



Held Back: Explaining the Sluggish Pace of Improvement to Basic Education in Developing Democracies—The Cases of India and Brazil*

Lindsey CARSON, Joanna V. NORONHA & Michael J. TREBILCOCK**

Abstract: Despite the widely accepted relationship between quality primary education and sustainable, equitable development, two of the world's fastest-growing democracies—India and Brazil—continue to trail their regional and economic peers in basic learning outcomes. Using a supply and demand framework, this article identifies six institutional factors that we hypothesize may have been determinative in shaping education outcomes in both countries: actual popular demand, availability of information about public education quality, impact of private school alternatives, financial allocations, incentive structures for educational personnel, and the influence of political institutions on the responsiveness of public leaders. Our analysis reveals the interrelationships among these six factors and their connections to broader economic, political, social, and historical realities in each

* This is an open-access article distributed under the terms of the Creative Commons license Attribution-Noncommercial-NoDerivs 3.0 Unported. Distribution and reproduction are permitted, provided that the original authors and JPAID as the source are credited.

** Lindsey Carson (corresponding and lead author), Adjunct Lecturer, The Paul H. Nitze School of Advanced International Studies (SAIS), John Hopkins University, Washington, DC, United States. Email: lcarson6@jhu.edu; Joanna Vieira Noronha, SJD Candidate, Harvard Law School, Harvard University, Cambridge, MA, United States; Michael J. Trebilcock, Professor of Law and Economics, University of Toronto Faculty of Law, Toronto, ON, Canada.

country. We conclude by identifying central elements of public accountability mechanisms that seem to be the most appropriate institutional venues to create and maintain the type of sustained, focused public pressure necessary to achieve lasting improvements to access and quality.

Keywords: Basic education, India, Brazil, Decentralization and service delivery, Accountability

“Inequality is often a *consequence* of progress. Not everyone gets rich at the same time, and not everyone gets immediate access to the latest life-saving measures, whether access to clean water, to vaccines, or to new drugs for preventing heart disease. Inequalities in turn affect progress. This can be good; Indian children see what education can do and go to school too. It can be bad if the winners try to stop others from following them, pulling up the ladders behind them. The newly rich may use their wealth to influence politicians to restrict public education or health care that they themselves do not need.”

Angus Deaton, 2015 Nobel Prize in Economics¹

Access to high-quality basic education is both theoretically and empirically associated with a wide range of positive development outcomes, including economic growth and diversification (Barro 1991; Bruns et al. 2011; Hanushek & Wößmann 2007; Lucas 1988), reduced fertility and infant mortality rates (Haveman & Wolfe 1984; United Nations (UN) 2005), and enhanced civic engagement and respect for human rights (Drèze & Sen 2013; Sen 1999; UN Development Programme (UNDP) 2011). However, despite remarkable improvements in primary school enrollment rates over the last half-century, learning outcomes in many developing countries remain appallingly poor (Pritchett 2013). Why, to use Olson’s (1996) analogy, are so many

¹ Angus Deaton, *The Great Escape: Health, Wealth, and the Origins of Inequality*, Princeton University Press (2013) at p. 1.

countries leaving big bills on the sidewalk?

The prevalence of poor learning outcomes is particularly puzzling in the context of economically dynamic democracies. In such countries, economic expansion should generate demand for educated workers, thus increasing the collective and individual returns on investments in education (Nelson & Phelps 1966; Pritchett 2001), while the enfranchised public possess political mechanisms to hold elected officials accountable for the quantity and quality of basic educational services (Gallego 2010; Lindhert 2003, 2005; Sokoloff & Engelman 2000). However, two large, vibrant, federal democracies that have experienced strong economic growth in recent years—India and Brazil—continue to produce (in some cases shockingly) feeble learning outcomes when compared to their regional and economic peers. This article uses the experiences of India and Brazil to analyze the factors that appear to affect the governmental supply of, and public demand for, quality basic education in economically-expanding, democratic societies.

Contextualizing India and Brazil

India

India's colonial legacy has cast a long shadow over the country's educational institutions. Over the half-century (1859 to 1919) during which the British colonial authorities directly controlled the then-colony's schools, basic education was severely under-resourced, with less than £0.01 per capita directed toward human capital in British India between 1860 and 1919 (Chaudhary 2009). Following independence in 1947, the country's 1951 census revealed that only 9 percent of women and 27 percent of men were literate (Kingdon 2007; Nilekani 2008). In the decades following independence, a dual system of education took hold as members of the middle- and upper-classes patronized private schools and elite tertiary institutions while, for the vast majority of the population facing under-funded public schools and

indifferent enforcement of child labor laws, education offered little hope as a pathway out poverty. By 1971, primary school enrolments stood at only 61 percent, with less than one-half of eligible girls enrolled (World Bank 2014a). In more recent decades, initiatives such as Sarva Shiksha Abhiyan (SSA), the national government's flagship program to provide free, compulsory basic education to all children by 2015, have improved access to education, with primary school enrollment rates climbing from 61.2 percent in 1971 to 93.3 percent in 2011 (World Bank 2014a). The number of children ages 6 to 14 out of school has dropped from 32 million in 2001 to 2.9 million in 2012-2013 (World Bank 2014b). However, despite this notable progress, the Indian education system continues to face major challenges relating to access, quality, and equity.

With respect to access, while programs such as SSA have succeeded in expanding primary school enrollment, school attendance rates remain remarkably low. Nationally, the overall attendance rate for primary school students was 76.2 percent in 2012-2013 (National University of Educational Planning and Administration (NUEPA) 2014a: 49), while primary school attendance among rural students fell from 75.9 percent in 2007 to 71.8 percent in 2013 (Pratham 2014). In addition, even those children attending school may lack access to education. Nationally, more than 15 percent of primary school teachers are absent on any given day (NUEPA 2014a), and other recent studies have discovered that across the country, only 45 percent of public primary school teachers present in classrooms are engaged in teaching activities (Chaudhary et al. 2006), with instruction rates within states ranging from 27 to 68 percent (Duflo et al. 2012; Pandey et al. 2009). Drèze and Sen (2013) calculate that the average Indian primary school student receives approximately one-fourth of the instruction he or she would receive in a well-functioning school.

The quality of education remains a critical issue in India as learning outcomes for students are low and learning trajectories largely flat (Pritchett 2013; World Bank 2014b). The 2013 ASER survey found that only 37.2 percent of rural government school students aged 6 to 14 were

able to read a paragraph from a story designed for grade 2 students, while just 19.8 percent were able to solve a basic division problem (Pratham 2014). India's students also perform extremely poorly on international assessments of learning outcomes. In the 2009 Organisation for Economic Co-operation and Development's (OECD) PISA survey, less than 20 percent of 15-year-old students in the two Indian states tested, Himachal Pradesh and Tamil Nadu, were considered "proficient"² on tests of reading, math, and science literacy; of the 75 countries and economies tested, including developing countries such as Azerbaijan, Brazil, Indonesia, Mauritius, and Peru, only Kyrgyzstan had comparably low levels of performance (Walker 2011). While India's adult literacy rate of 62.8 percent may be considered, at least in part, a legacy of centuries of neglect under British rule as well as the dualistic education system that took hold in the post-colonial period, India's youth literacy rates suggest that the country's schools continue to underperform. Only 81.1 percent of Indians between the ages of 15 and 24 are literate in comparison to rates in excess of 98 percent in other rapidly growing Asian economies such as China, Indonesia and Malaysia (World Bank 2014a).

With respect to equity concerns, even recognizing the country's low aggregate performance figures, India's education system is plagued by inequality, with significant variance in access and quality across geographic, gender, caste, religious, and socio-economic divisions. Under India's federalist system, the central and state governments share financial and administrative responsibilities for public education. While the federal share of funding has increased significantly since the early 1990s, states are still expected to fund three-quarters of total costs and control policy decisions relating to curricular, exams, and teacher recruitment (OECD 2011a). Variance in tax bases, growth rates, and other budget priorities produce disparities in available funding which,

² "Proficiency" is defined as the baseline level needed to participate effectively and productively in life (Walker 2011: xiii).

coupled with differences in approaches to school administration, contribute to notable variation in educational outcomes across India's 28 states and seven union territories. India also continues to struggle to provide equal educational opportunities to groups historically disadvantaged on the basis of gender, religion, caste, and/or socio-economic status. While the national primary school attendance rates for girls is only slightly lower than for boys, the gap in attendance more than doubles by secondary school, with only 49 percent of eligible females attending compared to 59 percent of their male cohorts (United Nations Children's Fund (UNICEF) 2011); these gender differentials are also reflected in the nearly 17 percentage point gap between national male and female literacy rates (Office of the Registrar General and Census Commissioner 2011). With regard to other disadvantaged groups, some evidence indicates that Muslim children as well as those from less affluent households and those belonging to scheduled classes, scheduled tribes, or other backward castes remain less likely to attend school compared with children from otherwise comparable backgrounds (Borooah & Iyer 2005; Hill & Chalaux, 2011; Prime Minister's High Level Committee 2006).

Brazil

An elite bias has permeated the Brazilian education system since its founding. After three centuries of educational neglect, in 1806 the Portuguese colonial authorities established Brazil's first public formal educational institution, a tertiary school created to train doctors, military officers, and other professionals to assist the royal family and colonial authorities. After independence, the dualist system created under the 1891 Constitution allocated responsibility for tertiary and traditional secondary institutions to the federal government while the states were charged with providing basic and vocational education. Reforms in 1906 further devolved authority over basic educational services to local governments. The bias towards higher education reflected the economic

and political interests of Brazilian elites. The country's nineteenth-century economy, largely dependent on slaves and labor-intensive means of production (for example, plantations, mining) did not require the cultivation of broad-based human capital (Beltrão & Diniz Alvez 2009). Even following the abolition of slavery in 1888 and into the first half of the twentieth century, the ruling elite—mostly owners of vast rural properties—remained largely uninterested in significantly extending education to the masses who served as their source of cheap labor (Engerman & Sokoloff 1997, 2002; Skidmore 1967; Wegenast 2009). Beyond agriculture, neither the natural resource-based, export-oriented economic model that persisted into the 1930s, nor the capital-intensive import substitution industrialization approach that began thereafter and continued into the 1980s, required a sizeable educated labor force. Hence, broad-based education was considered incidental to the country's economic growth (Skidmore 1967). Politically, the education gap disenfranchised significant segments of the population, as literacy, established as a voting requirement in 1889, remained a pre-requisite for the ballot until 1985.

