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The Politics of Learning: Directions for Future Research

Lant Pritchett

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Lant Pritchett
Harvard Kennedy School and Center for Global
Development

Abstract. A theory of change to guide a practical and pragmatic approach to the acceleration in the pace of learning in basic education in the developing world, such as that envisioned in the Research on Improving Systems of Education (RISE) research project and other global initiatives, must be based on a comprehensive and empirically adequate positive model of the politics of learning, that is, a model that actually describes the motivations and behavior of actual governments and policy makers. This paper lays out three facts about basic education in developing countries that a minimally acceptable positive political economy model of education should be capable of addressing. First, why did schooling expand so much and so uniformly across countries when it did? Second, why does governmental support for education generally (if not universally) take the form (direction production) and modality (large Weberian bureaucracies) that it does, rather than other forms and modes; alternatives that seem equally or more effective? Third, how did cross-nationally uniform political support for the expansion of schooling coexist in many countries with a politics that allowed very low learning to both arise and persist in some countries, but not others? While it is premature to posit complete answers to these questions, there are three points to be made about at least the outlines and shape of a positive model. One, neither the economist's naïve "normative as positive" (that governments did things because it was the normatively optimal action, in the sense of maximizing some measure of human well-being), nor "response to political pressure" (that governments did things because democratic pressures demanded it) hold any promise as *general* models. Two, Meyer's "global isomorphism" remains a strong conjecture as a causal force in both expansion and modality (e.g., Meyer, 1977; Boli, Ramirez et al., 1985; Meyer, Ramirez et al., 1992; Meyer, 1997) and, perversely perhaps, isomorphism facilitates the persistence of low learning quality (Pritchett, 2014). Three, the details of observability and

contractibility in principal-agent relationships—in particular that “socialization is not third party contractible” (explained below) is an important element for understanding the joint facts of (1) large and uniform expansion, (2) direct production via Weberian bureaucracies as the dominant modality, and hence (3) the possibility of both high and low quality of learning as persistent phenomena in different countries.

*Introduction*¹

Several facts are now widely accepted about basic schooling and education in developing countries.

First, there has been a massive expansion in years of schooling such that nearly all children enroll in primary school, and, although drop-out (even in early grades) is a concern, most children in the world today finish primary schooling (and more). While inequalities in access to, and completion of, basic schooling across socio-economic status, gender, residence, and ethnicity have been reduced by the drive to universality, there remain important issues of inclusion to be addressed.

Second, while educationists have always been concerned about the quality of learning in schools,² there is increasing recognition across a broad array of global development actors of a “learning crisis” (UNESCO GMR Team, 2014; World Bank, 2017). There is a steadily increasing body of evidence from multiple sources that in many countries learning profiles are too shallow—the amount learned per year of schooling is too low—and many children emerge from their schooling experiences inadequately prepared for their adult roles in their society, polity, and economy.

Third, it is widely recognized that, in order to make progress towards the ambitious education goals in the UN Global Goals of “relevant and effective learning outcomes” (target 4.1) and that “all youth...achieve literacy and numeracy” (target 4.6), the pace of progress in improving learning profiles—and hence learning levels at schooling completion—will have to accelerate dramatically as the current pace of improvement is, on average, quite slow (Beatty and Pritchett, 2012) and in many countries, including some large countries like India, learning outcomes of children at each grade level have been falling.

¹ I would like to emphasize this is not a “review of the literature,” but rather a future looking stance and hence the reader should not expect a broad and comprehensive review. I would like to thank Alec Gershberg for a thorough reading that improved the paper immensely and Justin Sandefur, Susannah Hares, and Agustina Paglayan for ongoing helpful discussion on these topics and my co-authors on the papers I cite herein: Yamini Aiyar, Deon Filmer, Martina Viarengo, and Varad Pande for the insights I have gleaned from working with them.

² The 1990 Jomtien Education for All [declaration](#), for instance, included as a principle a “focus and learning” and Article IV states: “Whether or not expanded educational opportunities will translate into meaningful development-for an individual or for society - depends ultimately on whether people actually learn as a result of those opportunities, i.e., whether they incorporate useful knowledge, reasoning ability, skills, and values.”

