana. ABL, has around 30% volume share of Ghana's beer market and is a subsidiary of SABMiller plc. The study aims to enable both the company's management and its many stakeholders to analyse the broad socio-economic impacts of its business decisions and to discuss these decisions based on facts and a realistic interpretation of them.

The results presented herein have been obtained by using an economic model which is based on input-output analysis and which distinguishes between *direct* (i.e. directly related to ABL's operations), *indirect* (i.e. related to that portion of the operations of ABL's suppliers and distributors that depend upon ABL) and *induced* impacts (i.e. related to how the incomes earned because of ABL's operations, are spent throughout the economy). The economic variables that are derived from this exercise are presented in terms of:

- value-added (e.g. household income, tax revenues and company profits and savings); and
- employment supported by ABL and Voltic's operations.

The study confirms the relative economic importance of ABL and Voltic in Ghana:

1. ABL and Voltic's operations generate value-added of US\$117 million, which is the equivalent of 0.4% of GDP;
2. ABL and Voltic contribute substantially to the tax income of Ghana with US\$46 million economy-wide tax income, equal to 1.1% of total tax income;
3. ABL and Voltic provide high-quality employment and its operations support at least 17,600 jobs throughout the economy, equivalent to 0.2% of the labour force; and

4. ABL provides guaranteed prices for raw materials, which gives farmers an important degree of price security for their harvest.

In addition to this description of the company's economic impact, one scenario has been analysed. This scenario describes a hypothetical situation in which all ABL's products would be imported instead of being produced in Ghana.

The scenario analysis suggests the following conclusion:

When substituting ABL and Voltic's local operations with imports, the Ghanaian economy would suffer a loss of US\$22 million in value-added and 5,100 in jobs.

We also provided several recommendations to the management team of ABL and to the Government of Ghana in the interests of potentially even increasing the company's socio-economic impact.

Recommendations for ABL and the Government of Ghana:

1. Recognise the fact that ABL and Voltic make a substantial local impact on Ghana's economy and consider making business and public policy decisions that could even increase that impact;
2. Ensure that Ghana maintains a business environment that encourages continued investment by the private sector; and
3. Consider the possible impact of brewery expansion and an increase in local agricultural sourcing (e.g. of sorghum) on the country's economy, and the policy changes and improvements that are most likely to promote these projects.

US\$117 MILLION

VALUE ADDED TO THE
GHANAIAN ECONOMY BY
ACCRA BREWERY LIMITED



ABL's brewery in the capital city, Accra.



Maize field. ABL sources all its maize from local farmers.

SECTION 1: INTRODUCTION AND OBJECTIVES

Accra Brewery Ltd (ABL) is the oldest brewing company in West Africa. Originally founded as the Overseas Breweries Limited in 1931, ABL became a subsidiary of SABMiller in 1997. Today, ABL produces both alcoholic and non-alcoholic beverages and the company's leading brands include Club Premium Lager, Club Gold Export Lager, Castle Milk Stout, Stone Strong Lager, Chairman Malt Liquor, Club Shandy, Redd's Fruit Fusion, Peroni, Chibuku, Club Cola, Club Muscatella, Club Orange, Club Soda and Club Quinine Tonic. SABMiller also owns Voltic, a company which was founded in 1995, and which produces bottled water and some soft drinks. ABL has approximately a 30% share of Ghana's beer market and Voltic has a 85% share¹ of the water market.

Given its long history and prominence in Ghana, ABL asked the consultants to conduct a Socio-Economic Impact Assessment (SEIA) of its operations, with a view to gaining a deeper understanding of the company's effects on such variables as employment, value-added, and household incomes. Accordingly, from January through April 2011, a study was carried out to quantify the impacts of ABL on the economy of Ghana, making use of the company's 2010 financial data and the most up-to-date economic variables available for Ghana. These impacts focused on the following operations:

- Voltic, with 450 jobs and gross revenues of US\$37 million² in 2010; and
- ABL, with 400 jobs and gross revenues of US\$52 million in 2010.

As noted above, the objective of this study was to quantify the socio-economic impact of ABL in order to enable management to:

1. Analyse the broader socio-economic impact of its decisions; and
2. Discuss socio-economic issues with various stakeholders based on the facts and the realistic interpretation of them.

In order to meet these objectives, an economic model has been developed based on input-output analysis that describes the linkages or inter-dependencies between economic sectors. The economic model is introduced in Section 2; Section 3 contains a description of the Ghanaian economy. A description of the current economic impact of Ghana is described in Section 4; Section 5 includes ABL's community engagement in Ghana; and the results of one scenario analysis is presented in Section 6. Finally, in Section 7 the main conclusions and recommendations for ABL and the Government of Ghana are presented.