While continuing to prioritize tertiary education, the national government finally began to devote more attention and resources to basic education during the military dictatorship (1964-1985), motivated, in part, by the belief that investments in primary education would help the regime maintain popular legitimacy and support (Ames 1987; Brown & Hunter 2004). However, significant reforms—including the constitutional declaration of universal access to education as a right of citizens and a duty of the Brazilian state—were not instituted until after the country's re-democratization in 1985.

Axiomatically, the return to democracy expanded popular participation in governance, facilitated by the elimination of literacy as a voting requirement and the establishment of a constitutional voting requirement for all Brazilians 18 years and older in municipal, state, and federal elections. This expansion of the electorate and growth in electoral competition likely encouraged the increase in the percentage of the

federal budget allocated to education as well as the spending shift from university to primary education (Brown 2002). Over the last three decades, the majority of Brazilian educational indicators have trended gently but steadily upwards, and Brazilian children have enjoyed virtually universal access to primary education since the late 1990s. Adult literacy climbed from 75 percent in 1980 to 90 percent in 2008, while the mean years of schooling for adults rose from 2.6 in 1980 to 7.2 in 2011 (World Bank 2014a). Public expenditures on education have also increased significantly, from 3.4 percent of GDP in 1980 to 5.8 percent in 2010, reaching a level comparable to richer OECD countries (World Bank 2014a). However, more than a century of underinvestment in basic schooling has left the country with a pronounced educational deficit when compared to its Latin American peers such as Chile, Argentina, and Mexico, whether measured by mean years of schooling, adult literacy rates, or baseline proficiency in reading, math, and scientific literacy (OECD 2014).

Hypotheses Concerning Supply and Demand for Quality Basic Education

Recognizing the positive impacts that learning has on individual and collective development, what explains the failure of India and Brazil to provide quality basic education to all their children on par with their regional and economic peers? Do members of the public in these countries expect and demand such educational services from their government? If not, what factors could explain such collective indifference or inaction? If the Indian and Brazilian public want—and articulate their desire for—better, more equitable basic education, what institutional structures or policies prevent the governments from supplying those services? Do the causes of dysfunction stem from imperfections in demand, supply, or both? We identify six factors—three concerning demand, and three related to supply—that we hypothesize

may have been determinative in shaping education outcomes in both countries.

Demand-side factors

First we consider whether the actual demand for quality education in India and Brazil is as robust as the theoretical and empirical literature concerning the links between education and well-being would predict. We investigate how the real and perceived individual returns on education—both for the general population as well as for marginalized groups—have affected the value people attach to the availability and quality of basic education. We next examine whether attenuated demand for quality education can be attributed to insufficient consumer/citizen information concerning the actual quality of the educational services provided by the state. Finally, we analyze the growth of the private school system in both countries, exploring whether the existence of non-governmental alternatives reduces popular pressure on politicians and policymakers by allowing dissatisfied parents to abandon public schools rather than mobilize for comprehensive, systemic educational reforms.

Supply-side factors

Turning to supply-side factors, we first consider how the two countries finance education, taking into account absolute levels of public expenditures as well as the allocation of such funds geographically, by level (pre-primary, primary, secondary, tertiary, vocational), and by category of expenditure (facilities, materials, salaries, pensions, vouchers, conditional cash transfers). We then examine how education is managed at the national, state/regional, district, and school levels, focusing on the incentives generated for teachers, principals, and other administrators. Finally, we analyze public accountability mechanisms in both India and Brazil, focusing on monitoring, evaluation, and reporting

systems and anti-corruption initiatives, and consider more generally how political structures affect the responsiveness of leaders at various levels of government.

Demand-Side Factors

Insufficient and/or dispersed demand

India

The demand for quality basic education in India is profoundly and inextricably intertwined with the country's economy and labor market and the perceived returns on education within and across demographic groups. The informal sector is so dominant in India's economy that it distorts and diminishes the demand for education, especially public education, as the returns to schooling appear low to a majority of students. Moreover, as we will note in this section and expand on in a later section of the article, many parents seem to believe that education functions like a lottery ticket in India, where the odds of children "winning" improve if they are enrolled in private schools, especially English-language schools.

SSA, the federal government's first massive mobilization to provide universal primary education, became operational in 2000-2001, and its implementation has coincided with a period during which Indian economic growth has been impressive—averaging 7.7 percent annually until the last few years. However, that growth has been largely "jobless," driven by improvements in labor productivity and growth in capital-intensive and skilled labor-intensive rather than broad-based workforce expansion (Bhagwati & Panagariya 2013; Drèze & Sen 2013).

Most strikingly, the lowest levels of unemployment are found among the illiterate, and rates of unemployment actually increase with levels of education (with the notable exception of those with post-secondary school technical training); 34.5 percent of women and

18.9 percent of men with tertiary degrees in India are unemployed (International Labour Organization (ILO) 2013). One factor that contributes to this counter-intuitive phenomenon is the aforementioned persistent and growing dominance of the informal sector in the Indian economy. Poor physical infrastructure, weakly integrated internal markets, and complex webs of draconian and sometimes inconsistent state and federal labor and employment laws create incentives for entrepreneurs engaged in labor-intensive industries to remain small and/or informal, and even formal businesses increasingly rely on informal workers (Bhagwati & Panagariya 2013; National Commission for Enterprises in the Nonorganised Sector (NCEUS) 2009; UNDP India 2009). The percentage of workers engaged in informal employment grew from 91 percent in 1999-2000 to 93 percent in 2009-2010, and 83.5 percent of Indian non-agricultural workers now work informally (ILO Department of Statistics 2011). The shortage of formal employment opportunities may thus encourage parents to view “education as a lottery ticket, not a safe investment” (Banerjee & Duflo 2011: 82).

The dominance of the informal sector in employment is especially pronounced among traditionally marginalized populations. In particular, the proportion of Muslims engaged in the informal sector or home-based or street vending enterprises is much higher than for other groups, while their participation in the government, public, and formal private sectors is significantly lower than that of Dalits or other Hindus (Prime Minister’s High Level Committee 2006). These imbalances in occupational representation may help to explain Muslim parents’ comparably lower valuation of the expected returns on education for their children (Borooah & Iyer 2005), as well as the depressed school attendance and attainment rates of Muslim children (Borooah & Iyer 2005; Prime Minister’s High Level Committee 2006).

The poor quality of learning outcomes generated by the Indian school system further lowers the expected returns on investments in education, potentially weakening and further dispersing demand for educational services in the country. While the main focus of this paper is

basic education, it is important to understand the dynamics between broader access to high quality tertiary education and the demand for, and quality of, basic and secondary education. Specifically, when tertiary institutions prove capable of providing students with the skills and education that allow them to secure high-paying or otherwise-coveted employment, the prospect of those professional opportunities can exert a “pull factor” farther down the educational chain, leading citizens to demand quality basic and secondary educational services that will allow their children to seize those opportunities (Bowman 1962). However, the low quality of many tertiary institutions in India has frustrated the generation of such a beneficial cycle. A recent national assessment of 100,000 tertiary students across disciplines on their employability, measured as a function of their communication skills, logical ability, aptitude, and domain knowledge, determined that two-thirds of the skills pool “is not fit to have a job” (Wheebox 2014: 40). Similarly, a 2013 study of 60,000 students about to graduate from three-year bachelor’s degree programs in India found that 47 percent were not employable in any sector of the knowledge economy (Aspiring Minds 2013).

While recently-announced labor market reforms may eventually lead to large-scale formal employment opportunities in the manufacturing and industrial sectors (Mandhana 2014; Thirani Bagri 2014), the process is likely to be lengthy. This suggests that at least in the short term, the informal sector will continue to dominate the Indian economy, thus lowering perceived and real returns on investments in education. That being said, the employment challenges presented by the gap in the skills and knowledge demanded by businesses and the learning outcomes generated by Indian schools is a problem largely (although not entirely) endogenous to the education system. There is strong demand for well-educated and trained workers among foreign and domestic firms in India, but the candidates produced by Indian schools and universities largely lack the requisite knowledge and skills to secure employment; in a recent survey, 61 percent of private sector employers in India reported that they face difficulty filling positions, particularly in the accounting,

finance, and engineering fields (Manpower Group 2013). Here, too, the demand seems to concentrate on diplomas, rather than the harder problem of quality. Thus, while the high percentages of unemployed Indians with high levels of scholastic attainment may create the impression that the problem is a lack of jobs, the issue is also to an important extent the poor state of learning outcomes; in the words of Adi Godrej, a leading Indian entrepreneur, “there is not unemployment in India, only un-employability” (World Economic Forum 2012: 19).

Brazil

In the early years following the return to democracy, Brazilian government officials focused on battling hyper-inflation and accelerating anemic economic growth rather than initiating social reforms in areas such as education and health care (Reis Silva & Sguissardi 2005), but under President Cardoso (1995-2002) and his successors (Presidents Lula da Silva and Rousseff), access to basic education has been greatly expanded, and primary school enrollment is now virtually universal. Concerted efforts to effectively reform the education system are, thus, a relatively new endeavor in Brazilian history.