This dramatic acceleration in improvements in learning that is needed to address the learning crisis and achieve widely shared goals, will require the national governments to both adopt, and then successfully implement, effective strategies to improve their systems of education. Here there is a substantial lacuna in existing research and knowledge. That is, while there is a massive and rapidly expanding academic literature estimating the causal impacts on learning of various specific “interventions,”³ there is much, much less literature asking the questions: What is it that induces governments to prioritize learning (rather than expansion only)? What are the types of interventions governments are willing to adopt (e.g., will governments adopt performance pay for teachers)? What are facilitators and obstacles to the implementation of the learning oriented reform initiatives once adopted? Without a reasonably validated positive model of political adoption and implementation of effective learning strategies, it is impossible to make viable and effective “recommendations” about education system reform. If we don’t know why governments are doing what they are doing now, it is unlikely we can be effective in making what they are doing better through research and “recommendations.”⁴

The RISE research program seeks to look at all aspects of what it takes to accelerate learning—from understanding what are the contextually relevant changes that would lead to greater learning, to actually understanding the politics of the adoption and implementation of those changes to the overall system of education that make expansion of effective proximate determinants of learning possible.

This RISE working paper makes a start in articulating some facts a political theory of schooling and learning would have to explain, in ruling out some of the current approaches, and in suggesting some paths forward.

³ There are many recent “systematic” reviews of this literature that draw on hundreds of papers providing reasonably rigorous estimates of causal impacts of various “interventions”: Muralidharan and Glewwe (2015), McKewan (2015), two reviews by 3ie (Snijlsveit et al, 2017), and [JPAL](#). Evans and Popova (2015) conduct a review of reviews, examining why “systematic reviews” of the same body of evidence come to different conclusions.

⁴ Even what constitutes a “recommendation” is often deeply confused. Suppose someone “recommends” to me a diet to lose weight, then I have no interest in losing weight. One type of recommendation is a “means to end” recommendation of the type: “given your goals/objectives/preferences doing X will be better for you in achieving those goals.” But some types of “recommendations” are of the type: “You should have different goals that you actually do have.” Without a clear distinction of normative and positive model we cannot even know which type a given policy “recommendation” is, or to who the “recommendation” is addressed.

What are some facts to be explained (and why by politics)?

There are three sets of facts about the world that need to be explained. These facts will have to be explained by politics as they are not easily (if at all) explained by standard economic approaches.

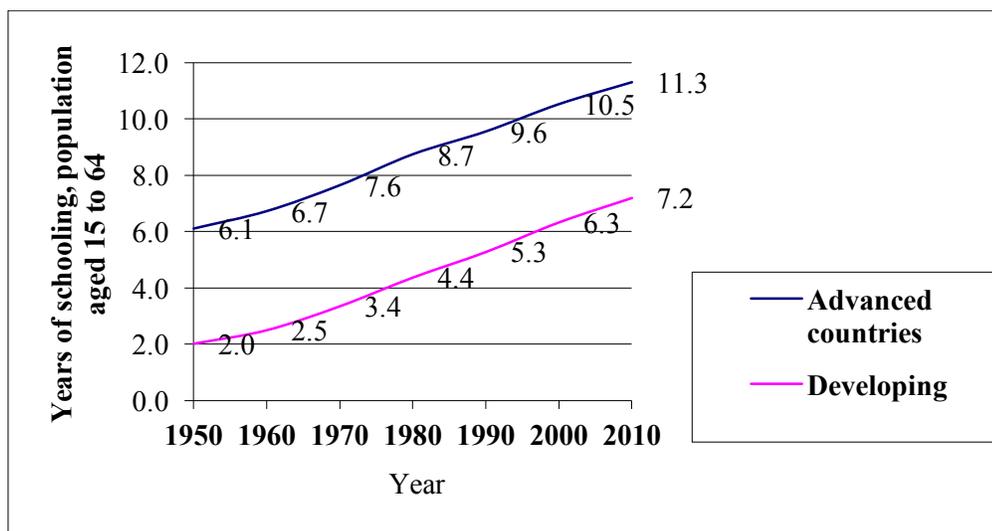
1 Facts about the expansion of schooling