¹ 85% market share in water market is an estimate of Voltic.

² The exchange rate used for official financial reporting by ABL and Voltic in Ghana is 1.42 GHS/US\$ in 2010.

SECTION 2: MODEL DESCRIPTION

2.1 MODELLING APPROACH

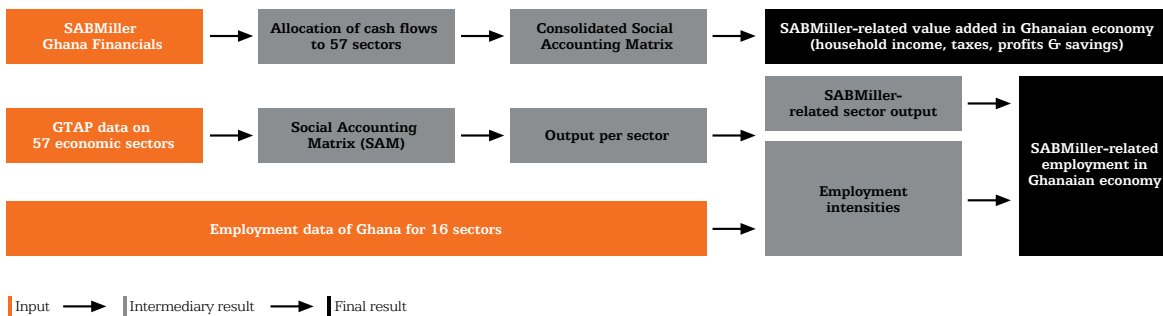
The model that was developed for this study combines the distribution of ABL's and Voltic's revenues over its various financial stakeholders (e.g. suppliers, employees, government, etc) with an input-output (I-O) description of the Ghanaian economy. Input-output analysis considers inter-industry relations in an economy, depicting how the output of one industry flows toward another industry where it serves as an input; as a consequence, we trace economic inter-dependencies among producers of goods and services, or how one industry depends upon another, both as a customer of outputs and as a supplier of inputs. Fundamentally, what the input-output table does is to reconcile what goes into an economy, with what emerges from it.

Suppose, for example, that the single output of the Ghanaian economy is beer. In order to produce beer, the economy requires inputs like labour and capital, along with raw materials like sorghum. The difference between the cost of the inputs and the price of the outputs indicates the value-added that is associated with the brewing of beer. By examining a country's input-output table, analysts gain a clearer idea of what resources are being used for what purposes, and how much value-added is generated through the production of goods and services. These tables help governments think about how the most value-added can be generated, given the inputs that are available to the nation.

The Social Accounting Matrix (SAM) that is related to the I-O tables, in turn, examines the national accounts in a more disaggregated fashion to determine, inter alia, how incomes and employment are distributed among different industries, regions, social groups, and households. For example, brewing takes place in Accra and uses a mix of different types of labour: managerial, skilled, semi-skilled, and unskilled. The suppliers to the brewery, including farmers, are similarly scattered around the country and use their own types of labour. Again, the SAM indicates how the production process is distributed in terms of its effects on such economic units as regions and households; more on this below.

The central purpose of this report is to trace and measure the effects of ABL's and Voltic's operations on the Ghanaian economy. Thus, when ABL, for example, places orders with suppliers or delivers its products to wholesalers, these companies will generate revenues and will pay wages to their workers. These suppliers may have to invest in additional capacity owing to ABL's orders, leading them to make purchases from a variety of local, Ghanaian industries. In parallel, the workers who are directly and indirectly employed by ABL and its suppliers will make their own consumption decisions, causing the purveyors of the goods and services they buy to place new orders for items and also to invest in additional capacity as needed. This

FIGURE 1: OVERVIEW OF THE MODELLING APPROACH



study thus provides a quantitative and, to a lesser extent, qualitative assessment of all these effects on the broader Ghanaian economies. Figure 1 shows how three information sources are used to arrive at the two main model outputs.

