Case Study 5

Institutions, Inequality, and Incomes: Ghana and Côte d'Ivoire

Ghana's development has exceeded expectations—at least after many disappointments. Côte d'Ivoire (CIV) started with many apparent advantages, but on many economic measures, Ghana has closed the development gap that existed between itself and CIV at independence.

It is recommended that you read Chapters 2 and 5 in conjunction with this case. These country illustrations provide further interpretation of the more general research discussed in those chapters.

A Natural Comparative Case Study

Ghana and Côte d'Ivoire border each other in West Africa. Their land area is similar in size at 92,456 square miles (239,450 km^2) and 124,502 square miles (322,458 km^2), respectively. Their populations are also similar, with 25.5 million people in Ghana and 20.6 million in Côte d'Ivoire in 2012. Becoming independent within three years of each other and also sharing similar geographies, these adjoining countries make for a natural comparison. One of the most striking differences is that Ghana was part of the British Empire from 1821 to 1957, and CIV was a French colony from 1842 until 1960. (Note, however, that full colonial rule took a long time to become established throughout the territories of these countries; the French were still fighting to extend their presence into the early years of the twentieth century.)

How did these colonial histories matter? Did their influences extend after independence, affecting later development policies for good or ill? Or have other, internal factors been more decisive? Can this help us to better understand why it is so challenging to sustain high growth, eliminate poverty and hunger, and to achieve other Millennium Development Goals?

The experiences of a half-century after independence illustrate some of the opportunities for and threats to development. This case study raises thought-provoking questions and presents the types of information one would weigh in addressing this and other comparative country studies. This case illustrates how the frameworks and many-country statistical studies of Chapters 2 and 5 can be applied to understanding development experiences in comparative perspective. The richness of culture and nuances of complex political histories are abstracted to feature some broad approaches and findings in development economics in a short space. Readers are encouraged to explore these leading African nations in detail.

Poverty and Human Development As reported in the UNDP's 2013 *Human Development Report*, Ghana is considered a medium human development country, with a New Human Development Index (NHDI) value of 0.558, while CIV is considered a low human development country, with an NHDI of just 0.432. Ghana's performance is 22 positions higher than predicted by income, while CIV's is 9 positions lower. In the 1990 *Human Development Report*, when the original HDI was introduced, the numbers were 0.393 for CIV and 0.360 for Ghana. Both made progress, but Ghana much more so. CIV's Multidimensional Poverty Index (MPI) as reported in the 2013 *Human Development Report* is very high at 0.353, while Ghana's MPI is substantially lower at 0.144. And the 2009 *Human Development Report* Human Poverty Index (see note 11) for CIV was 0.374, ranking 29 places lower in the country rankings based on human poverty than income poverty (the fraction under \$1.25 per day). This suggested that what the UNDP termed *human poverty* is relatively worse in CIV than even its income poverty would suggest. Ghana's HPI was significantly better, at 0.281 (with its ranking as predicted by its income poverty).

These outcomes would have surprised many who wrote at the time of independence. In 1960, Ghana had a real GDP per capita of just $594, far behind CIV's $1,675; but in 2007, according to the *Penn World Table*, Ghana had reached $1,653—a gain of 278% and nearly enough to close its original deficit—while CIV increased to $2,228, a modest gain of just 33% after 47 years. In 2011, Ghana's estimated income per capita PPP of $1,830 surpassed CIV's level of $1,780 (2013 World Development Indicators).

Ghana has a life expectancy of 64, while that of CIV is only 55 (2012 PRB estimates); in 1960, life expectancy in CIV was 51, to Ghana's 46, a dramatic reversal. In 2011, under-5 mortality was 115 in CIV and a still high but significantly lower 78 in Ghana.

Aysit Tansel showed that by 1987, Ghana was well ahead of CIV in mean years of schooling by each gender and across age groups. By 2008, the adult literacy rate reached 65.0% in Ghana versus 48.7% in CIV.

Highly credible information on the extent of extreme poverty in these countries is difficult to find, but it is not doubted that at the time of independence, poverty was far higher in Ghana. Using 1987 surveys, the World Bank put dollar-a-day poverty at just 3.28% in CIV that year but 46.51% in Ghana; a comparable figure for Ghana (from a 1998 study) was 36% and for CIV (2002) was 16%. The most recent available World Bank estimates are 28.6% below $1.25 per day in Ghana (2006 survey) and 23.8% (2008 survey) in CIV (2013 World Development Indicators). It appears that over time, poverty has fallen in Ghana and risen in CIV.