Some other inclusive reforms may have played an important role in improving education outcomes. In particular, Bolsa Familia, the system of conditional cash transfers (CCTs) established in 2001 and subsequently expanded, has received accolades for its role in boosting school enrollment and retention rates, as well as parental investments in children’s education (Cardoso & Portela Souza 2004). However, as the government did not phase in CCTs using a control group, robust evaluation of programmatic impacts has not been possible, leaving only less rigorous assessments that do not allow us to conclude that the CCTs did in fact create strong incentives for families to send their children to school (increase demand in terms of number of students) or more significantly voice their demands regarding quality given a new stake in education outputs. Studies have demonstrated that these programs are

associated with moderate increases in enrollments (de Brauw et al. 2014; Glewwe & Kassouf 2012) and higher scholastic achievements among poor students (Martins & Kay 2011), but the evidence is mixed in regard to the inter-generational transmission of poverty (Bruns et al. 2012).

Having recently improved access to basic education by virtual universalization, Brazil now faces the more difficult task of identifying and implementing ways to enhance learning outcomes. However, while popular demand for such quality improvements could potentially strengthen the will of democratically-elected officials to pursue reforms, recent and historical trends in public perceptions concerning the returns on education suggests that the population may value schooling—specifically academic attainment and credentials—over learning, which may weaken the strength of demand for quality education by diverting it towards access to diplomas. Moreover, even though tertiary education is beyond the scope of this paper, it is important to recall the previously mentioned “pull” factor: while access to basic education has been universalized, access to quality tertiary education has not. The Brazilian tertiary system adds an aggravating layer of inequality—the best universities are frequently free public institutions, but without broad access to high quality free public education it is no surprise that students from more affluent families, who often attend private schools, tend to do better on entrance exams.

Studies on the internal returns on education with respect to future salary in Brazil show that such returns are highest at the pre-school level, reaching over 15 percent (Barbosa Filho & Pessoa 2008). However, the returns on education then appear to take the shape of a modified S-curve, with expected benefits initially rising before leveling off until reaching a critical point. A recent analysis of Brazilian education levels and wage distribution found that the returns on education slow considerably, even occasionally decreasing, through the first years of education (primary school and incomplete secondary school), only increasing dramatically upon the conclusion of secondary school (Maldonado et al. 2012). This data also suggests the persistence of the so-called “sheepskin” or

diploma effect, whereby returns on education increase substantially upon the completion of each education cycle (primary, secondary, and tertiary school) and receipt of an academic credential (Arcand et al. 2003; Hungerford & Solon 1987; Jaeger & Page 1996). If motivated middle- and upper-class parents believe that the credential provided by a tertiary institution matters more than the knowledge imparted for students in securing lucrative vocational opportunities, they are unlikely to prioritize higher quality educational services, particularly at lower scholastic levels, so long as they are confident their children will be able to access university education regardless of learning achievements.

The insufficient/dispersed demand dynamics in Brazil work differently from in India in three main respects: (i) access is not currently an issue in Brazil, leaving the much thornier problem of quality to be addressed; (ii) the different pulls of informal and formal sectors are less relevant to understanding demand for high quality basic education; and (iii) there is less cultural distance between regions. That being said, a parallel can be made between the two cases, as harnessing enough public demand to successfully reform the education system as a whole in terms of quality is difficult for three main reasons: (i) improving quality is a complex endeavor that requires constant public pressure, transparency, and sufficient experimentation as there is no clear formula to apply to solve quality issues; (ii) there may be an S-curve return to education, compounded by a sheepskin effect, which helps divert demand away from reforms that target quality in the long-term, and (iii) broad-encompassing education reform is a collective endeavor, requiring mobilization of a large cross-section of citizens and receptivity from the government/bureaucracy. In this sense, it is much simpler for an educational entrepreneur to find enough local demand to maintain her school's attempt at tackling the quality problem than it is for the citizenry at large to mobilize and focus enough of its dispersed demand to successfully pressure governments into effective reform of the public system.

Insufficient information

India

Popular mobilization on issues related to basic education requires that citizens as well as administrators and policy makers have access to transparent information about the nature and severity of the problem. Domestic and international governmental and non-governmental organizations have conducted numerous studies on educational access and quality as well as learning outcomes in India,³ and the largely critical findings of these surveys have been widely publicized by the country's media. However, while available, it is unclear whether data concerning the low quality of Indian basic education information has been fully communicated to, or processed by, members of the public. For example, a 2011 Gallup poll revealed that three-quarters of surveyed Indian adults were "satisfied" with the quality of the education system or schools in their local communities (Gallup, Inc. 2011), while a study in rural Uttar Pradesh in 2005 found that parents and principals significantly overestimated the reading, writing, and arithmetic skills of children in their villages (Banerjee et al. 2006).

Surveys on policy priorities further suggest that the Indian public either does not appreciate the severity of the current crisis in the country's schools or simply considers other problems more urgent. In a recent national survey of the voting priorities of more than 250,000 Indian adults, respondents ranked "better schools" seventh on a list of 30 policy and political issues, behind job opportunities, drinking water, roads, public transport, electric supply, and hospitals (Association for Democratic Reforms and Daksh 2014; TNN 2014). An earlier survey of parents in a rural district in Uttar Pradesh revealed similar attitudes, with

³ Examples include the National Council on Educational Research and Training's (NCERT) All Indian School Education Surveys and National Achievement Surveys, the OECD's PISA surveys, ASER's Annual Status of Education Reports.

less than 14 percent of respondents including education among the top three most-pressing issues facing their villages (Banerjee et al. 2006). As critical as education is to individual and collective development, the magnitude and scope of the challenges facing India and its citizens may simply dilute popular pressure and mobilization around the issue of basic education.

Moreover, assessment of progress on outcome-based priorities, such as those related to learning, is far more difficult than evaluation of improvements based on input-based indicators, such as increased public funding allocations for basic education, or even outputs, such as ensuring all children have access to a primary school within a mile of their household (World Bank 2013). The low average educational attainment and literacy levels of adults in the country may constrain parents' ability to evaluate the quality of the education that their children are receiving in schools, particularly if the language of instruction differs from that spoken at home. However, the proliferation of private schools across the country suggests that a significant segment of the parental population is cognizant of the low quality of many government schools. Private schools are more likely to be found in states, districts, and villages with poor-performing public schools, as measured by relatively visible deficiencies such as teacher absenteeism and non-teaching activity (Banerjee & Duflo 2011; Muralidharan & Kremer 2008; Mehrotra 2006), and the breakdown of government schools appears to be more decisive than parental ability to pay in terms of motivating flight to private schools (PROBE Team 1999).

Brazil

Brazil has systematically constructed and implemented an extraordinarily comprehensive system for assessing learning outcomes. In 1995, the Ministry of Education created the National System for Evaluation of Basic Education which administered bi-annual tests to a nationally-representative sample of students in grades four, eight, and

eleven (*Prova Brasil*). In 2005, the program was expanded, and now every student in the country in fourth and eighth grade participates in the bi-annual national tests which evaluate performance in mathematics and Portuguese, allowing “every segment of the Brazilian educational system to benchmark how well its students are learning and how efficiently its school or school system is performing” (Bruns et al. 2012: 4). Since 2007, the National Index of Basic Education Development (*Índice de Desenvolvimento da Educação Básica* (IDEB)) has monitored basic education in every Brazilian educational institution, analyzing the effectiveness of schools across municipalities, states, and regions. It aggregates measures of both student learning and flow in order to discourage automatic promotion as well as excessive grade retention. However, this abundant and rich body of information has not yet been made available to citizens in an easily accessible and comprehensible manner, such as a public ranking of schools or timely publication of performance results at the school level.

Exit

India

The role of private schools, including low cost schools, in providing basic education has been expanding in many developing countries and has provoked much debate as to appropriate government policies in regulating, restricting or supporting this role (Heynemann & Stern 2014). In recent years, India has witnessed a massive flight from public schools to private institutions with over 37 percent of the country’s students in grades one to five and more than 41 percent of those in grades six to eight enrolled in private schools in 2013-2014 (NUEPA 2014b). Primary-level private school enrollments have grown particularly dramatically in rural areas, rising from 18.7 percent in 2006 to 29 percent in 2012 (Pratham 2014). Much of the expansion in private school enrollment has been driven by increasing demand from poorer

households rather than India's upper- and middle-income groups, and low-fee private (LFP) schools have proliferated throughout the country, opening the doors of private education to broader segments of the population (Srivastava 2007; Tooley 2009; Tooley et al. 2007). While concern about the quality of public education has clearly contributed to the shift toward private schools, parental demand for English-language education (which the majority of private schools offer) has also fueled the exodus, as government schools are legally required to provide instruction only in vernacular languages (Duraismy & Subramanian 2003; Härmä, 2009; Tooley & Dixon 2007; Tooley et al. 2007). Government data indicates that 20 million primary and upper primary schoolchildren were enrolled in English-medium schools in 2011, an increase of 274 percent since 2003 (Rahman 2012).

Critics emphasize that many private schools currently fail to meet governmental standards, particularly with regard to teacher compensation and qualifications. While salaries vary across states and schools, teachers in public schools generally earn two-and-a-half to more than ten times the compensation paid to private school teachers (Tooley 2009; Tooley et al. 2007; Härmä 2009); teachers in private schools also tend to have less experience and are less likely to have received formal training in education than their public school counterparts (NUEPA 2013; Mehrotra 2006; Muralidharan & Kremer 2008). However, despite the lower salaries and weaker credentials of private school teachers, on average students in private schools out-perform their public school peers in cognitive assessments (French & Kingdon 2010; Pratham 2014). Rather than reflecting the high quality of instruction in private institutions, however, the significant and increasing performance gap between students in public and private schools appears to be attributable to declines in the already-low performance of government schools (Pratham 2014).