It is also important to note some of the shortcomings of the I-O/SAM methodology:

- first, reports of this kind are data-intensive and technically demanding. Their accuracy depends largely upon the availability and quality of both national and firm-level data;
- second, the I-O/SAM is best used as a 'snapshot' in time (in the case of this study the time is generally 2010) of a company's economic activities. If there is interest in time-series research or in tracking how the major variables under study have changed, the data can be useful, but only with certain caveats. For example, I-O data generally does not account very well for technological change since the tables (and the underlying model of the economy on which they are based) are only updated infrequently. However, since most industrial sectors engage in technological change over time, the analyst who relies on this data may miss some important effects, such as the possibility of capital-labour substitution. (Note that the net employment effects of that shift are not immediately obvious: thus, while capital-labour substitution could result in less direct demand for workers by firms like ABL, the increased productivity of such companies could lead to lower consumer prices and thus higher demand for the goods produced, so that the overall economic and employment impact could well be positive); and
- third, the I-O/SAM does not provide a good method for comparing the productivity of foreign and domestic firms. The framework assumes that, for example, the capital-labour coefficients for similar types of firm are essentially the same, thus equivalent injections of, say, investment into the economy by foreign or domestic firms would generate comparable

distributions of employment and income. Yet many economists have argued that foreign investment is indeed more productive for the economy as a whole because of the specific linkages that it forges with domestic suppliers, for example through technology transfer and financing. This type of 'linkage analysis', however, fails to yield much information on broader economy-wide impacts.

Despite these shortcomings, the great attribute of the I-O/SAM approach is that it yields a macro-perspective on a single firm's operations. Given ABL's and Voltic's desire to understand their broad socio-economic impact or 'footprint,' this approach seems to have particular relevance. In particular, this framework focuses on the financial and economic impacts of a company's investment and ongoing operations within a national setting, and should give a sense of the 'multiplier effects' associated with a company's operations throughout the economy. That information, in turn, can be used by corporate executives and government officials as they seek to understand which sectors in particular benefit from the activities of a company like ABL, and also the potential vulnerabilities with respect to future employment and income generation that might exist should, for example, certain types of suppliers lose their competitiveness.



A delivery truck about to take product to the market.

2.2 SOCIAL ACCOUNTING MATRIX

The key ingredient of the model is the Social Accounting Matrix (SAM). The SAM describes the financial flows of all economic transactions that take place within the Ghanaian economy. It is a statistical and static³ representation of the economic and social structure of Ghana. As shown in Figure 2, the number of columns and rows are equal because all sectors or economic actors (industry sectors, households, government and the foreign sector) are both buyers and sellers. Columns represent buyers (expenditures) and rows represent sellers (receipts).

Of the four quadrants in the matrix, three are relevant here. Final *consumption* induces production which leads to financial *transfers* between the various sectors which subsequently generate *incomes* for households, governments (taxes) and profits (dividends and savings).

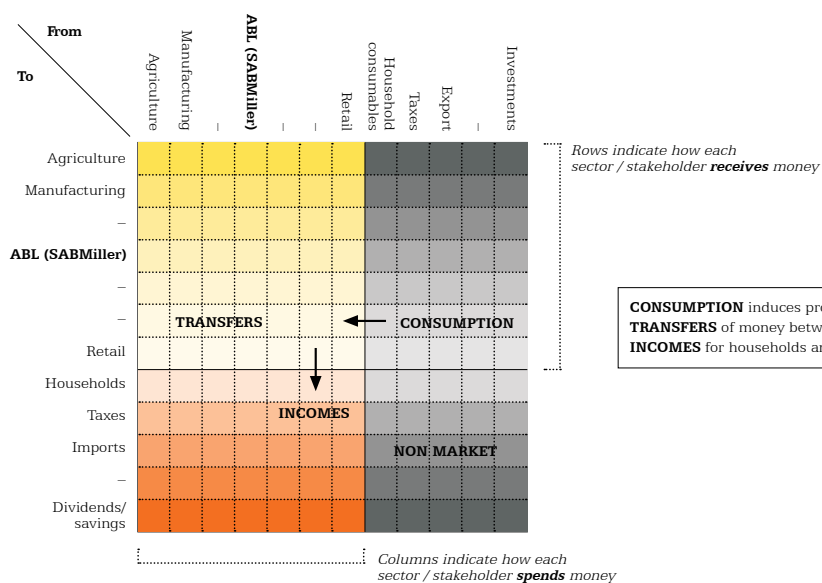
As indicated in Figure 2, ABL has been included as a sector in its own right by adding a row and a column in the matrix. The column is ABL's re-allocated cash flow statement. The row is left entirely blank except for the fraction of final beer consumption that flows to ABL and the (few) revenues that come from export. In that sense, beer consumption has been made an exogenous variable. The last step in constructing the matrix is to normalise, it such that all columns add up to one. The final beer consumption can then be traced in money terms throughout the economy. In doing so, the economic effect related to the presence of ABL can be divided into three effects:

1. *Direct* effects (round 0): effects directly related to spending by ABL (e.g. jobs and salaries provided by ABL);
2. *Indirect* effects (rounds 1 and 2): effects due to hotels, bars and retailers re-spending the money they receive from end-customers and suppliers re-spending the money that originated from ABL (e.g. jobs and salaries provided by retailers and suppliers). In the various graphs in this report a distinction is made between first tier trade partners of ABL in round 1 (i.e. direct suppliers and clients) and the suppliers of these first tier trade partners in round 2 (i.e. indirect impact other); and
3. *Induced* effects (round 3): effects due to the increased expenditures of households enabled by the increasing incomes generated by the direct and indirect effects.