Progress in both countries is small in comparison to East Asia; but the differences between these countries are substantial. How can we begin to understand such differences? Sometimes even recent changes in the patterns of development can have long historical roots, and we consider this first.

Long-Run Factors in Comparative Development

The Colonial Impact and the Legacy of Institutions The Portuguese built a fortress on the coast of Ghana in 1482 and named it Elmina ("The Mine"). Later, the British named this area the Gold Coast, as it was known until independence in 1957. Côte d'Ivoire (Ivory Coast) received its name from the French. These names apparently reflect how the colonial powers viewed the territories: as "coasts" rather than nations; as commodities for trade rather than people, or simply as a mine. The colonialists' priority of resources over people could not have been more obvious. Ghana suffered earlier and more from the impact of the slave trade. But CIV also suffered ill treatment, including a brutal campaign by the French to subdue the "interior" in the late nineteenth and early twentieth centuries and impose forced labor. How do we understand this terrible colonial experience and its possible aftermath? Settler mortality rates, which is correlated with the establishment of extractive institutions by the colonial power with long-term pernicious effects (see Chapter 2, section 2.7), was stunningly high in these two countries, each with an estimated 668 deaths per 1,000 per year, among the highest in the study by Acemoglu, Johnson, and Robinson (AJR); for comparison, the rate was just 15.5 in South Africa.*

Institutional Quality The expectation is that inherited institutions should be particularly bad in these two countries because colonialists would have had little incentive to protect property rights, encourage investment, or allow broad access to economic opportunities or political participation; instead, in stark terms, the incentive was to steal or have others steal for you. In their data for current institutional quality, the "average protection against expropriate risk" was 6.27 in Ghana and 7.00 in CIV, compared to a range from 3.50 in the Democratic Republic of Congo (known as Zaire at the time) to 10.00 in the United States—better, though not spectacularly better, investor protection. But a range of recent studies give higher marks to Ghana. Although all-country rankings of institutional quality should be used with caution, as they

*According to the AJR dataset, which is based on the work of the historian Philip Curtin, the other highest-mortality colonies were Togo, Gambia, Mali, and Nigeria. By contrast, the death rate was just 14.9 in Hong Kong, and 17.7 in Malaysia and Singapore. Settler mortality was used as an instrument for early institutions in the literature (see Chapter 2), and we examine two countries with identical settler mortalities giving attention to additional elements. (Conclusions of the research cited here are based on multicountry statistical analysis, not on case studies; we are taking such research as a starting point for issues to consider when conducting more in-depth comparative case studies).

can contain subjective elements; when a group of independently produced indicators with different focuses all point in the same direction, they become suggestive (though still never substituting for careful country-specific appraisal). Regarding corruption perceptions, according to Transparency International, in 2012 Ghana ranked 64th and CIV 130th out of 176 countries ranked. Regarding "ease of doing business," the World Bank–International Finance Corporation 2010 rankings of 183 countries listed Ghana as 92nd (7th in sub-Saharan Africa) and CIV as 168th (32nd in the region). Regarding democracy, for 2012 the *Economist* listed Ghana (ranked 78th of 167) as a "flawed democracy" (two steps above authoritarian) and CIV (ranked 136th) as authoritarian. And on current property rights protections, a 2013 ranking sponsored by the *Wall Street Journal* and Heritage Foundation placed Ghana at 50 on a scale of 100 and CIV just 25. Critics point out limits and flaws of these various rankings, but they are consistent. So this, too, must be better understood. Is it because things had gotten so bad in Ghana that reform became the only option?

Ethnolinguistic Fractionalization Another feature associated in the economics literature with low incomes and growth is ethnolinguistic fractionalization, with some social scientists also pointing out the potential dangers of religious fractionalization. In fact, both countries are fairly highly fractionalized, but CIV more so. Both countries have an Akan majority (45% in Ghana and 42% in CIV) and many smaller groups. In Ghana, the population is 69% Christian and 16% Muslim, but in CIV, adherents are much more evenly divided, with 39% Muslim and 33% Christian. Although scholars debate the proper way to measure fractionalization, seven main measures are used, with CIV higher on six, in some cases substantially higher.* CIV was torn by civil war in 2002, which has split the country, and the opportunistic use of fractionalization by political figures is an important factor.