While growing enrollments in private schools may provide some students with access to higher-quality education than they would receive in public schools, the exit to private alternatives may have profound

long-term political economy implications for the broader public education system. Parents who move their children to private schools lose a direct, personal stake in the quality of public schools, potentially lowering overall pressure on the government to improve services. Moreover, while the proliferation of LFP schools has extended private educational opportunities to some children from lower income groups, the most destitute and those traditionally marginalized in society—members of the scheduled classes, scheduled tribes, and other backward classes and Muslims—are still largely unable to afford private schools, leaving them over-represented in government-run schools (Härmä 2009; Mehrotra & Panchamukhi 2007; Nambissan 2010). Thus, the exodus of upper-, middle-, and even lower-middle class students from the public education system may exacerbate existing caste and socio-economic stratifications by leaving only the most vulnerable in government-run schools of “last resort” (Nilekani 2008: 180).

Brazil

In contrast to India, the percentage of Brazilian primary school students enrolled in private institutions remains modest, increasing from 12.8 percent in 2002 to 16.5 percent in 2012 (*Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira* (INEP) 2012), with students drawn almost exclusively from upper- and middle-class families (*Instituto Brasileiro de Geografia e Estatística* (IBGE) 2010). However, despite these important differences between India and Brazil in terms of percentage of students served, teacher pay, and the economic status of parents, the result of this exit is similar in its impact on demand for quality basic education: parents that have moved their children to private schools have considerably weaker incentives to demand general reforms of the public sector. Moreover, in the specific case of Brazil, when those individuals who wield significant economic, political, and social influence in the country distance themselves from the public education system, the population as a whole loses a powerful source of pressure on

government officials to improve the quality of education services.

Supply-Side Factors

Financing

India

While domestic public spending on education has increased in the vast majority of countries in recent years, rising from a global average of 4.6 percent of GNP in 1999 to 5.1 percent in 2011, India's public expenditures on education dropped from 4.4 percent of GNP in 1999 to 3.3 percent in 2010 (UN Educational, Scientific, and Cultural Organization (UNESCO), 2014). The central and state governments share fiscal and administrative authority over education in India, and as the number and scope of federal education programs have increased over the past three decades, the share of total primary education funding provided by the central government has also risen, growing from 6.4 percent in 1981-1982 to 27 percent in 2007-2008 (Mehrotra 2012). However, the division of fiscal responsibility for, and the administration of, various aspects of national education programs have often proven contentious between federal and state authorities, while confusion and mismanagement have led to waste and heightened geographic disparities. States remain responsible for the majority of education funding, and their respective tax and other revenues as well as budget priorities can vary enormously, resulting in massive discrepancies in spending per student across states (Accountability Initiative 2012; UNESCO 2008; De & Endow 2008). The federal government's Twelfth Planning Commission attempted to narrow funding gaps by providing limited equalization grants to states with low revenue capacity, but such transfers bridged barely 10 percent of the gap between the per student elementary education expenditures of the eight most educationally-backward states⁴ and the national average (Mehrotra

2012). Geographic disparities exist even within states, as state officials have the power to make strategic, often politically calculated, decisions with regard to resource allocations across districts and villages (Crost & Kambhampati 2010).

Teacher salaries constitute the majority of educational outlays at the primary level, with an average of 77 percent of total basic education budgets invested in teacher and management costs (Pratham 2012). The often-generous salaries paid to public sector teachers can amount to 13 times the average per capita income in some states (De & Endow 2008). In order to accommodate teacher salaries many schools maintain high student to teacher ratios; while the Right to Education Act established a maximum 30:1 pupil to teacher ratio, only 45.3 percent of rural public primary schools were able to meet this standard in 2013 (Pratham 2014).

The data on the financing of basic education in India strongly suggests that the country needs to devote more resources to primary education and implement effective equalization schemes to ensure that per pupil expenditures are equivalent across states and villages. While studies on the relationship between financial inputs and student performance have generally concluded that increased resources are not closely associated with learning outcomes (Glewwe et al. 2014), there does appear to be some minimum resource threshold that educational systems must meet in order to ensure other factors associated with student performance—the availability of textbooks, the existence of basic facilities including water and toilets, and having teachers present and engaged in teaching in the classroom—are present (Hanushek & Wößmann 2007), and the evidence suggests that India's expenditures still fall below this minimum financial baseline.

Brazil

In a measure intended to facilitate decentralization and democratic

⁴ Assam, Bihar, Jharkhand, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh, and West Bengal.

government in the post-dictatorship era, the 1988 Brazilian Constitution devolved the provision of primary education services to the municipal level. However, from 1988 to 1995, the decentralization process proved highly problematic due to widely divergent fiscal resource constraints, institutional capacity, and levels of corruption (Melo 2008). In addition, confusion over the respective responsibilities of federal, state, and municipal governments and the absence of a system to co-ordinate the actions of these sub-national units of government frustrated effective policy implementation (Abrúcio 2010; Abrúcio & Costa, 1999; Araújo e Oliveira 1998).

In response, the federal government partially recentralized the primary education system by creating national criteria to evaluate schools and measure outputs (*Prova Brasil*, now IDEB). To reduce regional inequalities, the central government also established education equalization funds, the *Fundo de Desenvolvimento do Ensino Fundamental* (FUNDEF 1996-2006) and its expanded successor, the *Fundo de Manutenção e Desenvolvimento da Educação Básica e de Valorização dos Profissionais da Educação* (FUNDEB 2007-present). These funds employ a three-pronged strategy to raise overall financial commitments to education and equalize funding across regions as well as state and municipal schools. First, the funds set minimum capitation levels per student, increasing significantly the resources available for basic education in poorer regions; funding also follows the student, creating incentives for schools to attract and retain students. Second, the programs require states to distribute resources across municipalities to ensure all schools receive the established per-student threshold amount, providing federal top-up funds to states unable to meet the threshold through their own tax revenues. Finally, by requiring that at least 60 percent of fiscal resources be invested in teachers' salaries, the funds have significantly increased wages and helped to attract more and better teachers in poorer areas (Bruns et al. 2012). The FUNDEF/FUNDEB reforms have increased as well as equalized educational funding in Brazil, as public expenditures on all levels of education rose from 3.7

percent of GDP in 1995 to 5.6 percent in 2010 (OECD 2013).

Recent reforms have attempted to redress Brazil's historic elite bias by shifting resources towards basic education, but primary schools still receive only 31.5 percent of overall public funding for education; while the average OECD country spends 1.7 times as much per tertiary school student as it does for a primary student, Brazil spends 4.7 times as much (OECD 2013). Beyond increasing the share of total education resources dedicated to the primary level, Brazil may be able to improve the quality of its basic education services by strengthening the impact of existing financial inputs. In recent years corruption has siphoned off a significant portion of funding for public education; a study by the Office of the Comptroller General estimated that between 13 percent and 55 percent of FUNDEF transfers to municipalities was lost through fund diversions (Mendes 2004). In addition to malfeasance, financial and bureaucratic mismanagement currently frustrate effective utilization of existing funds, providing one potential explanation for why cross-country surveys have found no clear correlation between educational funding and learning outcomes (Pritchett 2013). In fact, Brazil already possesses several institutional mechanisms through which it could improve the impact of its financial inputs to the education system; notably, the IDEB offers a comprehensive system for monitoring and evaluating the effectiveness of school funding across states, municipalities, and schools, while the country's decentralized education system allows for states and municipalities to serve as natural laboratories for innovative educational programming and fund utilization.

Administration

India

Enrolling nearly 200 million children in primary schools in 2013–2014, India's basic education system is the largest in the world, with nearly 1.1 million public primary schools operating throughout the

country (NUEPA 2014b). However, despite the massive scale of the Indian educational project as well as growing global acknowledgement of the benefits of school-based management, the administration of basic education remains a largely top-down enterprise in India. Under the Right to Education (RTE) Act and its primary implementing mechanism, the SSA, federal authorities establish national education objectives and standards, concerning, *inter alia*, student-teacher ratios, facilities, and school working days. State governments are then responsible for operationalizing these requirements, including all critical decisions relating to teachers, school infrastructure, and curriculum. While social development programs (including education) are managed by municipal governments in urban areas, administration in rural areas is handled through the three-tier Panchayati Raj system which devolves responsibilities at the district, block, and village levels.

At the local level, community education committees (CECs), such as school management committees, village education committees, and parent-teacher associations, are generally responsible for designing school development plans, overseeing delivery of SSA grants, and performing general monitoring and management functions. These community-based organizations ostensibly provide a mechanism for oversight and accountability at the local level, and studies on the effects of CECs in other developing countries have found evidence that they can improve student test scores, reduce teacher absenteeism, and decrease drop-out rates (Bruns et al. 2011). However, evidence on the impacts of CECs in India has been mixed and largely underwhelming (Banerjee et al. 2008). Consistent with Levy's (2014: 167) argument that the ultimate result of a particular intervention "depends partly on the intervention itself and partly on the relative strength of developmentally oriented and predatory influence networks in the relevant locales," it appears both that implementation of CEC programs has been problematic and that the larger environment in which such committees operate undermines their efficacy. For example, surveys indicate that there remains significant confusion with regard to the powers and responsibilities of CECs, even

among the members themselves (Banerjee et al. 2008; Department of School Education and Literacy 2011). In addition, it appears that the selection of committee members as well as the functioning of the bodies themselves are sometimes subject to undue influence by school principals, whose performance these organizations are supposed to monitor (Abogan et al. 2013).

Members of these local community education committees perform some oversight of teacher attendance, training, and performance; but, because most teachers are permanent state employees, state authorities make all critical decisions concerning their hiring, compensation, transfer, and dismissal (Pratham 2014). District inspectors are typically charged with ensuring that principals' reports on teacher attendance and performance are accurate, but inspectors are often responsible for dozens and sometimes hundreds of primary schools, and in-person monitoring visits are rare, rendering the threat of teacher dismissal for absence or poor performance essentially non-existent. Furthermore, teacher hiring, promotion, and salaries are based upon educational qualifications and seniority rather than performance-based indicators, creating few incentives for teachers to engage productively with their students or even to show up to their classrooms.

