Columbia FDI Perspectives

Perspectives on topical foreign direct investment issues

No. 213 November 20, 2017

Editor-in-Chief: Karl P. Sauvant (Karl.Sauvant@law.columbia.edu)

Managing Editor: Matthew Schroth (mas2443@columbia.edu)

Parsing the myth and reality of employment creation through resource investments[*]

by

Perrine Toledano, Olle Östensson and Kaitlin Y. Cordes[**]

Employment creation is often claimed by both investors and governments as an important benefit of investment in mining and large-scale agriculture. However, this benefit sometimes falls short of expectations. A closer look at employment tied to these investments provides greater clarity on the challenges of estimating employment effects and optimizing employment outcomes. Moreover, it can help contextualize policy recommendations focused on linking employment from natural resource investments to sustainable economic development.

Assessing or comparing employment impacts is complicated: there is no universal standard for measuring direct (on-site), indirect (in the supply chain) and induced (resulting from spending by direct and indirect employees) job creation. Moreover, in both mining and agriculture, location- and context-specific factors—such as skill levels in the local economy, the commodity/crop, or the level of mechanization/automation[1]—influence the potential employment generated by any particular project. These factors, combined with different measurement approaches (such as input-output models or computable general equilibrium models[2], limit generalizations regarding job creation from mining and agricultural investments, and constrain efforts to develop reliable numbers regarding employment impacts.[3]

While job numbers are sometimes more readily available for a specific industry or investment project, these numbers, too, should be treated with caution. Employment numbers for industries or projects do not always specify whether indirect and/or induced employment are covered. Public statistics refer solely to direct employment, although indirect and induced employment are usually more relevant for policy. Estimates of future employment effects are even more uncertain, and may be inflated by governments or investors. Industry structure and duration of natural resource investments can exacerbate these difficulties.

Moreover, focusing on formal employment opportunities ignores opportunities for informal sector employment created by natural resource investments, as well as the disruption of livelihoods that often accompany them.[4] For example, the additional demand generated by a mining project usually leads to local increases in informal employment in food production and services. At the same time, mining projects can severely affect informal sector livelihoods, including by displacing artisanal mining jobs that are important for employment and are generally not offset by increased employment in large-scale mining. Similarly, when large-scale agricultural investments displace smallholder agricultural production or other livelihood activities, the jobs generated by the investments are not likely to fully offset the number of livelihoods negatively affected, at least in the short-term. For some projects, considering employment outcomes from a broader perspective that also includes livelihood displacement may lead to drastically changed assessments of the net employment impact from an investment.

Numbers alone never tell the entire employment story. For stakeholders assuming that an investment will bring numerous local jobs, it is useful to examine who benefits from the jobs generated. The economic and social benefits that occur due to higher incomes may accrue to a small share of the population. Negative consequences can also arise. For instance, local unemployment may persist due to a mismatch between the skills required by investors or sub-contractors and the skills possessed by the local population. In-migration can boost the local economy, but can also result in inflation and friction between locals and newcomers over jobs and resources. Investments can also lead to localized structural changes in labor participation for women, such as a change from work in subsistence agriculture to services.

The key policy lesson is: governments hosting natural resource investments should arm themselves with sound assessments of the potential employment creation of such investments, considering not only the number of jobs created but also their timing, quality and security, likely beneficiaries, impact on livelihoods, and other socio-economic effects.

Policies grounded in such assessments should focus on the creation of direct jobs (employment targets, investment attraction measures, strengthened educational opportunities, including vocational training), indirect jobs (local content requirements, supplier development programs, "outgrower schemes" that incorporate smallholder farmers into business arrangements as a form of local procurement), and induced jobs (infrastructure improvements, capacity-building for local governments). Employment policies should always be shaped by community consultations and plan for employment impacts across the project life cycle, including project closure or failure.

