Journal of African Economies, 2023, **32**, ii183–ii201
https://doi.org/10.1093/jae/ejac048
Supplement Paper

OXFORD

Alleviating Poverty in Sub-Saharan Africa: The Role of Inclusive Business Models

Bernadette Dia Kamgnia* and Alban A.E. Ahouré

Cellule d'analyse de Politiques Économiques du CIRES, Bld Latrille, CIRES, Près Lycée Classique, 08BP 1295 Abidjan, Côte d'Ivoire

*Corresponding author: Kamgnia Bernadette Dia. E-mail: bdkamgnia@gmail.com

Abstract

The study aimed to analyze the ability of inclusive business (IB) models to sustainably contribute to efforts made in alleviating poverty in Sub-Saharan Africa, with an emphasis on the cases of Côte d'Ivoire and Kenya. Data collected on these two countries revealed a clear opposite stream in the integration pattern of the populations at the bottom of the pyramid (BoP) in IB models. In Côte d'Ivoire individuals at BoPs integrate IBs mainly through the agricultural sector, getting busy with the supply of raw material, and with the distribution and/or sale of products in the value chain; thus, supporting an upstream integration. In Kenya, individual at BoPs rather are concentrated in manufacturing, with a first choice on non-permanent employees as activity in the value chain, followed by permanent employees; hence, downstreaming the integration ladder. In both countries, IB contributes positively and significantly to welfare at BoPs, especially when the IB model is implemented as part of a specific program.

Keywords: impacts, integration, up-stream, downstream, poverty alleviation, inclusive business
JEL classification: D63, O47, O57, P46

1. Introduction

The international community has committed itself through the sustainable development goals (SDGs) to eradicate, by 2030, extreme poverty for everyone, anywhere in the world; specially to halve at least the proportion of men, women and children of all ages living in poverty. Not only poverty reduction remains a major concern given its prevalence but also it has been made a sustainability condition for its benefits to the poor, as well as to all the actors and sectors of the formal and informal economies. Indeed policies, strategies, programs and projects that have been implemented over the past two decades in the developing world, notably in Sub-Saharan Africa, only succeeded to reduce the incidence of poverty from about 56% in 1990 to about 43% in 2015.

In Côte d'Ivoire, the regional gap in poverty and inequality may have tended to decrease over time, with a poverty rate that decreased in the countryside (−5.7%) between 2008 and 2015, whereas it increased (+ 6.4%) in urban centers. However, there still are more poor people in rural areas (56.8%) than in urban areas (35.9%), despite the lower rate (22.7%) in Abidjan, as pointed out by the World Bank (2019). In Kenya, even though the extreme poverty rate (at a poverty line of about US $1.90 per day) of 46% of the population in

2006 decreased to 36% in 2016, the path out of poverty is insufficient to eradicate poverty by 2030 (AfDB, 2019).

Yet significant growth rates have been observed in these two countries, as in many others on the continent. For instance, with a rate of growth of about 7.4% in 2018, supported by external demand for agricultural products and an increased domestic demand resulting from large investment projects and household consumption, Côte d'Ivoire is considered as one of the fastest growing economies in Africa (World Bank, 2019). Kenya, the largest economic power in Eastern Africa, enjoyed an average growth rate of 5% over the last decade. Several factors, including favorable weather conditions, easing political uncertainties, improvement in business confidence and the sustained growth in private consumption, account for the observed performance.

In their efforts to alleviate poverty, African countries engaged themselves with the rest of the world, first in the millennium development goals, then in the SDGs, without neglecting Africa's specific goals spelt out in the agenda 2063. In the implementation of the underlying strategies, especially those of the mix SDGs—agenda 2063, African countries centered their approaches on the private sector. In effect, for these countries, an inclusive economic growth, as well as a rapid social, sustainable and environmental development, could be achieved only through the implementation of innovative and transformative business models. This is specially the case when these businesses work for the poor, as pointed out by the United Nations Development Programme (UNDP, 2008), and following Prahalad and Hart (2002), henceforth termed inclusive business (IB) models for the population at the bottom of the pyramid (BoP). In effect, Likoko and Kini (2017) pinpoint IB models as approaches that create opportunities, generate sustainable and decent incomes for groups with little or no mobility in the labor market, hence could be a substitute for development programs that still fail to meet the expectations of the poor.

The general objective of the paper was to analyze the role of IB models in alleviating poverty in Sub-Saharan Africa, drawing on the examples of Côte d'Ivoire and Kenya. The specific objectives were as follows: (i) determine the integration pattern of BoPs into IBs, (ii) evaluate poverty profiles at BoPs and (iii) assess the impact of IB on the welfare of beneficiaries. These objectives were achieved in a combination of descriptive analyses and econometric evaluations.

The paper is structured around six sections. Following section 1, section 2 proceeds into a review of the literature on the conceptualisation of IB, and on the role of entrepreneurship in poverty alleviation. The method of analysis is discussed in section 3, whereas the results are presented and discussed in sections 4 and 5. Section 6 concludes the paper.

2. Literature review

Poverty is far from being a one-dimensional phenomenon; it is rather a multidimensional problem that requires integrated multisectoral solutions (UNDP, 2000). For Ravallion and Datt (1996), poverty is a relative concept that is generally defined in relation to well-being. It exists in each society when the well-being of one or more persons does not reach a level considered as a reasonable minimum according to the criteria of this same society. This conception is further comforted by the World Bank (2001), for which poverty is a major deprivation of well-being. Such a deprivation has been evaluated on monetary, as well as on non-monetary stands over the years. On either stand, the analyses led to policy recommendations for alleviating poverty.

As concerns IB models, references are growing at defining them, along with their implementation and results across continents. The current paper focuses on the conceptualisation of IB and on the business opportunities for alleviating poverty.

2.1. Conceptualisation of inclusive entrepreneurship

The definitional approaches of IB abound in the literature, and as in any new field of knowledge, the debate grows between academics and practitioners.

Prahalad and Ramaswamy (2004) first explained the concept of 'inclusive business', then defined people at BoPs to represent the poorest populations, usually considered to be too unprofitable and inaccessible, as potential consumers. Therefore, enterprises should rethink their business models to adapt them to these populations that generate low margins but on an impressive large scale. In effect, following the UNDP (2008), doing business with the poor can create value for all. This is likely to be the case because such businesses connect the poor to markets, thus give them the means out of poverty, whereas entrepreneurs and firms react to the new and increased demand by innovating and by building markets for an increased economic and social growth. On those grounds, Naguib *et al.* (2013) present these models as win-win approaches. Research even supports the inclusion of populations at BoPs in the business with a poverty reduction approach (Prahalad and Ramaswamy, 2004; London and Hart, 2011a, b). Such an inclusion should help the poor meet their basic needs in a sustainable, economic, social and environmental way. As such, it is an inclusive development tool that is openly propoor.