Under the framework of the RTE Act, the central government established more demanding teacher eligibility criteria in 2011, but state governments have struggled to meet these elevated standards while simultaneously expanding access to the remaining out-of-school children and reducing student-teacher ratios (Planning Commission (Government of India) 2013). Adding to these challenges, the passing rate on the Central Teacher Eligibility Test has been woefully low, with only 11 percent of test-takers meeting the score threshold on the 2013 administration (Gohain 2013). Indian states have increasingly turned to contract teachers to fill the staffing gaps created by the lack of qualified formal teacher candidates; contract teachers do not meet the training criteria necessary to secure a permanent teacher position and are typically hired by village- or district-level authorities for terms ranging

from one to three years at salaries far lower than regular teachers (Goyal & Pandey 2013). Contract teachers are employed based on renewable contracts that can be severed if the teacher underperforms. While the reliance of the public education system on teachers that lack the established qualifications may raise concerns about the quality of instruction, a recent study examining data from government primary schools in Uttar Pradesh and Madhya Pradesh found that contract teachers had higher attendance and teaching activity rates than regular teachers and that higher teacher effort rates were associated with better student performance (Goyal & Pandey 2013).

While the absolute levels of teacher attendance and effort were low for both categories of teachers in the Goyal and Pandey study, their findings suggest that empowering local officials with the ability to hire and fire teachers on the basis of performance could offer one strategy for improving learning outcomes. However, any initiative to decentralize teacher accountability mechanisms or promote innovative incentive structures nationally is likely to face strong political opposition from teachers and teachers' unions (Kingdon & Muzzamil 2010). In fact, while the initial draft of the RTE Act delegated authority for appointing and dismissing teachers to local school management committees, this provision was omitted when this bill was presented to Parliament, reflecting the historically close and strong relationship between educators—who constitute the largest civil service group in most states—and politicians in the country (Mehrotra 2012).

Brazil

Management of schools in Brazil is more decentralized than under the Indian model. As noted above, historically, state and local governments were charged with providing and overseeing primary and secondary schools, and while reforms instituted under the Cardoso administration and continued and expanded by his successors have enlarged the role of the federal government in education, the provision of

basic education is still managed by state and municipal governments. At the local level, the federal government has encouraged the democratization of school management by promoting public school boards to serve as oversight bodies to ensure that curricular goals are being achieved and resources used in an effective manner (Cavalcanti 2005; Ferreira 2007). Comprised of parents, teachers, staff, principals, and members of the local community, school boards in some communities even serve as fora to elect school management or help decide on the composition of the teaching staff. However, the existence and performance of school boards remain uneven across states and municipalities and inherently reflect the different capacities, abilities, and knowledge of members of the community, prompting the federal Department of Basic Education to create the National Program for the Strengthening of School Boards in 2004 to provide in-person and distance training to members of school boards as well as members of state and municipal education secretariats.

Schools are led by principals who may be selected through direct appointment by local political leaders, competitive selection, election by community members, or some mixed criteria. Once selected, principals chosen through political appointment or competitive processes are typically granted tenure, insulating them from public accountability, including sanction or dismissal for underperformance (Borges 2008; Lück 2011). Elections, while allowing for closer alignment of candidate selection with local interests and priorities, also open the possibility that voters will be swayed by expectations of personal favors or misinformation concerning appropriate qualifications and objectives. In addition, electoral systems generally set short (two-year) terms, making it difficult for principals to gain and utilize experience to improve learning outcomes (Borges 2008).

Due to the decentralized nature of the Brazilian basic education system, the incentives and support available to principals to adopt innovative methods or pursue improvements in learning outcomes vary significantly throughout the country. Some states and municipalities

have eliminated tenure and are experimenting with performance-based bonus programs for teaching and non-teaching staff, including principals (Bruns et al. 2012). At the federal level, the Ministry of Education has initiated a series of continuing education courses to provide principals with training in school management and pedagogical coordination (Ministério da Educação n.d.).

The obstacles to improving teaching quality in Brazil parallel those concerning principals. Teachers often enter the profession ill-prepared and receive minimal in-service training (OECD 2011b; Rocha & Cancian 2011; Schwartzman 2005). Their working conditions are generally poor, with many teachers expected to teach two four-hour shifts daily, often in different schools (OECD 2011b). With regard to compensation, while the FUNDEF/FUNDEB system has increased salaries—in some states substantially—in contrast to India, public school teachers generally still earn less than they could in the public or private sectors or even teaching in a private school (Bruns et al. 2012; Bruns & Luque 2014), and teachers' wages in Brazil are amongst the lowest in World Education Indicators program countries.⁵

Several states and municipalities have recently experimented with pay-for-performance schemes, signaling an increasing openness to incentive-based wage structures (Bruns et al. 2012). However, in most Brazilian schools, salary increases and promotions are still based on seniority rather than achievement, providing few rewards for strong teachers or penalties for poor performers (Schwartzman 2005). The paucity of effective incentive programs to improve teacher performance has significant and troubling impacts on classroom activities, and ultimately, student learning outcomes. A recent World Bank study found that only 64 percent of classroom time in Brazilian primary and

⁵ Countries participating in the UNESCO/OECD WEI program: Argentina, Brazil, Chile, China, Egypt, India, Indonesia, Jamaica, Jordan, Malaysia, Paraguay, Peru, the Philippines, the Russian Federation, Sri Lanka, Thailand, Tunisia, Uruguay and Zimbabwe. Wages were measured both in absolute terms and relative to GDP per capita.

secondary schools is typically devoted to instruction, meaning that, on average, Brazilian students are deprived of one full day of class per week due to teacher ineffectiveness (Bruns & Luque 2014). Using data from schools in Rio de Janeiro, the same study further discovered a strong positive correlation between the percentage of classroom time spent on instruction and student test scores on the IDEB, Brazil's national student assessment program, noting that students in the city's high-performing schools receive an average of 32 more days of instruction over the 200-day school year than their peers in low-performing schools. The authors of the study suggested that "gaps of this magnitude in opportunities to learn could clearly contribute to gaps in test scores and pass rates" (Bruns & Luque 2014: 15).

Public accountability

India

In India, the structure and functioning of the country's political system creates few incentives for elected officials and bureaucrats to improve education services. Party politics have become inextricably interwoven with caste, ethnic, religious, linguistic, socio-economic, and geographic identities in the country, and affinity-based voting patterns have fostered a patronage system dominated by local elites who deliver popular support via vote banks in exchange for political position and influence (Hankla 2008; Kothari 1964). Identity-based politics inhibits political competition and facilitates elite capture at the local level (Keefer & Khemani 2005; Nilekani 2008; Ruparelia 2008). In areas characterized by limited political contestation, candidates and officials from the party securely in power may not need to be responsive to demands from broad swathes of their constituencies in order to maintain their positions (Keefer & Khemani 2005; Kohli 2004). Affinity-based politics also fuels political favoritism and corruption, as government officials steer school construction funds and projects to areas that will

reward their own voter bases to the detriment of less politically salient groups (Nilekani 2008). Compounding these problems are the complex administrative and financial structures of the Indian education system, discussed above, which make it difficult for citizens to identify the causes of underperformance in public schools or to hold officials responsible for poor learning outcomes, as there is always another level of government or political or bureaucratic actor to whom to assign responsibility (or scapegoat).

Brazil

In Brazil, while decentralization has facilitated community engagement and strengthened accountability in basic education, it has also created its own set of challenges. In states and municipalities dominated by entrenched elites, educational resources may be channeled for patronage and other clientelistic purposes, while politicians resist ceding control over school management and making the selection process for principals more democratic and meritocratic (Borges 2008; Peixoto 1999). In addition, while FUNDEB/FUNDEF block grants are intended to equalize funding to students throughout the country, corruption and other “leakages” at the municipal level often divert valuable public resources to private hands, undermining the quality and equality of educational services available to Brazilian students (Ferraz et al. 2012).

Moreover, while the Brazilian primary education system is highly decentralized, some key managerial decisions still remain concentrated at the federal or state level. For instance, decisions relating to salaries, recruitment, assessment, and promotion of teachers are still highly centralized, and principals and school boards are generally unable to change the terms of employment or institute incentive structures to improve service delivery (Abreu 1999; Campos et al. 2007). In addition, while the federal government has had great success in developing and implementing a national testing system that gathers valuable information

on schools and learning outcomes, it has not yet capitalized on the existence of that data to conduct rigorous impact evaluations on the chain of causality between specific programs or interventions and student performance (Bruns et al. 2012). Given that the country's decentralized education system provides a natural laboratory for managerial, pedagogical, technological, and financial experimentation, Brazil may be foregoing valuable opportunities to advance significantly its knowledge about best practices in education and thus to improve the quality of learning outcomes of its students (Bruns et al. 2012).

Conclusion

In recent decades, India and Brazil have finally enacted policies to operationalize their long-standing but heretofore nominal commitments to provide basic education to all children. Following sometimes similar, other times different yet parallel trajectories in regard to the demand for and supply of quality basic education, these two countries help us better understand the limits and strengths of current democratic mechanisms at work in enhancing access to and quality of basic education. While primary school enrollment rates have improved dramatically in both countries, with Brazil achieving virtual universalization, both India and Brazil have struggled to create educational systems and environments in which children successfully learn. Seeking to explicate the factors that hinder two of the world's largest, economically-dynamic democracies from providing high-quality basic education services to all children, we have examined both demand- and supply-side hypotheses and their deep connections to broader, albeit distinctive, economic, political, social, and historical realities in each country.

The experiences of these two countries also reveal the potential advantages as well as the challenges of decentralization in the context of basic education systems. While the devolution of authority to state, local, and school-level officials may foster conditions that promote experimentation, innovation, and accountability in educational service

provision, both India and Brazil have struggled to demarcate in a coherent and appropriate fashion the roles of the various levels of governance mechanisms. Focusing on the relative assets and capabilities at each level of government, the Brazilian example in particular illustrates the critical role that central governments can play in increasing and equalizing per pupil resources across the country as well as developing and implementing national student testing and school evaluation programs.