As employment impacts are context-specific, so are policy solutions. Efforts to optimize employment generation from resource investments must be tailored to the relevant context. A thorough understanding by governments of the variables related to employment from natural resource investments can help both in designing policies and evaluating potential investments.

[*] The *Columbia FDI Perspectives* **are a forum for public debate. The views expressed by the author(s) do not reflect the opinions of CCSI or Columbia University or our partners and supporters.** ***Columbia FDI Perspectives*** **(ISSN 2158-3579) is a peer-reviewed series.**

[**] Perrine Toledano (ptoled@law.columbia.edu) is Head: Extractive Industries, Columbia Center on Sustainable Investment (CCSI); Olle Östensson (olleostensson@gmail.com) is an independent consultant specializing in the relationship between extractive industries, commodity trade and development; and Kaitlin Y. Cordes (Kaitlin.cordes@law.columbia.edu) is Head: Land and Agriculture, CCSI. This *Perspective* is based on Kaitlin Y. Cordes, Olle Östensson and Perrine Toledano, "Employment from mining and agricultural investments: how much myth, how much reality?," Columbia Center on Sustainable Investment, Columbia University (2016). The authors are grateful to Lorenzo Cotula, Matt Genasci and Tyler Gillard for their helpful peer reviews.

[1] CCSI, IISD and Engineers without Borders, "Mining a mirage: reassessing the shared-value paradigm in light of the technological advances in the mining sector" (2016), http://ccsi.columbia.edu/files/2015/07/mining-a-mirage-CCSI-IISD-EWB-2016.pdf; *see also* Nahom Ghebrihiwet, "Mining automation: threat or opportunity for FDI technology spillovers?", *Columbia FDI Perspectives*, No. 167, Feb. 15, 2016.

[2] CCSI, "Handbook on Measuring Employment from Extractive Industry Investments," http://ccsi.columbia.edu/work/projects/handbook-on-measuring-employment-from-extractive-industry-investments/.

[3] One 2014 estimate, which looks fairly accurate, placed direct employment globally from mining at 2.5 million. International Council on Metals and Mining, "The role of mining in national economies," (2014), https://www.icmm.com/website/publications/pdfs/society-and-the-economy/161026_icmm_romine_3rd-edition.pdf. Estimating the employment creation from agricultural investment is too fraught an exercise, given the opacity around such investments.

[4] A livelihood is a means of making a living, and is thus broader than formal or informal employment. It may include, for example, artisanal mining or smallholder farming.

For further information, including information regarding submission to the *Perspectives*, please contact: Columbia Center on Sustainable Investment, Matthew Schroth, mas2443@columbia.edu.

The Columbia Center on Sustainable Investment (CCSI), a joint center of Columbia Law School and the Earth Institute at Columbia University, is a leading applied research center and forum dedicated to the study, practice and discussion of sustainable international investment. Our mission is to develop and disseminate practical approaches and solutions, as well as to analyze topical policy-oriented issues, in order to maximize the impact of international investment for sustainable development. The Center undertakes its mission through interdisciplinary research, advisory projects, multi-stakeholder dialogue, educational programs, and the development of resources and tools. For more information, visit us at http://www.ccsi.columbia.edu.

Most recent *Columbia FDI Perspectives*

- No. 212, Stephen Kobrin, "The rise of nationalism, FDI and the multinational enterprise," November 6, 2017.
- No. 211, Mélida Hodgson, "NAFTA 2.0: a way forward for the investment chapter," October 23, 2017.
- No. 210, Karl P. Sauvant, "The importance of negotiating good contracts," October 9, 2017.

- No. 209, Catharine Titi, "A stronger role for the European Parliament in the design of the EU's investment policy as a legitimacy safeguard," September 25, 207.
- No. 208, Lisa Sachs, Jeffrey Sachs and Nathan Lobel, "Corporations need to look beyond profits," September 11, 2017.

All previous *FDI Perspectives* are available at http://ccsi.columbia.edu/publications/columbia-fdi-perspectives/