

Economic Impact Assessment model

Local economic impact of the Sierra Leone Brewery Limited, a Heineken operating company

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A company's economic impact

The presence of foreign companies is often perceived differently by different people. Some regard them as providers of economic activity, jobs and wages while others see them as extractors of (hard) money and exploiters of cheap labour. These two view points are two sides of the same coin. Companies point to the benefits that their presence brings - economic activity, jobs and taxes - but seldom underpin this with quantitative analyses. Company critics often point to the negative effects while disregarding the positive economic contributions. By developing an EIA model NCDO believes to put realism and fairness in this debate.

The EIA model

The EIA model considers both the direct (cash spending and jobs provided by the company) and indirect economic effects (cash re-spending and jobs provided by recipients of company cash). The model does not include company specific effects that are harder to quantify (e.g. training, standard setting etc). The EIA model has been designed in a generic fashion so that it can be applied, with minor changes, in different sectors and regions.

Direct effects

Using the EIA model starts with analysing the direct effects of a company. For this the company's cash flow statement is used. All the cash flow items are allocated in such a way that all the payments to each of its main economic stakeholders (i.e. employees, suppliers, banks, governments etc) are grouped together. By distinguishing between money that remains in the local economy and money that leaves the local economy (e.g. imports), the capital balance of the company in the local economy can be established. In addition to the cash flows, the jobs provided by the company are considered as well.

Indirect effects

The indirect effects are incorporated subsequently. The cumulative economic effect of the re-spending of cash that stakeholders have received from the company is included in the model by tracing the money flows throughout the economy. Since the model is static (i.e. has no time dimension), this means that the various rounds of re-spending that take place are assumed to happen instantaneously. In economic jargon this modelling is called input-output analysis. Indirect jobs supported by

the company are estimated directly if sufficient data are available or are modelled using general economic data when this is not the case. Combined, the direct and indirect effects provide a fairly complete picture of the economic impact of a company. More specific effects like "mode of entry", environmental degradation, human capital development, etc. can be added where needed. The model enables scenario analysis.

Results from the pilot with Sierra Leone Brewery

The EIA model has been tested for Sierra Leone Brewery Limited (SLBL), a Heineken operating company. The various ways in which the SLBL stakeholders re-spend money in the economy have been investigated using numerous sources (among others data from and interviews with the Bank of Sierra Leone and World Bank). Table 1 summarizes the direct and indirect economic effects from the model. As can be seen from the table, the indirect economic effects are significantly larger than the direct effects. For every dollar that SLBL spends in Sierra Leone, the total economic effect is 5 times larger. Due to the labour-intensive nature of beverage distribution and retail,

Table 1: **Direct and indirect economic effects from the model**

	Direct	Indirect ¹	Total	Multiplier
Cash to suppliers (USD)	8	2 - 36	10 - 44	1.3 - 5.5
Cash to households (USD)	(15) ²	5 - 26	(10) - 11	n/a
Taxes (USD)	4.5	0.6	5.1	1.12
Jobs (FTE)	175	6,900	7,075	40

¹ The lower and upper bounds of the indirect effects are due to the exclusion or inclusion of household re-spending in the determination of the total re-spending effect. The most realistic value of the multipliers are probably closer the upper bound.

² The negative number arises by subtracting the USD 20 mln in beer consumption from the USD 5 mln that households receive from SLBL in salary.

the effect is even more dramatic for employment supported. For each job provided by SLBL, 40 jobs are supported (8 in agriculture and 32 in distribution). The small multiplier for taxes is due to the small taxable base in Sierra Leone through which SLBL carries most of the tax burden of its value chain.

An example of different scenarios that can be analysed is the substitution

of imported Barley by locally grown Sorghum, figure 1. Because of the large indirect effects, keeping money in the local economy is beneficial for Sierra Leone. In 2005, SLBL spent USD 210.000 on buying Sorghum which created approximately USD 790.000 in indirect effects bringing the total to about USD 1 mln. This added economic activity generates USD 630.000 in

household income. Because the model distinguishes between three different income groups (the food poor, people who earn too little to feed their families sufficiently; the poor, people who don't earn enough to meet the daily needs of their families and the non poor) it was also analysed to whom the benefits of Sorghum substitution go, as is shown in the diagram. As can be seen, the poor benefit relatively the most.

Conclusion

The EIA model enables the quantification of direct and indirect impacts of a (foreign) company on the local economy. This facilitates a deeper understanding of the societal role of the company. And since the model allows analysis of scenarios it enables management to tune decisions more towards enhancing the local economic impact and to thereby achieve a better fit in society. Finally NCDO believes that a quantitative understanding of a company's economic impact puts realism and fairness in the ongoing discussion with local communities, governments and society at large. By specifying different parameters, the model can relatively easily be applied in different sectors and regions. This brings insight in their economic impact within reach of many different companies.

INTRODUCTION

In 2006 NCDO and Heineken International commissioned Triple Value Strategy Consulting and InReturn to develop an economic impact assessment (EIA) model and test the model for the Heineken operating company Sierra Leone Brewery Limited (SLBL). The EIA model offers better insight in a company's local economic impact, which managers lack so far. As a result they can now have a deeper understanding of the link between company strategy and operations on local impacts. This offers a solid foundation for stakeholder interaction. Equally important, the EIA model allows companies to do scenario analyses. This enables management to more explicitly include societal opinions in their business decisions. In this summary the analysis of the pilot case of SLBL is described.

Figure 1: **Buying Sorghum locally benefits the poor relatively the most**