2.3 ASSUMPTIONS

The main assumption in the model described above is that input-output analysis implicitly assumes that an increase in demand can be met by an increase of production at constant prices in all affected sectors of the economy. In reality however, there are sectors that will not 'feel' the effect of an increased demand for beer and therefore will not experience an increase of production. Alternatively, there can also be sectors that are unable to increase production at constant prices because of shortages in, for example, labour, raw materials and production capacity. However, due to under-employment, this seems not an issue for (unskilled) labour-intensive industries.

FIGURE 2: SOCIAL ACCOUNTING MATRIX



³ SAMs are valid for a specific year. Economies are subject to change and SAMs must be updated periodically.

SECTION 3: THE GHANAIAN ECONOMY

Ghana has been viewed by the international community in recent years as an African success story. Free and fair elections, and peaceful changes of government, have demonstrated that there are no inherent barriers to democratisation in Africa. The management of the economy has also been professionalised, providing investors and entrepreneurs with reassurance about the prospects for economic stability.

To be sure, the introduction of potentially large oil revenues into the economy beginning in 2011 following the coming on-stream of the offshore Jubilee field coupled with increased earnings from gold mining, will pose challenges for the Central Bank and relevant ministries as they try to manage the potentially inflationary inflow of hard currency. Asset bubbles could be created, making the economy more volatile and brittle. In addition, some of Ghana's traditional sectors could also be squeezed by these inflationary developments, as they could face higher prices for inputs, including labour (and particularly skilled labour).

Unlike many other developing world economies that depend heavily upon a single commodity, however, Ghana's economy is relatively well-diversified between agriculture, industry, and services. Exports of gold, timber, cocoa, diamonds, bauxite, and manganese are important drivers of GDP, although at an estimated value of US\$5,200 million, they are far outstripped by imports of capital equipment, petroleum, and food products with a total value of US\$10,300 million.

With the start of oil production in early 2011, the balance of trade could become more positive, though this effect will be offset to some degree if strengthened currency values prompt higher levels of imports. Still, despite the excitement in Ghana that revolves around the recent oil discoveries, it is important to recall that the domestic economy continues to revolve around subsistence agriculture which employs 85% of the workforce, mainly smallholders. Accordingly, the government and other stakeholders must continue to develop policies and programmes that ensure productivity gains in the agricultural sector. Figure 3 and Table 1 provide reference data on the evolution of Ghana's economy.

FIGURE 3: GROWTH OF GROSS DOMESTIC PRODUCT: GHANA VS SUB-SAHARAN AFRICA

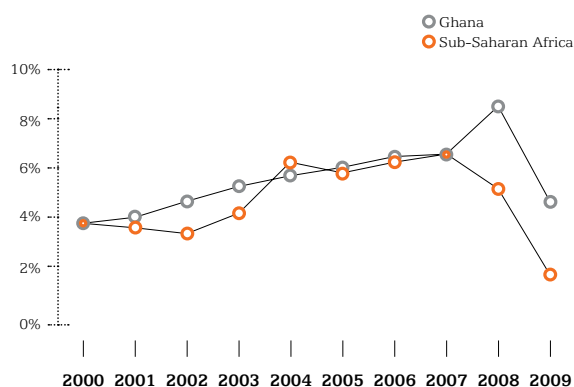


TABLE 1: KEY INDICATORS OF THE GHANAIAN ECONOMY 2010

Population	23 m
Size of workforce	11 m
Nominal Gross Domestic Product (GDP)	US\$31,550 m (GHS44,799 m)
GDP per capita	US\$1,370 (GHS1,950)
Government revenue as % of GDP	21.5%
• Tax revenue as % of GDP	13.6%
• Non-tax revenues & Grants as % of GDP	7.9%
Sector breakdown of GDP	Agriculture 23% Forestry, fisheries 6.1% Mining & Quarrying 1.8% Manufacturing 6.2% Utilities 1.2% Construction 8.7% Wholesale & Retail trade 5.6% Hotels & Restaurants 7% Transport & Communication 11.9% Finance & Business services 8.9% Public services 15.9% Net Indirect taxes 3.7%
GDP by expenditures	
• Domestic demand	86.8%
– Private consumption	75.6%
– Government expenditure	11.2%
• Real investment (GFCF)	22.4%
• Net exports of goods and services	-13.1%
• Statistical Discrepancies	3.9%

Source: Ghana Statistical Service (GSS) 2010

SECTION 4: ABL'S ECONOMIC IMPACT IN GHANA

The model described in the previous section has been applied to determine the economic impact of ABL and Voltic on the economy of Ghana. In this section some of the results are presented. First, ABL's 'going-concern'⁴ impact on value added over the entire economy is discussed. Next, the effects on employment are presented.