For Teodosio and Comini (2012), IBs are a subset of social business. Specially, they are processes that connect supply (producers) to demand (consumers), in triggering positive self-reinforcing processes of economic wealth creation and social empowerment in developing countries. However, for authors, such as Michelini (2012), beyond social concerns, IBs are organisations that build relationships with the poor, with the intention of integrating them within the value chains of the enterprise. More specifically, IB models integrate the poor in three different ways: (i) customers/consumers type of relationships where the poor are the primary target market for some organisations that create products and provide affordable services; (ii) suppliers, distributors or business partnerships where the poor are involved in the value chain of a product, hence contributing to job creation, knowledge sharing and skills transfer and (iii) customers and suppliers, or business partnerships where the poorest are the target market of an organisation, or are the stakeholders involved in the company's value chain. Many other definitions include those of development practitioners, including institutions (Hart *et al.*, 2003; McMullen, 2011; George *et al.*, 2012; Adams *et al.*, 2016), international organisations, NGOs and companies, such as the World Business Council for Sustainable Development and the SNV Netherlands Development Organization (2008), the FAO (2015).

Likoko and Kini (2017), on their part, present definitions that expand practitioners and/or inclusive companies' views on those of researchers and academics. For these two authors, the definitions differ from one group to the other. Hence, on theoretical grounds, authors, such as Weppe *et al.* (2012), Warnier *et al.* (2013), centered the discussions on strategic resources, against ordinary resources and negative resources (with respect to performance), in support of the foundation of IBs. In effect, those authors assert that 'the resources that one perceives negatively can be the basis of new business models, whence an entrepreneur creates new services (new uses) of these, leading to unsuspected performance'.

2.2. The bottom of pyramid in IB models

The idea of BoP was developed by Prahalad and Hart (2002), Prahalad and Hart (2002); Prahalad and Ramaswamy (2004) and Hammond and Prahalad (2004). Prahalad and Hart (2002) was the basis of the BoP theory. For these authors, eradicating poverty in the world by the logics of assistantship from north to south is not effective. Rather, the economic logic of the BoP's populations should be integrated, through the awareness of enterprises whose substantial profits are achievable in these regions.

The essentialist economic vision rather conceives BoP markets as made up of populations living on less than US $2 a day. Another approach divides BoPs into three categories. The first is made up of about 1.1 billion people who earn between $2 and $8. The second category includes 1.6 billion with a daily income of between $1 and $2. The last class comprises those who live in extreme poverty; one billion people who earn less than $1 a day. The different categories of populations with such low-income levels are spread across continents, rather disproportionately. Asia leads with 68%, followed by Africa (16%) and Latin America (10%). These three continents account for 94% of the poor, whereas Central and Eastern Europe and Russia share the remaining 6%. The majority (68%) of BoPs live in rural areas (Golja and Požega, 2012).

In short, the different approaches point to the existence of many poor people in the world. Excluding this popular mass from the economic market would contribute to keep the mass vulnerable and extremely poor. Thus, the idea of IB is about getting these people out of poverty through the game of business and entrepreneurship, by integrating them into business value chains.

2.3. Entrepreneurship and poverty alleviation

Sutter *et al.* (2019) provide an extensive review of literature on entrepreneurship as a solution to extreme poverty, along with some directions for future research. In total, those authors reviewed over 200 articles and 77 journals, all spread over a period of 28 years. Specifically, the authors tackled the relationship from three angles: (i) as a remediation, hence assuming that poverty is the result of scarce resources and that the provision of resources will allow entrepreneurship to flourish; (ii) as reform, assuming that poverty is primarily the result of social exclusion and that entrepreneurship can alleviate poverty by instituting social change and (iii) as revolution, an angle that suggests that poverty alleviation will occur when alternative models of economic organisation are identified, exploited, and scaled through entrepreneurship. The remediation view explored how opportunity identification, opportunity exploitation and entrepreneurial growth occur as external partners such as multinational organisations or non-governmental organisations provide information, training, financial capital and market access. Research anchored on reform rather considered opportunity identification, opportunity exploitation and entrepreneurial growth in terms of the social context and their potential for promoting social change. But researchers in the revolution perspectives tended to often play the role of interpretivists and advocates for change. Hence, the revolution avenue revealed to be the most radical approach to poverty alleviation, yet the least common within their review. Based on their thorough review, Sutter et al. recommend for future research: (i) to explore the implications of existing assumptions and (ii) to relax existing assumptions. For instance, if reform perspective assumes that entrepreneurship should reform markets, then future research would explore the implications of such a change in its being initiated by outsiders versus insiders, as strived by the existing literature.

But practically, one would admit that the 'business-poverty' relationship has been profoundly transformed in the recent years. The greatest facet of the global poverty problem seems to be echoed by the impressive rise in private economic power represented by business. But despite the mobilisation of the international community and the importance of public support mechanisms, the impact of entrepreneurship on poverty remains mixed. Inclusive business models that work (Table 1) should be a viable solution.

Of course, some authors do not agree on the extent of the possibilities offered to the poor. Karnani (2007) even claims that the BoP proposal is a 'mirage' filled with 'fallacies'. Garrette and Karnani (2010) further argue that there is in fact 'no fortune at the bottom of the pyramid'. For these authors, there are very few examples of profitable businesses that simultaneously help public welfare. Rather, examples of for-profit companies that exploit the poor on a large scale are numerous. Hence, a distinction must be made between charities

Table 1. Articulation of IB Models in the Value Chain

Integration as suppliers	Integration as distributors	Integration as consumers
Establish a supplier-based procurement strategy Companies –Securisation–cost reduction–tracking and quality control of inputs–adaptability and product development BoP –Business opportunity–technical assistance–funding	Co-create a distribution network with entrepreneurs –Risks sharing–best strategic positioning–commitment of distribution channels that guarantees sales –Business opportunity–technical assistance–funding	Develop innovative communication solutions –ccess to new markets–increase revenues–increase the friendly capital–test its innovation –Access to the new product or service–increase in its productivity–increase in the quality of life

Source: Constructed by the authors from UNDP (2008).

and businesses that have a social purpose in addition to increasing wealth. Linking corporate social responsibility to a profitable business is a major challenge.

But Prahalad and Hart (2002) maintain their contention that it is possible to establish a concerted business infrastructure around the BoP. This would create a purchasing power through access to credit and income generation and shape aspirations through consumer education and development, to adapt local product development and bottom-up innovation solutions and to improve access to distribution systems and communication links.

3. Empirical strategy

The method of analysis was centered on the use of cross-sectional data on the populations at BoPs, comparing those that benefit from IB to those who do not. More specifically, the data were analyzed in two ways. The first avenue was a descriptive analysis of integration patterns. The second approach was an impact evaluation, including proper sensitivity analyses.

3.1. IB as an instrument of poverty reduction

Monetary poverty profiles of people at BoPs were analyzed. The profiles were constructed based on a disaggregation focusing on the business sector and on the activities of integration into IB model. More specifically, the Foster, Greer and Thorbecke indices, the P_α coefficients, were computed in view of examining differences among populations at BoPs based on their inclusion or not in the value chain of an inclusive firm. Households' expenditures per capita served as the main indicator of monetary poverty.

3.2. Impact analysis of IB models

The impact of IB models on the performance of BoP's activities and on their status of poverty is evaluated using the propensity score matching (PSM), the inverse probability weighted adjusted regression (IPWRA) and the endogenous switching regression (ESR) approaches. Indeed, the robustness of the causal effects of participation in an IB on outcome indicators could be reduced due to implicit endogeneities. Hence, IPWRA and ESR are employed to control for endogeneity and heterogeneity biases.