Population Patterns of population growth are often considered an important aspect of development, as discussed in Chapter 6. At independence in 1960, the population of CIV was just 3.6 million, so it grew about 5½ times by 2007. In contrast, Ghana's population was already nearly 7 million in 1960, so it grew by less than 3⅓ times in the same period. Even now, the total fertility rate is a high 4.0 in Ghana but significantly higher at 4.9 in CIV, with one extra birth per woman. While just 8% of married women of childbearing age use modern contraceptives in CIV, 17% do in Ghana—still a small fraction but more than twice the incidence of CIV (the gap remains, at 24% to 13%, when considering both traditional and modern methods). High birth rates generally hinder economic development. Faster population growth is associated with slower per capita income growth and slower improvement in other development indicators; lower fertility increases family incentives and resources for education. But the geographic distribution of population does not seem to have particularly strong political implications. For example, Jeffrey Herbst classifies both Ghana and CIV as among just 7 of 40 sub-Saharan African countries with a "neutral political geography."

Extreme Inequality As explained in Chapter 5 (and introduced in Chapter 2), extreme inequality can retard the development process. The most recent World Bank Gini coefficient estimates for CIV and Ghana do not differ significantly (at 0.42 and 0.43). But Arnim Langer points out that the combination of relatively high and rising inequality in CIV, coupled with rising ethnic tensions that political actors had deliberately made worse, led to the conflict that broke out there in the early 2000s (ethnic inequalities as a factor in conflict is considered in Chapter 14, section 14.5).

Common Law versus Civil Law? As a former British colony, Ghana's legal system is based on common law, while the legal system in CIV is based on French civil law. Since the late 1990s, the view that common law legal systems provide a better foundation than civil law systems for the development of the financial system has been very influential. Authors in this literature such as Rafael La Porta and his colleagues argue either that common law better protects property rights, better enforces contracts, offers more predictability, or that it is better able to adapt to changes in economic conditions. Investment is generally necessary for economic growth (Chapters 3 and 4), and the development of an effective financial system encourages investment

*For example, according to the 1997 basic Easterly-Levine (ELF) measure, CIV was rated 0.86 and Ghana 0.71, with the range in Africa from 0.04 for Burundi to 0.9 for Congo and Uganda. On the widely cited 2003 Alesina et al. alternative measure, CIV is 0.82 and Ghana 0.67 in a range from 0 to 0.93. These are the usual baseline measures, but one measure of the seven points in the other direction: the 1999 measure of Fearon, on which CIV is 0.78 and Ghana 0.85.

(Chapter 15). Some evidence supports the prediction that civil law countries will experience less financial development and lower rates of investment. But differences between French and British institutions besides the legal system may be important.

French versus British Rule? The British Empire is commonly considered to have preferred indirect rule, relying on its ability to dominate local traditional political systems rather than to create new ones (possibly related to common law tradition). In contrast, the French are said to have tended to employ direct rule of their colonies, introducing their own centralized administrative structures, perhaps related to their own legal and historical traditions. Tactics might well have been similar regardless of the colonizer if conditions strongly favored central rule or indirect rule. But where starting conditions were similar in both colonies and when local advantages of either centralization or decentralization were not strong, a centralized French strategy and a decentralized British strategy might plausibly have been expected.

The evidence does reflect a more decentralized rule in British Ghana and more centralized rule in French Côte d'Ivoire. But if centralized rule is then transmitted to the postcolonial regime, the result can be a state with too few checks and balances. Decentralized rule, in contrast, provides better incentives and checks against large-scale government corruption (see Chapter 11). The postcolonial record is complex but shows continued strong tendencies toward centralization in CIV, although the aftermath of civil strife increases uncertainty about the future course (indeed there is some risk that CIV may face a prolonged period as a failed state). As Catherine Boone notes in her richly detailed study of both countries, the case of Ghana is subtle with initial but far from fully successful postcolonial government attempts at more centralization, probably in part to wrest a larger share of agricultural revenues, but in 1992 there was a reinstatement of at least a ceremonial role—and unofficially a much larger role—for chiefs and other traditional village governance. This built on long traditions that were not systematically undermined under the British the way they were under the French.

Finally, some observers view postindependence CIV as having a more dependent relationship with France. Besides colonial rule having negative effects in general, close CIV dependence on its former colonial ruler may have been a hindrance to its economic and political growth and development over the long run. In contrast, Ghana diversified more of its international relations, perhaps giving it somewhat higher bargaining power in pursuing its national development interests.