However, both Brazil and India continue to face unresolved challenges in recruiting suitably qualified teachers and principals, providing adequate on-the-job training, and adopting promotion and dismissal mechanisms that reflect relative effectiveness in the classroom. The evidence from cross- and intra-country studies reveals that the solution is not as simple as merely raising teachers' salaries (Bruns & Luque 2014; Goyal & Pandey 2013). In fact, government primary school teachers in India are paid substantially better than many other professionals with equivalent qualifications, yet they tend to have lower attendance and teaching activity rates and generate weaker learning outcomes than lower-paid private school and contract teachers (Goyal & Pandey 2013; Pratham 2014). The incongruence between salary and performance suggests that much more attention must be given to recruitment qualifications and procedures, on-the-job programs to improve teachers' classroom effectiveness, and stronger incentives to motivate superior performance, including more effective monitoring, assessment, and accountability mechanisms. This is not a challenge faced by developing countries alone: many developed countries confront similar—and strongly contentious—challenges (see for example *The Economist* 2015: 53).

Beyond these issues, clarifying and rendering more coherent the respective roles and mandates of different levels of government and agencies in the provision of basic educational services, providing broadly accessible information on relative school performance, and focusing more on learning outcomes as opposed to educational inputs,

are preconditions to effective public accountability for the performance of these systems. In this respect, broad gauge, comparative country-wide governance data of the kind generated by the World Bank Governance Indicators are not helpful in evaluating the effectiveness of multi-level governance regimes of the kind exhibited by India and Brazil (and many other developed and developing countries) in the educational and other social policy spheres where major differences in institutional performance are likely to emerge and persist at the sub-national and local levels. In such contexts, as the educational experience of India and Brazil reviewed in this paper exemplifies, we have only begun to address the challenge of developing effective public accountability mechanisms for multi-level service-delivery programs. Notwithstanding our currently limited knowledge of what works and how, the two cases analyzed here point to a few key areas that are crucial elements to more effective public accountability mechanisms that may then be used by citizens to achieve universal access and enhance educational quality. Firstly, federal governments should (i) establish an effective financial equalization regime, (ii) elaborate basic curricula requirements, and (iii) create a national evaluation program that produces data on education outputs and publicizes its results broadly and accessibly. Secondly, at the local level, (iv) schools and school boards should have greater degrees of autonomy over key management decisions (including hiring, promotion and firing of teachers and principals), as well as having broader latitude to experiment with pedagogical tools—provided this autonomy is accompanied by (v) a strengthening of school governance mechanisms such as transparent and truly participatory school boards in order to minimize the risk of local forms of political patronage or cronyism corrupting these decisions.

References

- Abogan, A., Achakzai, A., Bersudskaya, V., Chaskel, S., Corrarino, M., Garin, E., ...Vyas, S. (2013). *Lessons in learning: An analysis of*

- outcomes in India's implementation of the Right to Education Act*. Princeton: Woodrow Wilson School of International and Public Affairs. Retrieved from:
http://www.princeton.edu/rpds/papers/Hammer_Policy_Workshop_Spring2013.pdf.
- Abreu, M. (1999). Descentralização e federalismo. *Cadernos Aslegis*, 3(7), pp. 30-35.
- Abrucio, F. (2010). A dinâmica federative da educação Brasileira: Diagnóstico e propostas de aperfeiçoamento. In R. Portela de Oliveira and W. Santana (Eds.), *Educação e federalismo no Brasil: Combater as desigualdades, garantir a diversidade*, pp. 39-70. Brasília: UNESCO.
- Abrúcio, F. & Costa, V.M.F. (1999). *Reforma do estado e o contexto federativo Brasileiro*. São Paulo: Fundação Konrad Adenauer.
- Accountability Initiative (2012). Sarva Shiksha Abhiyan, GOI 2012-3. Budget briefs - Education sector. Retrieved from:
http://www.accountabilityindia.in/sites/default/files/sarva_shiksha_abhiyan_2012-13.pdf.
- Ames, B. (1987). *Political survival: Politicians and public policy in Latin America*. Berkeley, CA: University of California Press.
- Arcand, J-L, Hombres, B., and Ponde Avena, C (2003). Sheepskin effects in the returns to education by ethnic group: Evidence from northeastern Brazil. CERDI Working Paper. Retrieved from:
<http://publi.cerdi.org/ed/2003/2003.26.pdf>.
- Araújo e Oliveira, J.B., (1998). Avanços e impasses na educação: à guisa de balanço. *Revista do Legislativo*, 21, pp. 16-27.
- Aspiring Minds(2013). National employability report: Graduates. Annual Report 2013. Retrieved from:
http://www.aspiringminds.in/docs/national_employability_report_graduates_2013.pdf.
- Association for Democratic Reforms and Daksh (2014). ADR-Daksh national voters survey. Retrieved from:
<http://adrindia.org/national-survey/adr-daksh-national-voters-survey>.
- Banerjee, A., Banerji, R., Duflo, E, Glennerster, R., & Khemani, S. (2006). *Can information campaigns spark local participation and improve outcomes? A study of primary education in Uttar Pradesh, India*

- (World Bank Policy Research Working Paper No. 3967). Washington, DC: World Bank.
- Banerjee, A., Banerji, R., Duflo, E., Glennerster, R., & Khemani, S. (2008). *Pitfalls of participatory programs: Evidence from a randomized evaluation in education in India* (NBER Working Paper No. 14311). Cambridge, MA: National Bureau of Economic Research.
- Banerjee, A.V. & Duflo, E. (2011). *Poor economics: A radical rethinking of the way to fight global poverty*. New York, NY: Public Affairs.
- Barbosa Filho, F. & Pessoa, S. (2008). Retorno da educação no Brasil. *Pesquisa e Planejamento Econômico*, 38(1), pp. 97-125.
- Barro, R. J. (1991). Economic growth in a cross section of countries. *Quarterly Journal of Economics*, 106(2), pp. 407-43.
- Beltrão, K.I. & Diniz Alvez, J.E. (2009). Reversal of the gender gap in Brazilian education in the 20th Century. *Cadernos de Pesquisa*, 39(136), pp. 125-56.
- Bhagwati, J. & Panagariya, A. (2013). *Why growth matters: How economic growth in India reduced poverty and the lessons for other developing countries*. New York, NY: Public Affairs.
- Borges, A. (2008). State government, political competition and education reform: Comparative lessons from Brazil. *Bulletin of Latin American Research*, 27(2), pp. 235-54.
- Borooah, V.K. & Iyer, S. (2005). Vidya, veda, and varna: The influence of religion and caste on education in rural India. *Journal of Development Studies*, 41(8), pp. 1369-404.
- Bowman, M.J. (1962). The Land Grant Colleges and Universities in Human Development. *Journal of Economic History*, 22(4), pp. 523-46.
- Brown, D.S. (2002). Democracy, authoritarianism, and education finance in Brazil. *Journal of Latin American Studies* 34(1), pp. 115-41.
- Brown, D.S. & Hunter, W. (2004). Democracy and capital formation: Education spending in Latin America, 1980 to 1997. *Comparative Political Studies*, 37(7), 842-64.
- Bruns, B., Evans, D., & Luque, J. (2012). *Achieving world class education in Brazil: The next agenda*. Washington, DC: The World Bank.
- Bruns, B., Filmer, D., & Patrinos, H.A. (2011). *Making schools work: New evidence on accountability reforms*. Washington, DC: World Bank.
- Bruns, B. & Luque, J. (2014). *Great teachers: How to raise student learning*

- in Latin America and the Caribbean*. Washington, DC: World Bank.
- Campos, A.G., Amorim, R.L.C., & Garcia, R.C. (Eds.). (2007). *Brasil: o estado de uma nação – Estado, crescimento e desenvolvimento: A eficiência do setor público no Brasil*. Brasília: IPEA.
- Cardoso, E. & Portela Souza, A. (2004). *The impact of cash transfers on child labor and school attendance in Brazil* (Vanderbilt University Working Paper No. 04-W07). Nashville, TN: Vanderbilt University. Retrieved from: www.researchgate.net/publication/23698116_The_Impact_of_Cash_Transfers_on_Child_Labor_and_School_Attendance_in_Brazil/file/d912f508e649d87464.pdf.
- Cavalcanti, M. (2005). Programa Nacional de Fortalecimento dos Conselhos Escolares. *Nova Escola*, 187.
- Chaudhary, L. (2009). Determinants of primary schooling in British India. *Journal of Economic History*, 69(1), pp. 269-302.
- Chaudhary, N., Hammer, J., Kremer, M., Muralidharan, K., and Rogers, F.H. (2006). Missing in action: Teacher and health worker absence in developing countries. *Journal of Economic Perspectives* 20(1), pp. 91-116.
- Crost, B. & Kambhampati, U.S. (2010). Political market characteristics and the provision of educational infrastructure in North India. *World Development*, 38(2), pp. 195-204.
- De, A. & Endow, T. (2008). Public expenditure on education in India: Recent trends and outcomes. RECOUP Working Paper No. 18.
- De Brauw, A., Gilligan, D.O., Hoddinott, J., & Roy, S. (2014). *The impacts of Bolsa Familia on schooling: Girls' advances increase and older children gain* (IFPRI Discussion Paper No. 01319). Washington, DC: International Food Policy Research Institute.
- Department of School Education and Literacy. (2011). *Sarva Shiksha Abhiya: Framework for implementation based on the Right of Children to Free and Compulsory Education Act, 2009*. Delhi: Ministry of Human Resources Development.
- Drèze, J. & Sen, A. (2013). *An uncertain glory: India and its contradictions*. Princeton, NJ: Princeton University Press.
- Duflo, E., Hanna, R. & Ryan, S.P. (2012). Incentives work: Getting teachers to come to school. *American Economic Review*, 102(4), pp. 1241-78.