3.2.1. Propensity score matching

The choice of the PSM approach is motivated by two essential reasons: i) the cross-sectional nature of the data and ii) the pairing that has an advantage over other quasi-experimental methods, for its relying on the preliminary development of a tool which is the propensity score. It would be recalled that the basic idea behind PSM is to match each treated household with a similar untreated household and then measure the average difference in the outcome variable between the treated and untreated households. In other words, the interest is in the question, 'How would the welfare level of households have changed had the treated households chosen not to be in the treatment group'.

Following Imbens and Wooldridge (2009), the average treatment effect on the treated (ATT) is defined as:

$$ATT = E\left[Y(1) - Y(0) \backslash T = 1\right] \tag{1}$$

Y(1) and *Y(0)* are outcome indicators for treated and untreated individuals, respectively. T is a treatment indicator. $E\left[Y(1) \backslash T = 1\right]$ is observed, whereas $E\left[Y(0) \backslash T = 1\right]$ is missing in the data set. The mere comparison of the treatment outcome of those who participated and of those who did not participate introduces some bias in the estimated impacts due to self-selection bias. PSM reduces such a bias by creating comparable counterfactual individuals for the treated individuals, based on the observables. Whence individuals are matched based on the observables, PSM assumes that there are no systematic differences in unobservable characteristics between treated and untreated individuals. Given this assumption of conditional independence and the overlap conditions, ATT is computed as:

$$ATT = E\left[Y(1) \backslash T = 1, p(x)\right] - E\left[Y(0) \backslash T = 0, p(x)\right] \tag{2}$$

3.2.2. Inverse probability weighted adjusted regression

The propensity score model could lay on a good deal of several misspecifications, hence give rise to imbedded bias, as supported by Robins *et al.* (2007) and Wooldridge (2007, 2010). In such cases, resorting to IPWRA estimation would correct for unbiasedness (Wooldridge, 2007). Following Imbens and Wooldridge (2009), ATT in IPWRA estimation is executed in two steps.

More specifically, assume that the outcome variable can be modeled as a linear regression of the form $Y_j = \alpha_j + \beta_j x_j + \varepsilon_j for\ j = [0; 1]$ and the propensity scores given by $p\left(x; \gamma\right)$. The first step consists of estimating the scores $p\left(x; \hat{\gamma}\right)$. In the second step, (α_0, β_0) and $(\alpha_1, \beta_{1.})$ are estimated from a weighted least squares problem as:

$$\underbrace{\min}_{\alpha_0, \beta_0} \sum_i^N \left(Y_i - \alpha_0 - \beta_0 x_i\right) / p\left(x, \hat{\gamma}\right) \ if\ T_i = 0 \tag{3}$$

$$\underbrace{\min}_{\alpha_1, \beta_1} \sum_i^N \left(Y_i - \alpha_1 - \beta_1 x_i\right) / \left(1 - p\left(x, \hat{\gamma}\right)\right) \ if\ T_i = 1 \tag{4}$$

$$ATT = \frac{1}{N_T} \sum_i^{N_T} \left[\left(\hat{\alpha}_1 - \hat{\alpha}_0\right) - \left(\hat{\beta}_1 - \hat{\beta}_0\right) x_i\right] \tag{5}$$

where $(\hat{\alpha}_1, \hat{\beta}_1)$ are the estimated inverse probability weighted parameters for the treated individuals, whereas $\left(\hat{\alpha}_0, \hat{\beta}_0\right)$ correspond to the estimated inverse probability weighted parameters for the non-treated individuals. N_T is the total number of treated individual

(Wossen *et al.*, 2017), which in the current case corresponds to the total number of BoPs' populations who got integrated in IB activities.

3.2.3. Endogenous switching regression

Selection bias caused by observables might be properly dealt with by matching techniques, especially when combined with weighting. Nevertheless, endogeneity bias could as well derive from unobservable heterogeneities. In the present case of inclusive entrepreneurship, unobservables could be skills of BoPs, motivation, seriousness, self-confidence and social relations. Such a bias is best dealt with in ESR models, as they allow a simultaneous estimation of the selection and the outcome equations.

A typical ESR model is derived from a latent variable framework, such that a given BoP would participate in an *IB* if the potential welfare $Y*$ is positive. We would therefore have:

$$Y_i^* = \delta_0 + \varphi z_i + \mu_i \; with \; T_i = \begin{cases} 1 \; if \; Y_i^* > 0 \\ 0 \; if \; Y_i^* \leq 0 \end{cases} \tag{6}$$

where z is the vector of variables that affect the potential welfare from participating in the *IB*. The outcome function conditional the treatment may be specified as ESR model as follows:

Regime 1:

$$Y_{1i} = \beta_1 x_{1i} + \varepsilon_{1i} \; if \; T_i = 1 \tag{7}$$

Regime 2:

$$Y_{2i} = \beta_2 x_{2i} + \varepsilon_{2i} \; if \; T_i = 0 \tag{8}$$

where Y_1 is the outcome indicator (food and non-food expenditures, education and health expenditures, productivity, multidimensional poverty ...) of treated individuals and Y_2 the corresponding outcome indicator for the untreated, whereas x is the vector of control variables. The error term in the selection equation (6) and those in the outcome equations (7) and (8) are assumed to have a trivariate normal distribution with mean zero and a variance–covariance matrix Ω, with the specificity that the covariance of the error terms of equations (7) and (8) is not defined as the two outcomes cannot be observed simultaneously. Also, the correlations between the error term of the selection equation and each one of the outcome equations are different from zero; what gives rise to the selection bias. ESR models solve such a selection bias by estimating the inverse mills ratios (λ_{1i} and λ_{2i}), as well as the covariance terms ($\sigma_{1\mu}\sigma_{2\mu}$). The estimated inverse ratios are then included as auxiliary regressors in equations (7) and (8); otherwise, proceed into two Heckman sample-selection approaches. Significant correlations imply rejection of absence of selection bias.

3.3. Specification of variables

The variables of the impact analysis are defined in Table 2, in terms of the treatment variable, pairing variables and outcome variables.

3.4. Sources of data

The data have been collected to support a research project led by the Cellule d'Analyse de Politiques Economiques du CIRES (CAPEC) in Côte d'Ivoire on the theme: '*Economic inclusion of youth and women through inclusive business model: cases of Burkina-Faso, Côte d'Ivoire and Kenya*', under the financial support of the International Development Research Center (IDRC) of Canada. More specifically the data bases of Côte d'Ivoire and of Kenya are used in the current paper.