Education Some scholars consider education of central importance in explaining economic growth; Edward Glaeser and coauthors even argue that improved education can result in improved institutions. Educational attainment was abysmal in both nations at the time of independence. One of the most striking postcolonial differences between the countries is the higher level of educational attainment in Ghana, where there have been greater investments in education. In the early years after independence, there was strong policy attention to providing basic education in some of the poorer areas in Ghana. In 2010, according to the 2013 Human Development Report (HDR), the mean years of schooling was almost 3 years higher in Ghana (at 7.0) than in CIV (at 4.2). Moreover, expected schooling is now 11.4 years in Ghana, compared with only 6.5 years in CIV. Education is intrinsically valuable, as reflected in the HDI; it has apparently been a factor in faster growth and may even figure in later institutional improvements. Ghana has also had recent success scaling up basic health insurance.

Development Policies Development policies are often framed by a country's underlying economic institutions; this can place constraints on the types of beneficial reforms and policies that a country can successfully implement. The failure of a country to implement otherwise obvious policies (such as investing in quality primary education) may not reflect failures of understanding as much as the realities of political constraints. But when achieved, well-designed and implemented policies can have very positive effects on development outcomes; bad policies can have disastrous consequences.

Policies in Ghana Both nations started as (and still are) largely agrarian economies, with over half of the labor force working in rural areas. But the two countries have had somewhat different policy trajectories. The general scholarly view is that in the first quarter century after independence, Ghana chose many poorly conceived and often corrupt interventionist policies. Early policies have been described as oriented toward urban industry, with inefficiently implemented import substitution to replace manufactured imports with locally produced ones (see Chapter 12). But one policy associated with the early rule of Kwame Nkrumah through 1966 was an emphasis on basic education, which may have left an enduring legacy through difficult subsequent swings. After disastrous policies and extreme instability, including coups in the mid-1960s to early 1980s, Ghana underwent a policy transformation to become a favorite country of liberalization promoters in the World Bank and elsewhere in the 1980s.

The development process is complex and rarely proceeds linearly. In Ghana, there was relative deterioration from independence until the early 1980s; much of its economic growth took place from the mid-1980s to the present. For example, cocoa had long been an important part of Ghana's economy, but it went into decline when state marketing boards (described in Chapter 9) limited the price farmers received for cocoa, so as to subsidize industrialization. After farmers were allowed to receive a much higher price and technical assistance was offered, output greatly increased, particularly in two spurts in the late 1980s and early 2000s. Fertilizer use and improved varieties have diffused among farmers (diffusion in Ghana for the case of pineapples is examined in Findings Box 9.1 in Chapter 9). Cocoa growing now provides a basic livelihood for over 700,000 farmers in Ghana.

By the early 1990s, World Bank analysts such as Ishrat Husain were pointing to Ghana as a country that had been doing a better job at following and implementing more of its recommended market-friendly policies than countries such as CIV.

A reason given for large-scale reform in Ghana (and in explaining other countries as well) is that things got so bad that there became no choice but to embrace reform. Naturally, when according to local conditions things become so bad that continued resistance to change is futile, *something* changes—perhaps not always for the better. Ghana became a classic example for proponents of the controversial view that duress "causes" reform. A criticism, to paraphrase Dani Rodrik, is that it is not clear how much duress is enough to "cause" reform; and as a result, it is not very convincing when analysts simply claim that a reform did not happen because the situation must not have been bad enough.

Policies in Côte d'Ivoire In contrast, CIV experienced relatively faster growth in the 1960s and 1970s and then decline from 1980 to the present (recently more pronounced due to civil conflict). Institutions that appear to perform serviceably for two decades can have underlying weaknesses that later emerge—for example, politicians treat weaknesses as a political opportunity or the system proves to have too little flexibility as new challenges emerge.

CIV is widely viewed as having started down a more market-based, export-oriented path in a way that should have helped the rural agricultural sector, where most of the population and most people living in poverty were located. But this did not prevent elites from extracting what they could from the rural areas. In fact, there were a number of policy lurches. An apparently favorable tactic might have been an early policy of effectively trying to keep all the ethnic groups engaged in and benefiting from growth in the national economy. There were large migrations into CIV, for example, including the forced labor brought into CIV from Burkina Faso (Upper Volta) by the French in the early 1940s. A more ethnically based politics in the late 1990s is viewed by specialists in the politics of CIV as helping to precipitate the disaster of regional and ethnic conflict in the 2000s.