- Duflo, E., Dupas, P., & Kremer, M. (2009). *Additional resources versus organizational changes in education: Experimental evidence from Kenya*. Unpublished manuscript. Retrieved from: http://siteresources.worldbank.org/EXTHDOFFICE/Resources/5485726-1239047988859/5995659-1239051886394/5996104-1246378480717/Dupas_ETP_SBM_05.09.09.pdf.
- Duraisamy, P. & Subramanian, T.P. (2003). Costs, financing, and efficiency of public and private schools in Tamil Nadu. In Tilak, J.B.G. (Ed.). *Financing education in India: Current issues and changing perspectives*, p. 110.
- The Economist*. (2015, February 14). High-fliers in the classroom (Teacher Recruitment). Retrieved from: <http://www.economist.com/news/international/21643146-programme-s-place-bright-and-ambitious-graduates-poor-schools-are-spreading-a-round>
- Engerman, S.L. & Sokoloff, K.L. (1997). Factor endowments, institutions, and differential paths of growth among New World economies: A view from economic historians of the United States. In S. Haber (Ed.), *How Latin America fell behind: Essays on the economic histories of Brazil and Mexico, 1800-1914*, pp. 260-306. Stanford, CA: Stanford University Press.
- Engerman, S.L. & Sokoloff, K.L. (2002). Factor endowments, inequality, and paths of development among New World economies. *Economia* 3(1), pp. 41-109.
- Ferraz, C., Finan, F. & Moreira, D. (2012). *Corrupting learning: Evidence from missing federal education funds in Brazil*. National Bureau of Economic Research Working Paper No. 18150.
- Ferreira, T. (2007). Transparência e gestão participativa aliadas à qualidade. *Nova Escola*. Retrieved from: <http://revistaescola.abril.com.br/politicas-publicas/gestao-democratica/transparencia-gestao-participativa-aliadas-qualidade-425385.shtml>.
- French, R. & Kingdon, G. (2010). *The relative effectiveness of private and government schools in rural India: Evidence from ASER data* (Working Paper No. 10-03). London: University of London, Department of Quantitative Social Science.
- Gallego, F.A. (2010). Historical origins of schooling: The role of democracy

- and political decentralization. *The Review of Economics and Statistics*, 92(2), pp. 228-43.
- Gallup, Inc. (2011). *Muslims in India: Confident in democracy despite economic and educational challenges*. Retrieved from: <http://www.gallup.com/poll/157079/muslims-india-confident-democracy-despite-economic-educational-challenges.aspx>.
- Glewwe, P., Hanushek, E.A., Humpage, S., & Ravina, R. (2014). School resources and educational outcomes in developing countries: A review of the literature from 1990 to 2010. In P. Glewwe (Ed.), *Education policies in developing countries*, pp. 13-64. Chicago: University of Chicago Press.
- Glewwe, P. & Kassouf, A.L. (2012). The impact of Bolsa Escola/Bolsa Familia conditional cash transfer program on enrollment, dropout rates and grade promotion in Brazil. *Journal of Development Economics*, 97, pp. 505-17.
- Gohain, M.P. (2013), Sept. 4. 11% aspirants pass CTET 2013. *Times of India*. Retrieved from: <http://timesofindia.indiatimes.com/home/education/news/11-aspirants-pass-CTET-2013/articleshow/22276839.cms>.
- Goyal, S. & Pandey, P. (2013). Contract teachers in India. *Education Economics*, 21(5), pp. 464-84.
- Hankla, C.R. (2008). Parties and patronage: An analysis of trade and industrial policy in India. *Comparative Politics*, 41(1), pp. 41-60.
- Hanushek, E.A. & Wößmann, L. (2007). The role of education quality in economic growth. World Bank Policy Research Working Paper No. 4122. Washington, DC: World Bank.
- Härmä, J. (2009). Can choice promote education for all? Evidence from growth in private primary schooling in India. *Compare*, 39(2), pp. 151-65.
- Haveman, R.H. & Wolfe, B.L. (1984). Schooling and economic well-being: The role of nonmarket effects. *Journal of Human Research*, 19(3), pp. 377-407.
- Heynemann, S.P. & Stern, J.M.B. (2014). Low cost private schools for the poor: What public policy is appropriate? *International Journal of Educational Development*, 35, pp. 3-15.
- Hill, S. & Chalaux, T. (2011). *Improving access and quality in the Indian*

- education system* (OECD Economic Department Working Paper No. 885). Paris: OECD Publishing.
- Hungerford, T. & Solon, G. (1987). Sheepskin effects in the returns to education. *Review of Economics and Statistics*, 69, pp. 175-77.
- Instituto Brasileiro de Geografia e Estatística. (2010). *Síntese de indicadores sociais*. Retrieved from: <http://www.ibge.gov.br/home/estatistica/populacao/condicaodevida/indicadoresminimos/sinteseindicsoais2010/default.shtm>.
- Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira. (2012). *Censo da educação básica 2012: Resumo técnico*. Retrieved from: <http://portal.inep.gov.br/resumos-tecnicos>.
- International Labour Organization. (2013). *Global employment trends 2013: Recovering from a second jobs dip*. Geneva, Switzerland: International Labour Organization.
- International Labour Organization Department of Statistics. (2011). Statistical update on employment in the informal economy. Retrieved from: http://www.ilo.org/public/libdoc/ilo/2011/111B09_241_engl.pdf.
- Jaeger, D.A. & Page, M.E. (1996). Degrees matter: New evidence on sheepskin effects in the returns to education. *Review of Economics and Statistics*, 78, pp. 733-40.
- Keefer P. & Khemani, S. (2005). Democracy, public expenditures, and the poor: Understanding political incentives for providing public services. *World Bank Research Observer*, 20(1), pp. 1-27.
- Kingdon, G.G. (2007). *The progress of school education in India* (Working Paper Series, No. 071). Oxford, UK: Global Poverty Research Group.
- Kingdon G. & Muzzammil, M. (2010). *The school governance environment in Uttar Pradesh, India: Implications for teacher accountability and effort* (Working Paper No. 31). Cambridge, UK: Research Consortium on Educational Outcomes and Poverty.
- Kohli, A. (2004). *State directed development: Political power and industrialization in the global periphery*. Cambridge: Cambridge University Press.
- Kothari, R. (1964). The Congress “system” in India. *Asian Survey*, 4(12), pp. 1161-73.
- Levy, B. (2014). *Working with the grain: Integrating governance and growth in development strategies*. Oxford: Oxford University Press.

- Lindert, P.H. (2003). Voice and growth: Was Churchill right?, *Journal of Economic History*, 63(2), pp. 315-50.
- Lindert, P.H. (2005). *Growing public: Social spending and economic growth since the eighteenth century*. Cambridge: Cambridge University Press.
- Lucas Jr., R.E. (1988). On the mechanics of economic development. *Journal of Monetary Economics*, 22, pp. 3-42.
- Lück, H. (2011). *Mapeamento de práticas de seleção e capacitação de diretores escolares*. Retrieved from: <http://www.fvc.org.br/pdf/selecao-capacitacao-diretores-relatorio-final.pdf>
- Maldonado, W.L., Marques, I.M. & da Silva Filho, O.C. (2012). A dynamic model of education level choice: Application to Brazilian states. *Revista da Brasileira de Economia*, 66(2), pp. 225-45.
- Mandhana, Niharika. (2014), Oct. 16. India takes on bureaucratic red tape with series of changes. *Wall Street Journal*. Retrieved from: <http://online.wsj.com/articles/india-takes-on-bureaucratic-red-tape-with-series-of-changes-1413476879>.
- Manpower Group. (2013). *Talent shortage survey results*. Retrieved from: http://www.manpowergroup.com/wps/wcm/connect/587d2b45-c47a-4647-a7c1-e7a74f68fb85/2013_Talent_Shortage_Survey_Results_US_high+res.pdf?MOD=AJPERES
- Martins, R. & Kay, B. (2011). *Com a barriga cheia: The impact of the Bolsa Familia Program on educational outcomes in Brazil* (Unpublished master's thesis). Vanderbilt University, Nashville, TN. Retrieved from: <http://etd.library.vanderbilt.edu/available/etd-03272011-185029/unrestricted/thesisfinal.pdf>.
- Mehrotra, S. (2006). Reforming elementary education in India: A menu of options. *International Journal of Educational Development*, 26, pp. 261-77.
- Mehrotra, S. (2012). The cost and financing of the right to education in India: Can we fill the financing gap? *International Journal of Educational Development*, 32, pp. 65-71.
- Mehrotra, S. & Panchamukhi, P.R. (2007). Universalising elementary education in India: Is the private sector the answer?. In P. Srivastava & G. Walford (Eds.), *Private schooling in less economically developed countries: Asian and African perspectives*, pp. 129-52. Didcot:

Symposium Books.