In discussing ABL's impacts, it is crucial to recognise that these impacts are felt *directly* through the company's own operations and *indirectly* through the impacts on its suppliers. When ABL purchases bottles, for example, its suppliers earn revenues and they pay taxes and wages. These effects are captured by our analysis. Further, when the employees of ABL, Voltic, and their suppliers earn incomes, part of this is spent on the local economy, again with important economic impacts; these are called the *induced* effects. We begin by discussing ABL's direct impacts on value added in Ghana.

company's salary and tax payments and its profits. To arrive at the value-added for the Ghanaian economy, one has to subtract the salary and tax payments and profits that accrue to foreign shareholders. Figure 4 shows the value-added related to ABL's operations.



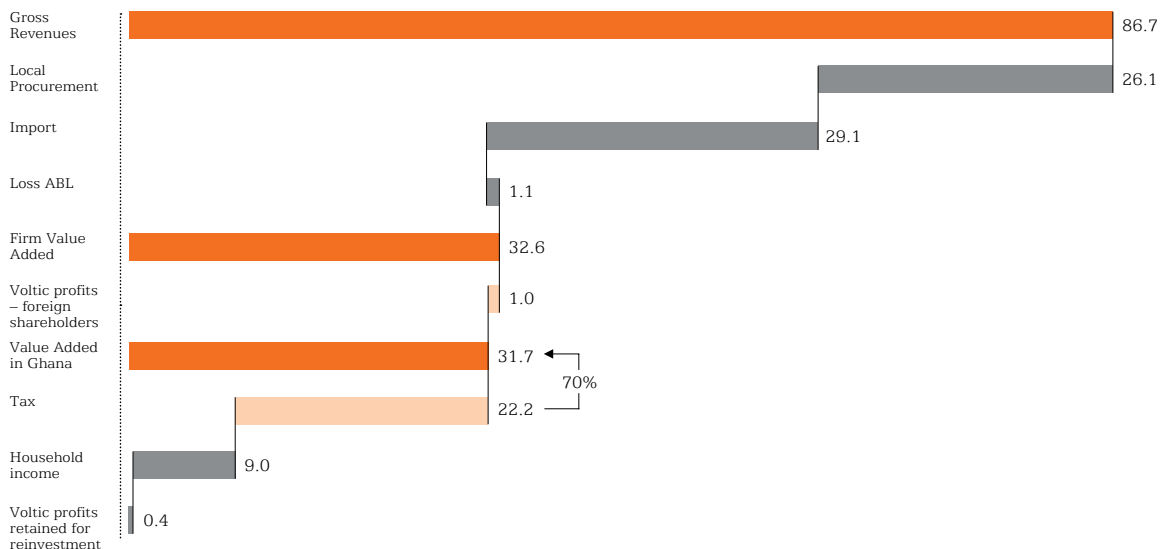
Of the total revenues of US\$86.7 million⁶, ABL's overall value-added is US\$32.6 million. However, since SABMiller has a 100% share in ABL and Voltic, some of this value-added leads to cross-border dividend payments. Subtracting this amount leads to a value-added of US\$31.7 million for the Ghanaian economy. Out of this, the government receives US\$22.2 million in taxes, households US\$9 million in salaries and US\$0.4 million of the profits⁷ remains in Ghana for reinvestments.

This means that of the total value-added that ABL directly contributed to the Ghanaian economy in 2010, 70% is in the form of taxes. From a national economic perspective ABL's value-added accounts for 0.1% of GDP.

4.1 DIRECT VALUE-ADDED OF 'GOING-CONCERN' OPERATIONS

A company's value-added is defined as its revenues minus the cost of all goods and services minus revenue adaptations⁵. To put this in other words, it is equal to a

FIGURE 4: ABL AND VOLTIC'S VALUE ADDED AND GHANAIAN VALUE ADDED (US\$M) IN RELATION TO ITS REVENUES IN GHANA



4 'Going concern' here means a situation in which investments are assumed equal to depreciation. In other words, the economic impacts are derived entirely from the profit & loss statement 2010.