Enduring Questions By 1990, Ghana was already being deemed a "success story" by the World Bank and others. Is it because the nation followed the right policies? And if so, what explains why Ghana chose good policies and CIV did not? How much benefit can be attributed to the volume of aid itself?

CIV fell into a period of severe conflict in 2002–2007; many lives were lost, and resources continue to be diverted into managing the problems, with perceptions of prospects still damaged. French military involvement reflected France's ongoing unique relationship with CIV. In contrast, Ghana has so far remained stable. Why? And can it continue to remain stable? It remains to be seen how well Ghana comes through its recent discovery and production of oil. In principle, new resources can help reduce poverty, directly and indirectly. But for many countries, a "resource curse" has resulted from political conflict over resource revenues and an overspecialized or even "hollowed out" economy (see Chapter 14).

Have leadership differences mattered for development of these countries? Socialist Kwame Nkrumah constructively supported education but diverted resources from cocoa exports to local industry, leading to economic disaster; under duress, socialist Jerry Rawlings embraced market-oriented policy reforms that led to short-term pain but long-term gain. Subsequent leaders have been pragmatic and at least have done relatively little harm and perhaps some good. CIV's capitalist President Félix Houphouët-Boigny, backed by France ("Françafrique"), seemed early on to be leading his country to economic success but stole billions from the public purse and led the country to ruin while clinging to power for 33 years until his death in 1993. Subsequent leadership has impressed few observers. Of course, extraordinary leadership in government or civil society can play a decisive role in the course of development—think of Nelson Mandela in South Africa or Muhammad Yunus in Bangladesh. But in ordinary experience, is leadership the key, or is it underlying institutions? Or popular movements? Education? Imported ideas and technology? These remain enduring questions, and answers may depend on local circumstances.

As an examination of just two countries to illustrate more general evidence in the literature, it cannot be concluded beyond doubt that institutions set up by Great Britain in Ghana and France in Côte d'Ivoire had a dominant effect on the successes and failures of these nations in subsequent poverty reduction and economic growth. But there is support for factors identified in the large-sample statistical studies introduced in Chapter 2, notably institutions, inequality, and at least indirectly education. Colonial institutions apparently had negative effects, and within colonization, the degree of decentralization under colonial rule apparently also mattered. The reemergence of more decentralized governance in Ghana since 1992 may be related to less damaging British governance practices in this respect. At the same time, history is not destiny; Ghana has made progress that was not well predicted by instruments for colonial institutions. Nor are things necessarily bleak for CIV. Institutions and inequality are highly resistant to change. But the global trend is toward continued progress in human development, and other African nations such as Rwanda have made enormous economic strides that were very difficult to imagine just a few years earlier. But in CIV, the standoff following contaminated presidential elections in 2010 led to what has been called the Second Ivorian Civil War. Rather than simply blame CIV, it may be possible to trace the shape of policymaking to underlying institutions– doing so may be a way to help address deeper constraints. It is to be hoped that the international community can play a constructive role in facilitating improvements in CIV's underlying institutions, as well as to help secure the peace.

Sources

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Acemoglu, Daron, Simon Johnson, and James A. Robinson. "The colonial origins of comparative development: An empirical investigation." *American Economics Review* 91 (2001): 1360–1401.

Adjibolosoo, Senyo. "Ghana at fifty years old: A critical review of the historical genesis of why Ghanaians are where they are today." *Review of Human Factor Studies*. 13 (2007): 6–40.

Alesina, Alberto, and Eliana La Ferrara. "Ethnic diversity and economic performance." *Journal of Economic Literature* 43 (2005): 762–800.

Alkire, Sabina, and Maria Emma Santos "Acute Multidimensional Poverty: A New Index for Developing Countries." OPHI Working Paper 38, 2010, at http://www.ophi.org.uk/acute-multidimensional-poverty-a-new-index-for-developing-countries/

Beck, Thorsten, Asli Demirguc-Kunt, and Ross Levine. "Law and finance: Why does legal origin matter?" *Journal of Comparative Economics* (2003): 663–675.

Blunch, Niels-Hugo, and Dorte Verner. "Shared sectoral growth versus the dual economy model: Evidence from Côte d'Ivoire, Ghana, and Zimbabwe." *Development Review* 18 (2006): 283–308.