- Melo, M.A. (2008). Democracy, social spending and poverty. Background paper for Poverty Report's chapter on United Nations Research Institute for Social Development, *Democracy and the politics of poverty reduction strategies*.
- Mendes, M. (2004). *Análise das irregularidades na administração municipal do FUNDEF: Constatações do programa de fiscalização a partir de sorteios públicos da Controladoria-Geral da União*. São Paulo: Transparência Brasil. Retrieved from:
<http://www.transparencia.org.br/docs/fundef.pdf>.
- Ministério da Educação, n.d.. Escola de gestores da educação básica. Retrieved from:
http://portal.mec.gov.br/index.php?option=com_contentandview=articleandid=12337:escola-de-gestores-da-educacao-basica-apresentacaoandcatid=300:escola-de-gestores-da-educacao-basicaandItemid=693.
- Muralidharan, K. & Kremer, M. (2008). Public and private schools in rural India. In P.E. Peterson & R. Chakrabarti (Eds.), *School choice international: Exploring public-private partnerships*, pp. 91-110. Cambridge, MA: MIT Press.
- Nambissan, G.B. (2010). The global economic crisis, poverty, and education: A perspective from India. *Journal of Education Policy*, 25, pp. 729-37.
- National Commission for Enterprises in the Nonorganised Sector, Government of India. (2009). *Report on the global economic crisis and the informal economy in India: Need for urgent measures and fiscal stimulus to protect the informal economy*.
- National University of Educational Planning and Administration (NUEPA). (2013). *Elementary education in India: Progress towards UEE, flash statistics 2012-2013*. Retrieved from:
<http://www.dise.in/Downloads/Publications/Documents/Flash%20Statistics%202012-13.pdf>.
- NUEPA. (2014a). *Education for all: Toward quality with equity – India*. Retrieved from:
<http://www.educationforallinindia.com/education-foe-all-in-india-2014-review.pdf>.
- NUEPA. (2014b). *Elementary education in India: Progress towards UEE, flash statistics 2013-2014*. Retrieved from:

- <http://www.dise.in/Downloads/Publications/Documents/Flash%20Statistics2013-14.pdf>.
- Nelson, R.R. & Phelps, E.S. (1966). Investment in humans, technological diffusion, and economic growth. *American Economic Review*, 56(1/2), pp. 69-75.
- Nilekani, N. (2008). *Imagining India: The idea of a renewed nation*. New York, NY: Penguin Books.
- Office of the Registrar General and Census Commissioner. (2011). *Provisional population totals: India: Paper 1*. Retrieved from: http://www.censusindia.gov.in/2011-prov-results/data_files/india/Final_PPT_2011_chapter6.pdf.
- Olson, Jr., M. (1996). Big bills left on the sidewalk: Why some nations are rich, and others poor. *Journal of Economic Perspectives*, 10(2), pp. 3-24.
- Organisation for Economic Co-operation and Development (OECD). (2011a). *OECD economic surveys: India*. Paris: OECD Publishing.
- OECD. (2011b). *Strong performers and successful reformers in education: Lessons from PISA for the United States*. Paris: OECD Publishing. Retrieved from: <http://dx.doi.org/10.1787/9789264096660-en>.
- OECD. (2013). *Education at a glance 2013: OECD indicators*. Paris: OECD Publishing. Retrieved from: <http://dx.doi.org/10.1787/eag-2013-en>.
- OECD. (2014). *Programme for International Student Assessment report 2012: PISA 2012 results: What students know and can do*. Paris: OECD Publishing. Retrieved from: <http://www.oecd.org/pisa/keyfindings/pisa-2012-results-volume-I.pdf>.
- Pandey, P., Goyal, S., & Sundararaman, V. (2009). Community participation in public schools: The impact of information campaigns in three Indian states. *Education Economics*, 17(3), pp. 355-75.
- Peixoto, M.C.L. (1999). Descentralização da educação no Brasil: Uma abordagem preliminar. In D.A. Oliveira & M. R.T. Duarte (Eds.), *Política e trabalho na escola: Administração dos sistemas públicos de educação básica*. Belo Horizonte: Autêntica.
- Planning Commission, Government of India. (2013). *Twelfth Five Year Plan (2012-17): Social sectors, volume III*. Retrieved from: http://www.planningcommission.nic.in/plans/planrel/fiveyr/12th/pdf/12fyp_vol3.pdf.
- Pratham. (2012). *Annual Status of Education Report (Rural), 2011*. New

- Delhi: ASER Centre. Retrieved from:
<http://www.prathamusa.org/sites/default/files/Aser-2011-report.pdf>
- Pratham. (2014). *Annual Status of Education Report (Rural), 2013*. New Delhi: ASER Centre. Retrieved from:
http://img.asercentre.org/docs/Publications/ASER%20Reports/ASER_2013/ASER2013_report%20sections/aser2013fullreportenglish.pdf
- Prime Minister's High Level Committee, 2006. *Social, economic, and educational status of Muslims in India*. Retrieved from:
http://www.minorityaffairs.gov.in/sites/upload_files/moma/files/pdfs/sachar_comm.pdf
- Pritchett, L. (2001). Where has all the education gone? *World Bank Economic Review* 15(3), pp. 367-91.
- Pritchett, L. (2013). *The rebirth of education: Schooling ain't learning*. Washington, DC: Center for Global Development.
- PROBE Team. (1999). *Public report on basic education in India*. New Delhi: Oxford University Press. Retrieved from:
http://www.in.undp.org/content/dam/india/docs/public_report_basic_education_india.pdf
- Rahman, M. (2012, May 15). Language exodus reshapes India's schools. *The Guardian*. Retrieved from:
<http://www.guardian.co.uk/education/2012/may/15/india-schools-english>
- Reis Silva Junior, J. & Sguissardi, V. (2005). A nova lei de educação superior: fortalecimento do setor público e regulação do privado/mercantil ou continuidade da privatização e mercantilização do público? *Revista Brasileira de Educação* 29(2), 5-28.
- Rocha, M. & Cancian, N., "17% Dos Professores Não Têm Formação Ideal Para Dar Aula - Lei Exige Formação Superior Para Docentes A Partir Do 6º Ano Do Fundamental", *Folha de São Paulo - February 19, 2011*. Data from INEP, updated until January 2011.
- Ruparelia, S. (2008). How the politics of recognition enabled India's democratic exceptionalism. *International Journal of Politics, Culture, and Society*, 21, pp. 39-56.
- Schwartzman, S. (2005). Os desafios da educação no Brasil. In C. Brock & S. Schwartzman (Eds). *Os Desafios da Educação no Brasil*, pp. 9-50. Rio de Janeiro: Nova Fronteira.

- Sen, A. (1999). *Development as freedom*. New York, NY: Random House, Inc.
- Skidmore, T. (1967). *Politics in Brazil, 1930-1964: An experiment in democracy*. Oxford: Oxford University Press.
- Sokoloff, K.L. & Engerman, S.L. (2000). History lessons, institutions, factor endowments, and paths of development in the new world. *Journal of Economic Perspectives*, 14(3), pp. 217-32.
- Srivastava, P. (2007). *Neither voice nor loyalty: School choice and the low-fee private sector in India* (Research Paper No. 137). Delhi: National Center for the Study of Privatization in Education. Retrieved from: http://www.ncspe.org/publications_files/OP134_2.pdf.
- Thirani Bagri, N. (2014), Oct. 17. Narendra Modi, India's leader, moves to reshape labor rules. *New York Times*, p. B2.
- TNN. (2014, Apr. 3). National voters survey: What people want. *Times of India*. Retrieved from: <http://timesofindia.indiatimes.com/news/National-voters-survey-What-people-want/articleshow/33153654.cms>.
- Tooley, J. (2009). *The beautiful tree: A personal journey into how the world's poorest people are educating themselves*. Washington, DC: The Cato Institute.
- Tooley, J. & Dixon, P. (2007). Private schooling for low-income families: A census and comparative survey in East Delhi, India. *International Journal of Educational Development*, 27, pp. 205-19.
- Tooley, J., Dixon, P., & Gomathi, S.V. (2007). Private schools and the Millennium Development Goal of universal primary education: A census and comparative survey in Hyderabad, India. *Oxford Review of Education*, 33, pp. 539-560.
- United Nations. (2005). *World population monitoring 2003: Population, education, and development*. New York, NY: United Nations.
- United Nations Children's Fund. (2011). State of the world's children 2011. Retrieved from: http://www.unicef.org/sowc2011/pdfs/SOWC-2011-Main-Report_EN_02092011.pdf.
- United Nations Development Programme. (2011). *The real wealth of nations: Pathways to human development (Human Development Report 2011)*. New York, NY: United Nations Development Programme.
- United Nations Development Programme India. (2009). *Global economic*

crisis: Impact on the poor in India, a synthesis of sector studies.

Retrieved from:

http://www.in.undp.org/content/dam/india/docs/exe_sum_final.pdf.

United Nation Educational, Scientific, and Cultural Organization (UNESCO).

(2008). *Paper commissioned for the EFA Global Monitoring Report 2009, Overcoming Inequality: Why Governance Matters*. Paris: Author.

UNESCO. (2014). *Teaching and learning: Achieving quality for all, 2013/2014, Education for All (EFA) Global Monitoring Report*. Paris:

Author. Retrieved from:

<http://unesdoc.unesco.org/images/0022/002256/225660e.pdf>.

Walker, M. (2011). *PISA 2009 Plus Results: Performance of 15-year-olds in reading, mathematics and science for 10 additional participants*.

Wegenast, T. (2009). The legacy of landlords: Educational distribution and development in a comparative perspective. *Zeitschrift für Vergleichende Politikwissenschaft*, 3(1), 81-107.

Wheebox. (2014). The India skills report 2014. Retrieved from:

<https://wheebox.com/logo/FullVersion.pdf>.

World Bank. (2013). *Achieving learning for all*. Washington, D C: The World Bank. Retrieved from:

http://www.worldbank.org/content/dam/Worldbank/Feature%20Story/Education/1317335_HDN_Education_Overview.pdf.

World Bank. (2014a). World Bank Development Indicators 2014. Retrieved from:

<http://data.worldbank.org/data-catalog/world-development-indicators>.

World Bank. (2014b). *India: Third Elementary Education Project (SSA III)* (Project Appraisal Document, Report No. PAD743). Retrieved from:

http://www-wds.worldbank.org/external/default/WDSCContentServer/WDSP/IB/2014/05/01/000333037_20140501103833/Rendered/PDF/PAD7430P144447010Box385199B00OUO090.pdf.

World Economic Forum. (2012). *World Economic Forum on India: From deliberation to transformation*. Retrieved from:

http://www3.weforum.org/docs/IN12/WEF_IN12_Report.pdf.