5 Stock movements, allowances, customer discounts etc.

6 Revenues (US\$ million) = Consolidated Gross revenues (US\$88.5 million) - revenue adaptations (US\$1.8 million).

7 Typically, 30% of the profits of a SABMiller subsidiary (in a mature business stage) is used for reinvestments.

4.2 INDIRECT AND INDUCED VALUE-ADDED OF 'GOING-CONCERN' OPERATIONS

As discussed in Section 2.2, indirect economic effects are related to ABL suppliers and trade partners:

- for suppliers this means the re-spending of the US\$26.1 million that ABL spends on local procurement of goods and services (see Figure 4);
- for the hotels and restaurants and the retail operations it is the re-spending of money associated with the sale of ABL products, which is estimated at US\$31.3 million in gross margin⁸; and
- in addition, the induced economic effects stem from households that receive their salaries within the ABL value chain and subsequently spend part of those incomes.

As is demonstrated in Figure 5, only a fraction of ABL's impacts on the economy of Ghana are due to the company's direct impacts. Other impacts are generated by the company's suppliers and by the suppliers' suppliers. Still, additional impacts are felt via the induced effects of employees' consumption decisions. Overall, through these various rounds of impact, ABL contributes about 0.4% of Ghana's GDP.

With respect to taxes paid, however, the situation is somewhat different, as shown in Figure 6. Here it is important to note that the majority of tax revenues are paid directly by ABL, with a smaller share, mainly in the form of VAT, accruing via the indirect and induced effects.

It is important to note, however, that not all this value-added would disappear should ABL cease operations, since many activities (but not necessarily all) would be taken over by other breweries and water companies (see also Section 6.1).

FIGURE 5: VALUE-ADDED IN THE GHANA ECONOMY RELATED TO ABL AND VOLTIC (US\$M). THE INDIRECT IMPACT IS SPLIT BETWEEN THE DIRECT SUPPLIERS AND OTHER SUPPLIERS.

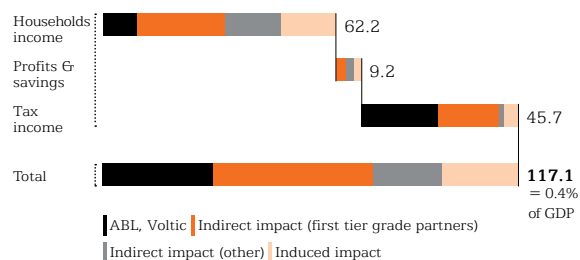
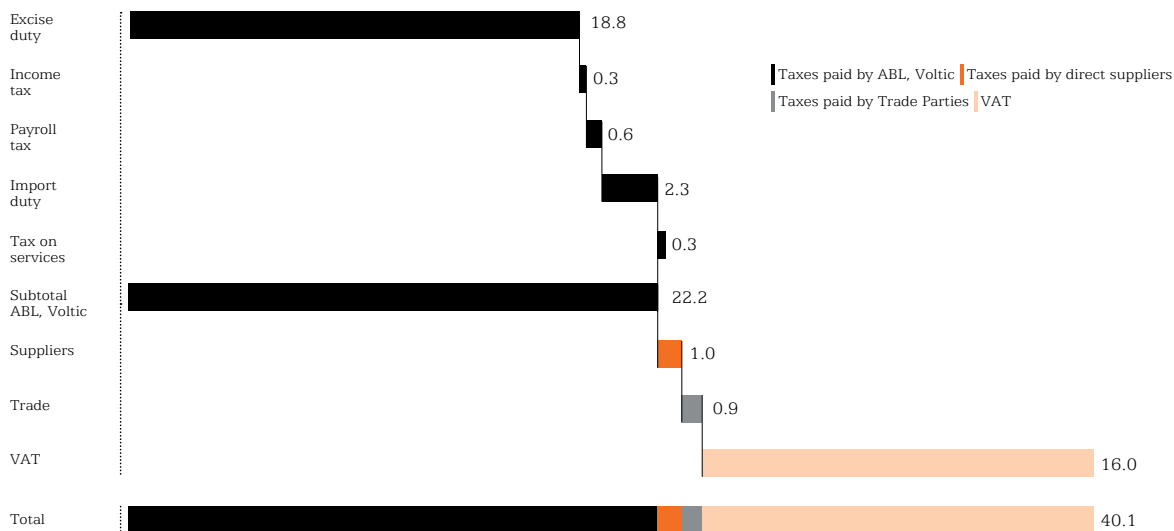


FIGURE 6: BREAKDOWN OF TAXES PAID IN THE VALUE CHAIN OF ABL AND VOLTIC (US\$M)



⁸ Total sales of ABL products at market prices is estimated at US\$134.0 million, of which US\$86.7 million accrues to ABL and US\$16.0 million is VAT included in consumer prices and US\$31.3 million is gross margin of trade parties selling ABL products.