Boone, Catherine. *Political Topographies of the African State. Territorial Authority and Institutional Choice*. Cambridge: Cambridge University Press, 2003.

Crook, Richard, Simplice Affou, Daniel Hammond, Adja F. Vanga, and Mark Owusu-Yeboah. "The law, legal institutions and the protection of land rights in Ghana and Côte d'Ivoire: Developing a more effective and equitable system." IDS Research Report 58. Brighton, U.K.: Institute of Development Studies at the University of Sussex, 2007.

Easterly, William. "Inequality does cause underdevelopment." *Journal of Development Economics* 84 (2007): 755–776.

Engelbert, Pierre. "Pre-colonial institutions, post-colonial states, and economic development in tropical Africa." *Political Research Quarterly* (2000): 7–36.

———. *State Legitimacy and Development in Africa*. Boulder, Colo.: Rienner, 2000.

Firmin-Sellers, Kathryn. "Institutions, context, and outcomes: Explaining French and British rule in West Africa." *Comparative Politics* 32 (2000): 253–272.

Glaeser, Edward L., Rafael La Porta, Florencio Lopez de Silanes, and Andrei Shleifer. "Do institutions cause growth?" *Journal of Economic Growth* 9 (2004): 271–303.

Herbst, Jeffrey. *States and Power in Africa. Comparative Lessons in Authority and Control.* Princeton, N.J.: Princeton University Press, 2000.

Heston, Alan, Robert Summers, and Bettina Aten. *Penn World Table*, vers. 6.3. Center for International Comparisons of Production, Income, and Prices at the University of Pennsylvania, August 2009.

Husain Ishrat. *"Why do some adjust more successfully than others? Lessons from seven African countries*." World Bank Africa Regional Office Policy Research Working Paper No. 1364, Office of the Chief Economist, 1994.

Husain, Ishrat, and Rashid Faruqee. *Adjustment in Africa: Lessons from Country Case Studies*. Washington, D.C.: World Bank, 1994.

La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert W. Vishny. "Law and finance." *Journal of Political Economy* 106 (1998) 1113–1155.

Langer, Arnim, "Horizontal Inequalities and Violent Conflict" Côte d'Ivoire Country Paper, 2005. http://hdr.undp.org/en/reports.

MacLean, Lauren Morris. "Constructing a social safety net in Africa: An institutionalist analysis of colonial rule and state social policies in Ghana and Côte d'Ivoire." *Studies in Comparative International Development* 37 (2002): 64–90.

Office of the Chief Economist, Africa Region, World Bank. *Yes, Africa Can: Success Stories from a Dynamic Continent*. Washington, D.C.: World Bank, 2009.

Population Council. "Côte d'Ivoire, 1998–99 results from the Demographic and Health Survey source." *Studies in Family Planning* 34 (2003): 53–57.

Population Reference Bureau. *World Population Data Sheet, 2012.*

———. "Progress in Reducing Adolescent Childbearing: Ghana's Success Story," A PRB ENGAGE Snapshot, 2013 http://www.prb.org/Journalists/Webcasts/2013/ghana-adolescent-childbearing-engage-short.aspx.

Rodrik, Dani. "Understanding economic policy reform." *Journal of Economic Literature* 34 (1996): 9–41.

Stewart, Frances. "Horizontal inequalities: A neglected dimension of development." QEH Working Paper Series, No. 81. Oxford: University of Oxford, 2002.

Tansel, Aysit. "Schooling attainment, parental education, and gender in Côte d'Ivoire and Ghana." *Economic Development and Cultural Change* 45 (1997): 825–856.

Tsikata, Fui S. "National mineral policies in a changing world: The vicissitudes of mineral policy in Ghana." *Resources Policy* 23 (1997): 9–14.

United Nations Development Programme. *Human Development Report, 2009* and *2010*. New York: Oxford University Press, 2009 and 2010.

White, Howard. "Using household survey data to measure educational performance: The case of Ghana." *Social Indicators Research* 74 (2005): 395–422.

World Bank. "PovcalNet." http://iresearch.worldbank.org/PovcalNet.

———. *World Development Indicators, 2010, 2013*. Washington, D.C.: World Bank, 2010, 2013.

Yimam, Arega. *Social Development in Africa, 1950–1985: Methodological Perspectives and Future Prospects.* Brookfield, Vt.: Avebury, 1990.