Fact 1a: Substantial expansion in schooling, even at constant income

The first fact any adequate descriptive political model would have to explain is the massive expansion of schooling. This expansion can be measured as increased enrollment rates (a current flow of children through schooling), but I prefer to use the *stock*: years of schooling completed of the adult population. Adult grade attainment as a stock reflects the historical accumulation of enrollment in school and persistence through grades. One standard source for data on adult grade attainment is Barro and Lee (2011).

Figure 1 shows that the average years of schooling completed of the adult (15 years and older) population has risen in developing countries from 2 years to 7.2 years, an increase of 5.2 years (Barro and Lee, 2011). Since the adult grade attainment in 1950 represents the cumulative achievement of history, this implies that schooling in developing countries expanded more than twice as much from 1950 to 2010 (gain of 5.2 years) as in all previous human history combined (gain of 2 years). So, one obvious question is why did the dramatic expansion of schooling happen to the extent it did, and when it did, in developing countries.

Figure 1: Years of schooling of the adult population more than tripled from 1950 to 2010.



Source: Pritchett (2013) Figure 1.1, from Barro and Lee (2011)

There are a couple of points worth making about this massive increase.

One, this implies that the average developing country adult in 2010 had more years of schooling completed (7.2) than developed country adults had in 1960 (6.7). Developing country stocks of schooled adults have already (in 2010) exceeded the levels of schooling that the current developed countries had when they already were, in every meaningful sense, fully developed. For instance, the Barro and Lee data shows that the adult population in France, an undeniably developed economy/society/nation-state in 1965, had only 4.71 years of schooling in 1965, a level exceeded in 2010 by many of the poorest places on the planet: Haiti at 5.16, Uganda at 5.36, and even Afghanistan at 4.75.

Two, since elites and generally well-off and privileged groups have access to schooling first, this expansion of schooling has quite often been the result of closing socio-economic gaps in schooling enrollment and attainment. For instance, take Bangladesh. Disaggregating the attainment profile by an asset index (Filmer and Pritchett, 2000) shows that in 1993/94 among children from the