The field survey has been conducted from January to May 2019 in both countries, based on quasi-experimental protocols. The sample comprised 2,635 households or small

Table 2. Variables Description

Treatment variables	**Whether or not to access an IB initiative**			
Pairing variables	At the BoP company level	Nature of variable	At the household level of the BoP	Nature of variable
	Age of the BoP entrepreneur	Continuous	Locality	multinomial (1: Abidjan; 15: Tonkpi)
	Educational level of the entrepreneur	Discrete (1: none; 2: primary; 3: secondary; 4: higher)	Age of the household head	Continuous
	Marital status of the entrepreneur	Multinomial (1: married, 2: divorced/separate; 3: single)	Marital status of the household head	Multinomial (1: married, 2: divorced/separate; 3: single)
	Sex of the entrepreneur	Discrete (1: male; 0: female)	Sex of the household head	Discrete (1: male; 0: female)
	Working capital (initial capital)	Continuous	Educational level of the household head	Multinomial (1: none; 2: primary; 3: secondary; 4: higher)
	Area of activity	Continuous	Number of dependent children	Continuous
	Professional training	Discrete (1: yes; 0: no)	Industry	Multinomial (1: agriculture; 2: commerce; 3: artisanat; 4: service; 5: other)
	Possess a DFE	Discrete (1: yes; 0: no) Saving: discrete	Possession of assets	Discrete
Outcome variables	Log of turnover	Continuous	Log total consumption expenditure per head of the household	Continuous
	Log of labor productivity	Continuous	Log of food expenditure	Continuous
			Log of non-food spending	Continuous
		Log of health expenditure	Continuous	
			Log of education expenditure	Continuous

Note: Values of expenditure variables are in US$; DFE means Declaration of fiscal existence. Source: Authors' compilation

Table 3. Sample Distribution Among Beneficiary BoP and Non-Beneficiary BoP in the Different Countries of the Survey

Country	Non-beneficiary BoPs	Beneficiary BoPs	Total
Côte d'Ivoire	1,047	577	1,624
Kenya	650	361	1,011
Total	1,697	938	2,635

Source: Authors computation from the CAPEC-KIPPRA-IDRC 2018/2019 survey

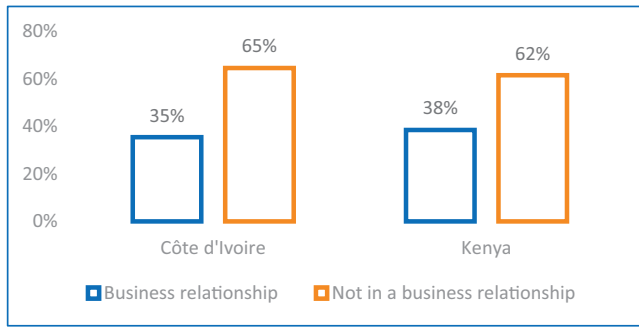

Figure 1. Status of Business Relationship with One or More Companies in Cote d'Ivoire and Kenya. Source: Authors from the CAPEC-KIPPRA-IDRC 2018/2019 survey

businesses (BoP) including 938 beneficiaries and 1,697 non-beneficiaries of an IB model (Table 3).

4. Empirical evidence of entrepreneurship and poverty at BoP in Côte d'Ivoire and Kenya

Either in Côte d'Ivoire or in Kenya, the smallest number of enterprises IB models is found among the one-person limited liabilities. Moreover, the surveyed enterprises in Kenya are mostly in agriculture (48%), followed by trade and services (34%), whereas in Côte d'Ivoire, the highest percentage of enterprises in IB is found in trade and services (66%), followed by manufacture and construction (19%). The integration patterns of populations at BoPs are first presented, followed by the analysis of the poverty profiles at BoPs.

4.1. Upstreaming versus downstreaming integration of BoPs in IBs

In Kenya, 38% of populations at BoPs are in business relations with a company, whereas in Côte d'Ivoire, 35% of individuals or production units are engaged in business relation with companies, as indicated in Figure 1.

Individuals or production units in business relationship with companies are integrated in value chains of companies, as suppliers of raw material, distributors/salesmen, permanent employees, non-permanent employees and/or as consumers (Table 4), benefiting from specific products or services offered by these companies. In Côte d'Ivoire, the highest rate of integration is among suppliers of raw material (59%), followed by distributors/traders (49%); the lowest is as non-permanent employees (10%). In Kenya, individuals are integrated the most as non-permanent employees (25%), followed by permanent employees (23%); the lowest percentage being as distributors/traders (7%).

Table 5 describes the sectors in which individuals at BoPs are in business relation with considered companies. In Côte d'Ivoire, the highest rate is in the agricultural sector (64%),

Table 4. Integration of Individuals at BoPs in the Different Nodes of the Value Chains of Considered Companies

Status of integration: as	Côte d'Ivoire		Kenya	
	Number	Percentage (%)	Number	Percentage (%)
Raw material suppliers	338	59	56	16
Distributors/traders	280	49	27	7
Permanent employees	86	15	82	23
Non-permanent employees	57	10	89	25
Consumer	256	45	54	15

Source: Authors from the CAPEC-KIPPRA-IDRC 2018/2019 survey. Notes: percentages are out of the total number of beneficiaries in each country given that each individual may perform more than one activity: 577 beneficiaries in Côte d'Ivoire and over 361 beneficiaries in Kenya. Source: Authors from the CAPEC-KIPPRA-IDRC 2018/2019 survey.

Table 5. Distribution of Individuals at BoPs in the Sectors of Activities of Inclusive Companies

Sector	Côte d'Ivoire		Kenya	
	Number	Percentage (%)	Number	Percentage (%)
Agriculture	266	**64**	82	25
Manufacturing/construction	13	3	149	**45**
Trade and service	137	**33**	99	**30**
Total	416	100	330	100

Source: Authors from the CAPEC-KIPPRA-IDRC 2018/2019 survey.

followed by trade and services (33%), whereas the lowest rates are in manufacturing and construction (3%). In Kenya, manufacturing and construction accounts for the highest rate of business relations (45%), followed by trade and services (30%); the lowest rates are in agriculture (25%). Agriculture ranks third in Kenya, while manufacturing/construction is third in Côte d'Ivoire; but the rates are not negligible, hence, constitute potential sectors for IB development in either country. Also, opportunities in education, housing and health are yet to be explored.

In sum, the descriptive analysis of individuals at BoPs' integration into IB models points to two clear opposite streams. In Côte d'Ivoire, individuals are clustered in the agricultural sector, getting busy with the supply of raw material and with the distribution and/or trade of products in the value chain of inclusive entrepreneurs; thus, supporting an upstream integration. However, in Kenya, BoPs are concentrated in manufacturing, with a first choice on non-permanent employee as activity in the value chain followed by permanent employees; hence, downstreaming the integration ladder.

4.2. Monetary poverty profiles in BoPs

Recalling from the literature review, the essentialist economic vision defines BoP markets as made up of populations living on less than US $2 a day. Based on the global poverty line of US $1.25, it was found that 76% of the populations at BoP in Côte d'Ivoire are poor, whereas in Kenya, the poor are only 52%.

Table 6 indicates that the incidence of poverty at BoPs is the greatest in agriculture (78%), followed by construction (77%) in Côte d'Ivoire, compared with Kenya where the incidence of poverty is the highest in agriculture (60%) followed by trade and services (54%). But the poverty incidences in the other sectors are all above 50%, except in Kenya where the incidence is 44% in manufacturing and construction. Of course, according to the World Bank,

Table 6. Poverty Incidence Across Sectors of Activities in BoPs, Based on the Global Poverty Line

Sector	Cote d'Ivoire		Kenya	
	Number	Percentage (%)	Number	Percentage (%)
Agriculture	209	**78**	49	**60**
Manufacturing and construction	10	**77**	66	**44**
Trade and services	86	**63**	53	**54**
Total	305	73	168	51

Source: Authors from the CAPEC-KIPPRA-IDRC 2018/2019 survey.