SECTION 5: ABL'S COMMUNITY ENGAGEMENT

4.3 EMPLOYMENT RELATED TO 'GOING-CONCERN' OPERATIONS

Ghana Statistical Service (GSS) regularly publishes national surveys that cover the size and allocation of the labour force in Ghana. For this study, the most recent labour force report has been used for the breakdown of the labour force over the various economic sectors. In conjunction with the output per sector from the SAM, the employment intensity⁹ per sector was then determined.

Using the revenues of all Ghanaian sectors associated with ABL's products¹⁰ in combination with the employment intensities of these sectors, the employment associated with the presence of ABL can be computed. The results are shown in Figure 7.

As we can see, ABL is related to a significant number of jobs. Although the company only employees 900 workers directly, its operations help support nearly 18,000 jobs throughout the economy. Another way to think about this is that for every job at ABL and Voltic, another 20 are supported throughout the Ghanaian economy. Not surprisingly, a large share of these jobs is found in the trade sector, but other beneficiaries include agriculture, industry, and transportation.

We should note the agricultural support that ABL provides to farmers through raw material procurement. ABL buys maize and sorghum via two intermediary agents. Behind these agents, there are 1,500–2,000 farmers involved producing key agriculture inputs for beer production.¹¹ Approximately 30–35% of their farming business is related to ABL's inputs. In 2010, they locally sourced almost 2,000 tonnes of maize (grits) including a one-year price guarantee. This gives farmers an important degree of price security for their harvest.

Figure 8 reveals the value-added per job; it is notable that value added per job at ABL (US\$40,600) is 14 times the average value-added per Ghanaian worker in the wider economy.¹²

In addition to its economic impacts, ABL also makes a social impact on Ghana through its sustainable development programmes. These focus on health, education, and the environment, although important contributions have also been made to the media and to local arts and culture activities. Further, Voltic in particular has been a major supporter of Ghanaian football, providing water to players in the national teams and in the Division One league.

Among its high-impact projects, ABL has emphasised improving school attendance by providing students with transportation in several communities, including Koforidua, Aboabo, and Ada; incidentally, this project has also provided jobs for drivers. The company has also provided thousands of people living in the Adabraka community with free health screenings and, when needed, with medical treatment. Finally, the community also supports local farmers who supply the company with needed raw materials. Essentially, these activities can be seen as 'public goods' which improve life for all Ghanaians who receive services from ABL, whether or not they are consumers of the company's products. In this way, ABL and Voltic generate additional benefits for Ghana beyond those stemming directly from their business operations.

FIGURE 7: BREAKDOWN OF JOBS RELATED TO THE PRESENCE OF ABL AND VOLTIC (000s)

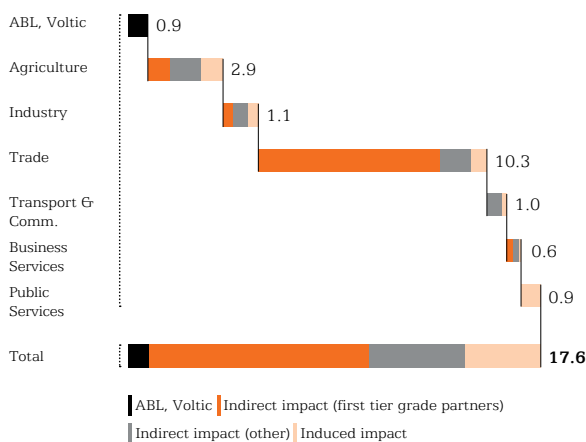
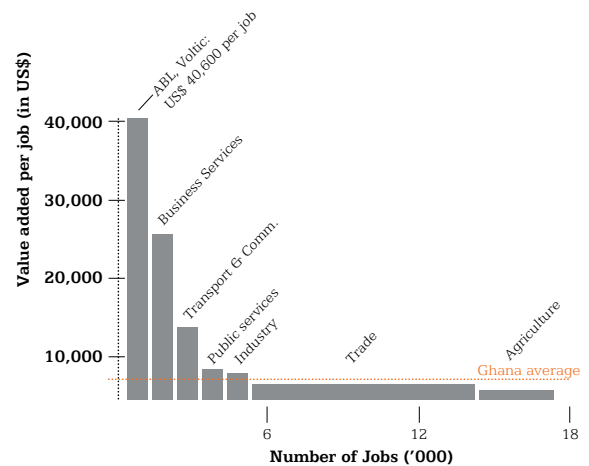


FIGURE 8: VALUE ADDED PER JOB VERSUS THE NUMBER OF JOBS ASSOCIATED WITH THE PRESENCE OF ABL AND VOLTIC



9 The number of jobs divided by financial value of output.

10 These outputs correspond with the "transfers" quadrant in Figure 2.

11 ABL's supply chain manager.

12 The average value-added per worker is defined as the GDP divided by the labour force (see table 1).

SECTION 6: SCENARIO ANALYSES

One of the objectives of the model is to enable management to analyse the broader socio-economic impact of its decisions. This section describes one scenario that has been analysed using the model. The scenario is a comparison of the economic impact of locally-brewed ABL products and imported products.