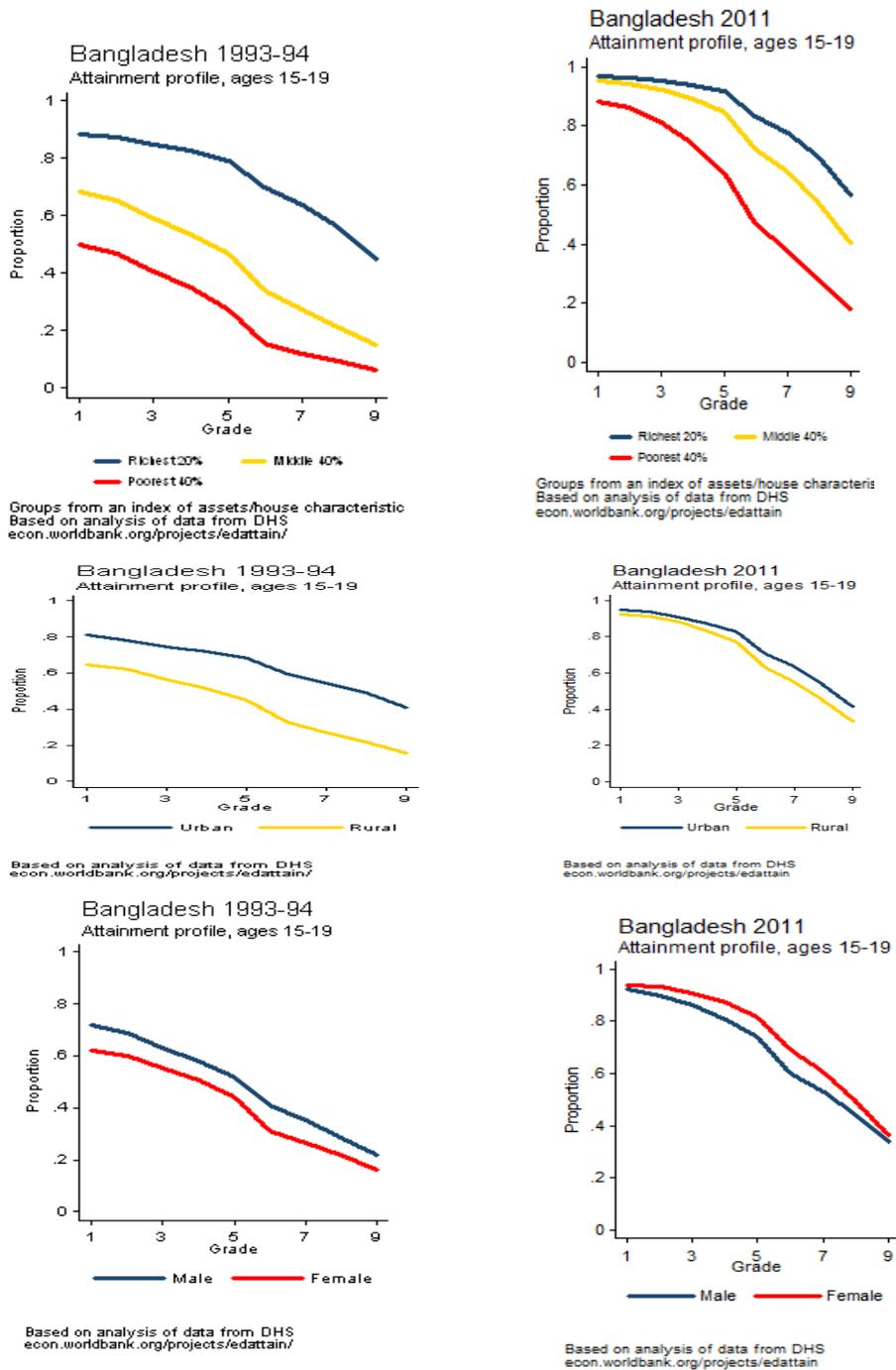
poorest 40 percent of households, only 50 percent had ever enrolled in schooling, compared to 88 percent of the richest 20 percent. By 2011, the “ever enrollment” of the richest 20 percent had improved to 97 percent (11 percentage points), but the ever enrollment of the poorest 40 percent had improved to 88 percent—a 38 percentage point improvement. The drive to universal ever enrollment in a mechanical sense had to differentially benefit the poor to a greater degree as the rich started with high participation.

Similarly, in 1993/94 there was a huge gap between urban and rural. In 1993/94, only 65 percent of the rural children ever started school, whereas by 2011 among the 15-19 cohort, 93 percent of rural children had at least started school. Similarly, by 2011 the boy-girl gap in schooling attainment had not just closed, but been reversed.

This does not necessarily mean that absolute gaps in completed schooling attainment closed as children from richer households stayed in school longer and completion of Grade 9 gaps persisted (at least for the asset groups), but it does mean the massive expansion drew formerly excluded poorer, rural, and female children into formal schooling. This means that the *marginal* benefit incidence of schooling expansion was much better than the *average* benefit incidence (Ravallion and Lanjouw, 1999)—expansion to universality differentially benefitted the poor and disadvantaged.

This differential benefit in enrollment of the poorer and excluded from schooling expansion is not (yet) universally true as in some low attainment and unequal access places, the gains are still disproportionately to the richer. In Niger for instance, ever enrollment of the richer 20 percent was only 54.6 percent in 1992 and 75.7 percent in 2012, a 21-percentage point increase, while among the poorest 40 percent the increase was from the paltry 15.3 percent to only 27.4 percent—a 12 percentage point gain. There are still pockets of non-enrollment and non-primary completion concentrated among the triple or quadruple disadvantage of poor, rural, girls, and disfavored ethnicities (Lewis and Lockheed, 2007).