Table 7. Poverty Incidence in the Nodes of Integrated Value Chains in BoPs, Based on the Global Poverty Line

Status of integration: as	Côte d'Ivoire		Kenya	
	Number	Percentage (%)	Number	Percentage (%)
Raw material suppliers	267	**79**	35	**63**
Distributors/traders	216	**77**	13	**48**
Permanent employees	58	**67**	37	**45**
Non-permanent employees	48	**84**	49	**55**
Consumer	193	**75**	28	**52**

Source: Authors from the CAPEC-KIPPRA-IDRC 2018/2019 survey.

poverty has decreased in these countries. Between 2013 and 2015, poverty fell by 0.6 percentage point per year, while the average decline over the past 25 years was one point per year. But the forecast for 2018 at 8.6% indicates that the pace of poverty reduction is even slower, at less than half a point a year between 2015 and 2018 (World Bank, 2018).

Still based on the global poverty line of US $1.25, it is found that in value chains, the poorest are non-permanent employees (84%), followed by suppliers of raw materials (79%) in Côte d'Ivoire; but these are primarily suppliers of raw materials (63%), followed by non-permanent employees (55%) in Kenya (Table 7).

In sum, downstreaming rather than upstreaming the IB integration ladder contributes to reduce poverty incidence at BoPs.

5. Socio-economic impacts of IB

The impacts of inclusive entrepreneurship on monetary poverty and on the activities of the beneficiaries of IB at BoPs have been determined as the effects of IB on the households' spending and on the labor productivity of their activities. To limit the consequences of selection bias in measuring the impact, the PSM estimation was extended to those of IPWRA and ESR specifications, considering the case of a general integration in IB, and that of integration under specific programs. One would note that specific programs lay on specific policies for integrating populations at BoPs into the business plan of the company over a given period. In such programs, the considered populations benefit from several complementary measures, such as coaching, training and supervisions. Appendix tables A.1 and A.2 present the descriptive statistics of the key variables of the estimated models, whereas the results of the various estimations are discussed in sections 5.1 and 5.2.

Table 8. Determinants of the Probability of Being Integrated in IB in Côte d'Ivoire

Access to IB model	(1) Beneficiairies in general	(2) Odds ratio	(3) Beneficiairies under special programs	(4) Odds ratio
Marital status (married = 0, single = 1)	−0.285***	0.752***	0.0810	1.084
	(0.0876)	(0.0627)	(0.138)	(0.164)
Sex_BoP (feminine = 0; male = 1)	−0.271*	0.763*	0.815***	2.260***
	(0.153)	(0.116)	(0.275)	(0.623)
Household size	0.0708***	1.073***	0.0230	1.023
	(0.0196)	(0.0213)	(0.0359)	(0.0366)
Have a savings account	0.254	1.289	−0.278	0.757
	(0.166)	(0.212)	(0.287)	(0.222)
Sector of activity (other activities = 0, agriculture = 1)	0.0473	1.048	−0.363***	0.695***
	(0.0448)	(0.0455)	(0.0966)	(0.0573)
Region (inland = 0, Abidjan = 1)	0.00660	1.007	0.0557***	1.057***
	(0.0106)	(0.0107)	(0.0205)	(0.0203)
Age_of BoP	−0.000461	1.000	0.0296**	1.030**
	(0.00706)	(0.00671)	(0.0128)	(0.0133)
Member of an association	1.275***	3.579***	1.868***	6.473***
	(0.189)	(0.663)	(0.337)	(2.195)
Number of years of schooling	0.0343**	1.035**	0.00151	1.002
	(0.0137)	(0.0142)	(0.0273)	(0.0251)
Constant	−3.006***	0.0495***	−3.059***	0.0469**
	(0.678)	(0.0325)	(1.184)	(0.0564)
Observations	1,098	1,098	405	405

Robust standard errors in parentheses $^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$ Source: Authors' computation

5.1. Impacts of IB in Côte d'Ivoire

5.1.1. Results of the propensity scores matching

The results of the PSM are presented in Table 8. In the general case, the probability of individuals to integrate an IB in Côte d'Ivoire is significantly determined by marital status (−), sex (−), household size (+), membership of an association or group (+) and to the number of years of schooling (+). Hence, compared with married people, single people have a lower propensity to be integrated in an IB. Women are more likely to benefit from inclusive entrepreneurship. Also, household heads with large families, that are members of an association and have a high level of education are more likely to integrate in an IB.

In the case of an integration as part of a specific program, the significant determinants of being integrated in an IB are sex (+), sector of activity (−), region (+), age (+) and being member of an association (+). That is, being an older male at BoP, living in Abidjan and participating in an association positively and significantly affect the probability of being integrated in an IB. Regions of common support for matching non-integrated individuals to the integrated ones in the case of general integration and in the integration as part of specific programs have been constructed, as intervals of propensity scores, [0.02851147–0.82503441] and [0.07234657–0.98650107], respectively, and presented in Figure 2.

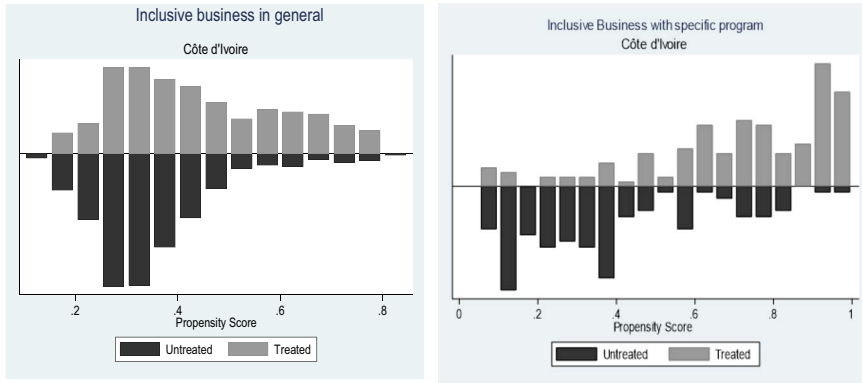

Figure 2. Common Support Region of Beneficiary and Non-beneficiary at BoP in Côte d'Ivoire. Source: Authors' computation

Table 9. Average Treatment Effect on Income Poverty and Productivity in Côte d'Ivoire

Variables	PSM (nearest neighbor)	PSM (stratification method)	IPWRA	ESR
Log expenditure per capita	0.133***	0.136***	0.149*	0.104***
	(0.043)	(0.059)	(0.089)	(0.035)
Log food expenditures	0.096	0.115	0.109	0.041
	(0.093)	(0.089)	(0.164)	(0.0413)
Log non-food expenditures	0.139*	0.196***	0.113*	0.094**
	(0.080)	(0.052)	(0.063)	(0.049)
Log health expenditures	−0.110	−0.026	−0.088	−0.069
	(0.069)	(0.050)	(0.101)	(0.044)
Log education expenditures	0.136	0.052	0.046	0.057
	(0.101)	(0.148)	(0.083)	(0.043)
Log productivity	0.271***	0.293***	0.300***	0.214***
	(0.127)	(0.075)	(0.082)	(0.045)
Observations	686	1059	665	587
Beneficiaries	416	416		
Non-beneficiaries	270	679		