6.1 COMPARISON OF ECONOMIC FOOTPRINT OF LOCAL PRODUCTION VS. IMPORT

In order to get a better view on what part can be attributed more directly to ABL and Voltic, a hypothetical scenario has been constructed in which all of ABL and Voltic's production facilities in Ghana are closed and the Ghanaian market is supplied with imported beer, soft drinks and bottled water. As can be seen in Figure 9, the consequences for Ghana would be severe, with a profound loss of incomes and savings and a somewhat smaller loss of tax revenues (since the foreign beer would presumably be taxed). Figure 10 shows the consequences of a closure of ABL's operations on employment; again, the consequences would be severe.

FIGURE 9: IMPACT ON VALUE ADDED IN CASE ALL LOCALLY-PRODUCED PRODUCTS WERE IMPORTED (IN US\$M)

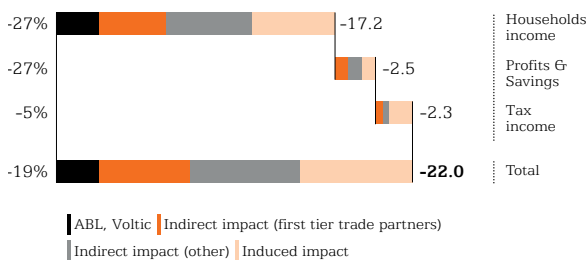
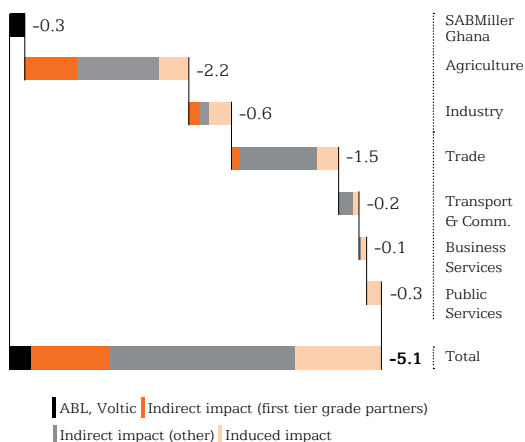


FIGURE 10: IMPACT ON EMPLOYMENT IN CASE ALL LOCALLY-PRODUCED PRODUCTS WERE IMPORTED (IN '000 JOBS)



SECTION 7: CONCLUSIONS AND RECOMMENDATIONS

7.1 CONCLUSIONS

The following conclusions can be drawn from the findings of this report:

1. ABL and Voltic are significant contributors to the Ghanaian economy, generating US\$31.7 million direct value-added, equivalent to 0.1% of GDP and US\$117.1 million economy-wide value-added, equivalent to 0.4% of GDP;
2. ABL and Voltic contribute substantially to the tax income of Ghana including US\$22.2 million ABL and Voltic tax payments, or 0.5% of total tax income, and US\$45.7 million economy-wide tax payments, equal to 1.1% of total tax income;
3. ABL and Voltic provide high-quality employment and is associated with a substantial number of jobs in the wider economy; the value-added per worker is 14 times the average Ghanaian worker, and for each job at ABL and Voltic another 20 are supported throughout the country, totalling 0.2% of the labour force; and
4. Closure of the brewery, soft drink and water plants would lead to a reduction of economy-wide value-added by US\$22.0 million, comprised of a loss of US\$17.2 million for households, US\$2.5 million of company profits and an decrease of tax income of US\$2.3 million. The corresponding loss of employment would be 5,100 jobs.

7.2 RECOMMENDATIONS FOR ABL AND THE GOVERNMENT OF GHANA

1. Recognise the fact that ABL and Voltic make a substantial local impact on Ghana's economy and consider making business and public policy decisions that could even increase that impact.
2. Ensure that Ghana maintains a business environment that encourages continued investment by the private sector.
3. Consider the possible impact of brewery expansion and an increase in local agricultural sourcing (e.g. of sorghum) on the country's economy, and the policy changes and improvements that are most likely to promote these projects.



Retailer selling Chibuku – a locally produced sorghum based beverage.