Notes: $^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$ Robust standard errors in parentheses. Source: Authors' computation

5.1.2. Average effect of inclusive entrepreneurship on monetary poverty in Côte d'Ivoire

The average of the estimated propensity scores is not different between the two groups of individuals. Moreover, the test of the equilibrium property of the propensity scores reveals that this property is satisfied. Table A2 in the appendix gives the lower bound, the number of treated individuals and the number of individuals of the control group for each block. The equilibrium test having been verified, the impacts of IB on monetary poverty are determined. Table 9 presents the estimated average treatment effects of IB on individual's welfare based on the nearest neighbor and stratification estimators, along with those of the IPWRA and ESR specifications for robustness purposes.

The ESR model was estimated using *distance to healthcare center* as instrument in the case of general integration in IB. In the case of integration in IB as part of a specific program, *homeownership and/or landownership* served as instruments.

In a general integration, IB has a significant impact only on expenditures per capita, on non-food expenditures and on labor productivity. More specifically, IB increases the expenditures per capita by 13.3% under PSM and 14.9% using the IPWRA specifications.

Table 10. Average Treatment Effect on Income Poverty and Productivity in Côte d'Ivoire Under Specific Programs

Variables	PSM (nearest neighbor)	PSM (stratification method)	IPWRA	ESR
Log expenditure per capita	0.273** (0.105)	0.228*** (0.072)	0.211** (0.086)	0.338*** (0.031)
Log food expenditures	0.287* (0.162)	0.327* (0.186)	0.274** (0.164)	0.413*** (0.039)
Log non-food expenditures	0.363*** (0.102)	0.256*** (0.080)	0.274** (0.138)	0.369*** (0.038)
Log health expenditures	0.442** (0.167)	0.480*** (0.134)	0.268** (0.132)	0.319*** (0.024)
Log education expenditures	0.405* (0.220)	0.407*** (0.113)	0.446** (0.158)	0.542*** (0.061)
Log productivity	0.431*** (0.142)	0.450*** (0.153)	0.519*** (0.099)	0.444*** (0.026)
Observations	204	693	247	247
Beneficiaries	145	145		
Non-beneficiaries	59	548		

Notes: ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$ Robust standard errors in parentheses. Source: Authors' computation

Similarly, non-food expenditures increase by about 14% in the PSM and by 11.3% using the IPWRA specifications, whereas labor productivity increases by about 27.1% in the PSM and by 30% using the IPWRA specifications. The ESR model, where both observable and unobservable sources of bias are accounted for the effect of IB, does preserve the significance pattern, however, with lowered magnitudes.

Under a specific program (Table 10), the impacts of IB on all the considered poverty indicators are not only all significant but also are almost the double, reaching 54% in the case of expenditures on education and 52% in the case of labor productivity. Therefore, we can conclude that when IB is entrenched in a specific program, it enables individuals at the BoP to significantly increase their spending especially on human capital and on productivity.

5.2. Impacts of IB in Kenya

Table 11 indicates that the probability for an individual at a BoP to integrate an IB in Kenya is significantly affected by household size (+), savings account (+), years of schooling (+), region (−) and years of experience (+). More specifically, people who have a saving account do have a higher propensity to integrate an IB than those who do not. But people living in Nairobi have a lower propensity to integrate an IB compared with those who are in other cities. In addition, household heads with large families are highly educated and, with several years of professional experience, are more likely to integrate an IB.

The most significant determinants of participating in IB, as part of specific programs in Kenya are sex (−), household size (+), member of an association (+) and region (−).

The regions of common support under the general case and in specific programs are obtained as the respective intervals [0.11049162–0.96489152], [0.04593642–0.74404294] and presented in Figure 3. Table A2 in the appendix gives the lower bound, the number of treated individuals and the number of individuals of the control group for each block. The equilibrium test has been verified.

Table 12 presents the treatment effects under PSM model, along with those under IPWRA and ESR specifications. In the case of Kenya, the ESR model was estimated using *distance to market* as instrument, in the case of general integration, and *distance to hospital* as instrument in integration in specific programs.

Table 11. Determinants of the Probability of Being Integrated in IB in Kenya

Access to IB model	(1) Beneficiaries in general	(2) odds ratio	(3) Beneficiaries in special Program	(4) odds ratio
Marital status (Married = 0, Single = 1)	0.0166	1.017	0.0121	1.012
	(0.0858)	(0.0872)	(0.110)	(0.112)
Sex_BoP (Feminin = 0; Male = 1)	−0.234	0.791	−0.433*	0.649*
	(0.176)	(0.139)	(0.226)	(0.146)
Household size	0.112**	1.118**	0.171***	1.187***
	(0.0476)	(0.0532)	(0.0607)	(0.0721)
Having a savings account	0.386**	1.471**	0.195	1.216
	(0.188)	(0.277)	(0.237)	(0.289)
Sector of activity (Other activities = 0, Agriculture = 1)	−0.135	0.873	0.232	1.261
	(0.117)	(0.102)	(0.152)	(0.191)
Age_of BoP	0.0205	1.021	−0.0126	0.988
	(0.0131)	(0.0134)	(0.0192)	(0.0190)
Member of an association	0.438	1.550	0.888*	2.430*
	(0.358)	(0.555)	(0.457)	(1.110)
Number of years of schooling	0.0614*	1.063*	−0.0325	0.968
	(0.0330)	(0.0351)	(0.0396)	(0.0383)
Region (inland = 0, Nairobi = 1)	−0.511**	0.600**	−1.485***	0.226***
	(0.214)	(0.128)	(0.324)	(0.0734)
Years of experience	0.0420*	1.043*	0.0226	1.023
	(0.0227)	(0.0237)	(0.0299)	(0.0306)
Constant	−3.856***	0.0212***	−2.435*	0.0876*
	(0.976)	(0.0207)	(1.267)	(0.111)
Observations	679	679	483	483
Prob > chi^2	0.0000	0.0000	0.0000	0.0000

Source: Authors' computation

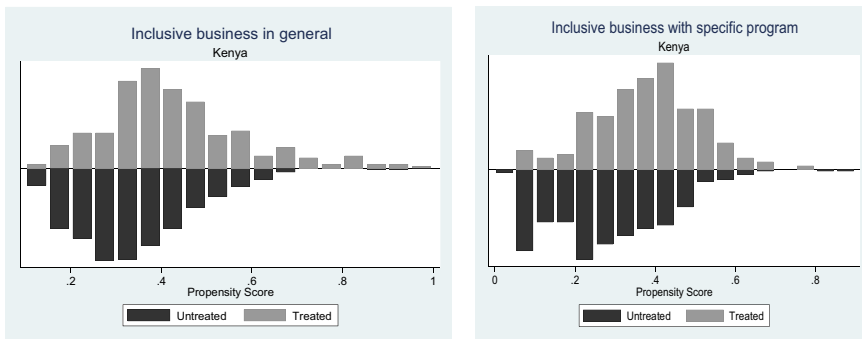

Figure 3. Common Support Region of Beneficiary and Non-beneficiary at BoP in Kenya. Source: Authors' computations

In general integration in Kenya, IB has significant and positive impacts only on expenditure per capita, on food expenditures and on labor productivity. More specifically, IB

Table 12. Average Treatment Effect on Income Poverty and Productivity in Kenya

Variables	PSM (nearest neighbor)	PSM (stratification method)	IPWRA	ESR
Log Expenditure per capita	0.591**	0.462***	0.647***	0.748***
	(0.239)	(0.116)	(0.147)	(0.053)
Log food expenditures	0.551**	0.478***	0.443***	0.605***
	(0.253)	(0.159)	(0.120)	(0.137)
Log non-food expenditures	0.184	0.085	0.051	0.039
	(0.191)	(0.159)	(0.141)	(0.036)
Log health expenditures	0.068	0.081	0.081	0.121
	(0.295)	(0.157)	(0.179)	(0.075)
Log education expenditures	−0.166	−0.098	−0.154	−0.042
	(0.215)	(0.167)	(0.184)	(0.053)
Log productivity	0.400**	0.442***	0.467***	0.347***
	(0.158)	(0.101)	(0.111)	(0.044)
Observations	452	712	731	731
Beneficiaries	274	158		
Non-beneficiaries	178	554		

Notes: $^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$ Robust standard errors in parentheses. The bootstrap option was used to compute the treatment effects using the PSM (stratification method). Source: Authors' computation

Table 13. Average Treatment Effect on Income Poverty and Productivity Under Specific Programs in Kenya

Variables	PSM (nearest neighbor)	PSM (stratification method)	IPWRA	ESR
Log expenditure per capita	0.810**	0.724***	0.647***	0.605***
	(0.333)	(0.154)	(0.147)	(0.137)
Log food expenditures	0.603**	0.615***	0.459***	0.389***
	(0.266)	(0.187)	(0.160)	(0.042)
Log non-food expenditures	0.885***	0.643***	0.472***	0.594***
	(0.263)	(0.194)	(0.164)	(0.054)
Log health expenditures	0.561*	0.357*	0.354*	0.217***
	(0.313)	(0.179)	(0.212)	(0.07)
Log education expenditures	0.785**	0.768**	0.616***	0.423***
	(0.363)	(0.283)	(0.228)	(0.055)
Log productivity	0.628**	0,581***	0,520***	0.607***
	(0.230)	(0.191)	(0.151)	(0.060)
Observations	270	496	509	509
Beneficiaries	159	159		
Non-beneficiaries	121	337		

Notes: $^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$ Robust standard errors in parentheses. Source: Authors' computation

increases the expenditures per capita by 59.1% under PSM, and 64.7% under the IPWRA specifications. Also, food expenditures increase by about 55.1% under the PSM, and by 44.3% under the IPWRA specifications, whereas labor productivity increases by 40% with the PSM, and by 46.7% under the IPWRA specifications. The effects of IB in the ESR specification are 74.8%, 60.5% and 34.7%, respectively.

As in the case of Côte d'Ivoire, the implementation of IB under a specific program has the highest significant impacts on poverty and productivity in Kenya (Table 13).

Overall, the impacts of IB in Kenya are greater than those in Côte d'Ivoire. The observed differences may be attributed to two facts. First, the downstream integration pattern in IB in Kenya may be more rewarding than the upstream integration in Côte d'Ivoire. Second, the long experience of Kenya in IB models could have contributed to the capacity of

individuals at BoPs on numerous grounds, for them to be taking a greater advantage of the opportunities offered by the IBs. Under specific programs, supplementary treatments provided to individuals at BoPs, in some way, sustain their exceptional performance.

6. Conclusion and recommendations

The study aimed to analyze the ability of IB models to sustainably contribute to efforts made at alleviating poverty in Sub-Saharan Africa, with an emphasis on the cases of Côte d'Ivoire and Kenya. Based on data collected by CAPEC and KIPPRA on an IDRC funding, the paper confirms that almost every economic sector in each one of the two countries can establish business partnerships with low-income populations, as in the rest of Africa.

The data revealed clear opposite streams of individuals at BoPs' integration patterns in IBs' value chains. In Côte d'Ivoire, individuals are clustered in the agricultural sector, getting busy with the supply of raw materials and with the distribution and/or trade of products in the value chain of inclusive enterprises; thus, supporting an upstream integration. In Kenya, individuals are concentrated in manufacturing, with a first choice on non-permanent employee as activity in the value chain followed by permanent employees; hence, down-streaming the integration ladder. In both countries, IB significantly and positively affects welfare at BoPs, especially when the IB model is implemented as part of a specific program.

The main policy recommendation is the promotion of IB models through incentives anchored on regulatory eases to companies, such as eases on tax payment and investment opportunities, to enhance their role in poverty alleviation. Also, governments should provide necessary human and financial capacities at BoPs for individuals to upgrade into IBs.

Research wise, availability of appropriate data on entrepreneurship in the various African countries is needed for sound poverty profiling and impact analyses. Specific research avenues are: (i) analyze the characteristics of high-growth enterprises in the context of poverty; (ii) investigate the characteristics of enterprises that engage in IBs, bringing out their specificities; (iii) explore ways to build entrepreneurial ecosystems that support individuals at BoP to upgrade into IBs.

Acknowledgements

The authors express their sincere thanks to the Members of the GPIR Group, especially Erik Thorbecke, Finn Tarp, Abebe Shimeles, Björn Nilsson, Christian Ebeke, for their comments all along. They also thank Dr N'dri-Becho Isabelle, Dr Kouadio Kouassi Boniface and Dr N'dri Kan David, for their valuable contributions as Research Assistants. The authors are specially grateful to the AERC for funding the Research Project on the grant RC19508 and to the IDRC for allowing them to use the databases on Côte d'Ivoire and on Kenya. All views expressed herein are those of the authors and do not necessarily represent the views of the funding organisations.

Supplementary material

Supplementary material is available at *JAFECO* online.

Data availability

The data underlying this article will be shared on reasonable request to the corresponding author.

References

Adams R., Jeanrenaud S., Bessant J., Denyer D., Overy P. (2016) 'Sustainability-Oriented Innovation: A Systematic Review', *Int J Manage Rev*, 18(2): 180–205. https://doi.org/10.1111/ijmr.12068.

AfDB (2019) *African Economic Outlook*. Abidjan, Côte d'Ivoire: African Development Bank Group ISBN 978-9938-882-87-2. www.afdb.org.

FAO (2015) 'Inclusive Business Models', in *Guidelines for Improving Linkages between Producer Groups and Buyers of Agricultural Produce*. The Food and Agriculture Organization of the United Nations, ISBN 978-92-5-108923-1. www.fao.org/publications.

Garrette B., Karnani A. (2010) 'Challenges in Marketing Socially Useful Goods to the Poor', *California Management Review*, 52(4): 29–47. https://doi.org/10.1525/cmr.2010.52.4.29.

George G., Mcgahan A. M., Prabhu J. (2012) 'Innovation for Inclusive Growth: Towards a Theoretical Framework and a Research Agenda', *J Manage Stud*, 49(4): 661–83. https://doi.org/10.1111/j.1467-6486.2012.01048.x.

Golja T., Požega S. (2012) 'Inclusive Business-What It Is all about? Managing Inclusive Companies', *International Review of Management and Marketing*, 2(1): 22–42.

Hammond A. L., Prahalad C. K. (2004) 'Selling to the Poor', *Foreign Policy*, 142: 30–7.

Hart S. L., Milstein M. B., Overview E. (2003) 'Creating Sustainable Value', *Management*, 2003(17): 56–69.

Imbens G. W., Wooldridge J. M. (2009) 'Recent Developments in the Econometrics of Program Evaluation', *Journal of Economic Literature*, 47: 5–86. https://doi.org/10.1111/j.1467-6486.2012.01048.x.

Jenkins B., Ishikawa E., Geaneotes A., Baptista P., Masuoka T. (2011) *Accelerating inclusive business opportunities: Business models that make a difference*. Washington, DC: IFC, pp. 1–50.

Karnani A. (2007) 'Doing Well by Doing Good. Case Study: 'Fair & Lovely' Whitening Cream', *Strategic Management Journal*, 28: 1351–7.

Lecocq A., Ammi M., Bellarbre E. (2014) 'Le Score de Propension: Un Guide méthodologique Pour les Recherches expérimentales et Quasi expérimentales en éducation', *Mesure et évaluation en éducation*, 37(2): 69–100. https://doi.org/doi:10.7202/1035914ar.

Likoko E., Kini J. (2017) 'Inclusive Business—A Business Approach to Development', *Current Opinion in Environmental Sustainability*, 24: 84–8. https://doi.org/10.1016/j.cosust.2017.03.001.

Lodge G., Wilson C. (2006) 'Multinational Corporations and Global Poverty Reduction', *Challenge*, 49(3): 17–25. https://doi.org/10.2753/CHA0577-5132490302.

London T., Hart S. L. (2011a) *Next Generation Business Strategies for the Base of the Pyramid*. Saddle River, New Jersey 07458: Pearson Educ. Inc. Publ. as FT Press Up.

London T., Hart S. (2011b) 'Introduction: Creating a fortune with the base of the pyramid', in T. London and S. Hart (eds), *Next generation business strategies for the base of the pyramid: New approaches for building sustainable value*. Upper Saddle River, NJ: FT Press, pp. 19–44.

McMullen J. S. (2011) 'Delineating the Domain of Development Entrepreneurship: A Market-Based Approach to Facilitating Inclusive Economic Growth', *Entrepreneurship Theory and Practice*, 35(1): 185–215. https://doi.org/10.1111/j.1540-6520.2010.00428.x.

Michelini L. (2012) *Social Innovation and New Business Models. Creating Shared Value in Low-Income Markets*, 2012th edition. Berlin: Springer.

Michelini L., Fiorentino D. (2012) 'New Business Models for Creating Shared Value', *Social Responsibility Journal*, 8(4): 561–77. https://doi.org/10.1108/17471111211272129.

Naguib J., Oppermann A., Rosendahl C. (2013) *Inclusive Business Models for Support Through PSD Programmes*. Berlin, Germany: Deutsche Geslischaft für Internationale Zusammenarbeit (GIZ).

Nations Unies (2014) *Objectifs du Millénaire pour le développement - Eliminer la pauvreté en 2015, c'est possible*. New York: Nations Unies.

Prahalad C. K., Hart S. L. (2002) 'The Fortune at the Bottom of the Pyramid. *Business*', *Strategy*, 1–14. https://doi.org/doi/pdf/10.1162/itgg.2008.3.1.85.

Prahalad C. K., Ramaswamy V. (2004) 'Co-Creation Experiences: The Next Practice in Value Creation', *Journal of Interactive Marketing*, 18(3): 5–14. https://doi.org/10.1002/dir.20015.

Ravallion M., Datt G. (1996) 'How Important to India's Poor Is the Sectoral Composition of Economic Growth?' *The World Bank Economic Review*, 10(1): 1–25. https://doi.org/10.1093/wber/10.1.1.

Robins J., Sued M., Lei-Gomez Q., Rotnitzky A. (2007) 'Comment: Performance of Double-Robust Estimators when "Inverse Probability" Weights Are Highly Variable', *Statistical Science*, 22(4): 544–59. https://doi.org/10.1214/07-STS227D.

Sutter C., Bruton D., Chen J. (2019) 'Entrepreneurship as a Solution to Extreme Poverty: Review and Research Directions', *Journal of Business Venturing*, 34: 197–214. https://doi.org/10.1016/j.jbusvent.2018.06.003.

Teodosio A., Comini G. (2012) 'Inclusive Business and Poverty: Prospects in the Brazilian Context', *Revista ADM*, 47(47): 410–21. https://doi.org/10.5700/rausp1047.

UNDP (2000) *Poverty Report - Overcoming Human Poverty*. New York, pp. 139. Cote DP(058)/P879/2000. ISBN/ISSN 92211261244.

UNDP (2008) *Les entreprises face aux défis de la pauvreté: stratégies gagnantes, un marché en bon état. xvii*. New York: UNDPjuillet, p. 155.

Warnier V., Weppe X., Lecocq X. (2013) 'Ressources stratégiques, Ressources Ordinaires et Ressources négatives, Pour une reconnaissance de l'ensemble du Spectre Des Ressources'. *Revue Française de Gestion*, 234(5):43–63.

WBCSD and SNV (2008) 'Inclusive Business - Profitable Business for Successful Development'. The World Business Council for Sustainable Development (WBCSD) and the Netherlands Development Organization (SNV), pp. 1–20. http://www.inclusuvebusiness.org.

Weppe X., Warnier V., Lecooq X., Fréry F. (2012) 'Quand les postulats d'une théorie induisent de mauvaises pratiques. La "théorie des ressources" selon Barney, J.B.', *Revue Française de Gestion*, 228-229(9-10): 253–268.

Wooldridge J. M. (2007) 'Inverse Probability Weighted Estimation for General Missing Data Problems', *Journal of Econometrics*, 141(2): 1281–301.

Wooldridge J. M. (2010) *Econometric Analysis of Cross Section and Panel Data*. Cambridge, Massachusetts: The MIT Press.

World Bank (2001) *World Development Report - Attacking Poverty*. New York: Oxford University Press, Inc., pp. 356.

World Bank (2018) *Poverty and Shared Prosperity - Piecing Together the Poverty Puzzle*. Washington D.C.: World Bank.

Wossen T., Abdoulaye T., Alene A., Haile M. G., Feleke S., Olanrewaju A., Manyong V. (2017) 'Impacts of Extension Access and Cooperative Membership on Technology Adoption and Household Welfare', *Journal of Rural Studies*, 54: 223–33. https://doi.org/10.1016/j.jrurstud.2017.06.022.