Figure 2: Catch up of the poor, rural, and girls in schooling attainment in Bangladesh

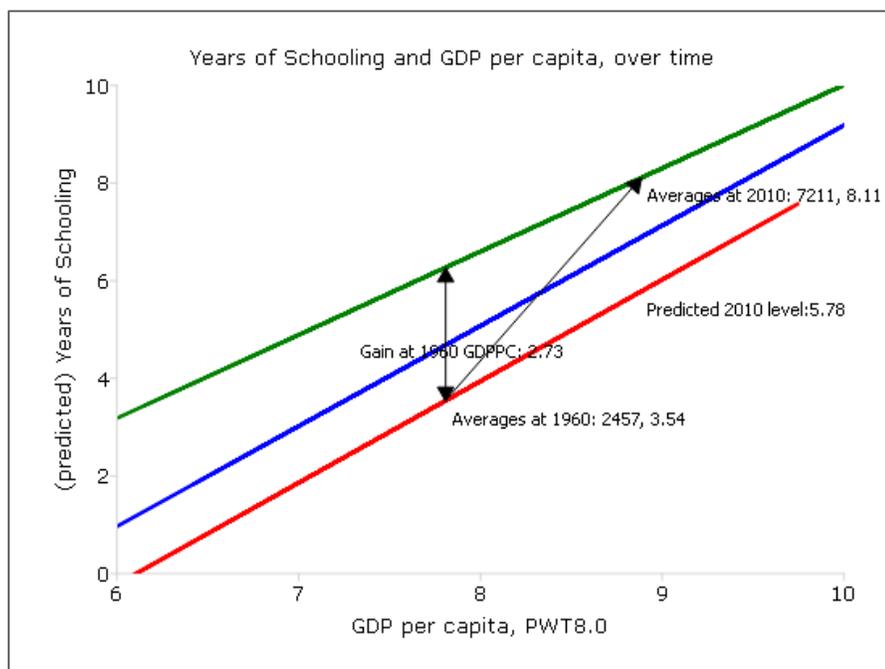


Source: <http://iresearch.worldbank.org/edattain/>

Expansion of national income alone cannot explain this expansion of schooling.

It is well and widely known that across countries the level of schooling and the level of GDP per capita are highly correlated (whatever view one takes on the direction of causation). Hence, as many countries experienced economic growth (the average growth rate in GDP per capita of developing countries was 2 percent per annum), one would have expected years of schooling to expand (there are a whole variety of reasons to expect economic growth to expand schooling). But the increase in schooling is much larger than would have been predicted on the basis of income growth alone. Figure 3 shows the cross-national relationship between GDP per capita and years of schooling completed in 1960, 1985, and 2010 (25 year spans). It is clear the overall cross-national relationship shifted up over time so that countries with exactly the same per capita income (in constant PPP terms) were predicted to have had substantially more schooling in 2010 than 1960.

Figure 3: Increase in schooling even at constant GDP per capita



Source: Author's calculations with PWT8.0 and Barro and Lee (2011) data.

For instance, if we take a country at the average income in 1960 of P\$2,457 (in constant PPP units), the years of schooling were 3.54 on average. By 2010, this had increased to 6.27, an increase of 2.73 years—a 75 percent increase *at constant income*. Obviously, this component of the increase in schooling cannot be explained by higher incomes.

Another way of expressing the same point is that between 1960 and 2010 average schooling increased from 3.54 to 8.11 years (in this particular sample), a total of 4.57 years. If we use the 1960 association of GDP per capita and adult schooling as a benchmark, then at the 2010 actual GDP per capita the predicted years of schooling would be 5.78, an increase of 2.24 years. So, roughly half of the observed increase in schooling could be mechanically attributed to what was “expected” from income expansion, but the other half was due to the overall shift in level of schooling completion at every level of income (8.11 actual in 2010 less the 5.78 predicted at 2010 levels of income in the 1960 relationship = 2.33 years).⁵

This is important, because if education had simply followed the existing association, then there would be less to explain (again, with complicated causation questions bracketed). That is, if schooling had simply moved along a fixed relationship then economic growth could potentially explain the increase over time, as it would have been exactly what the static cross-national relationships at each point in time would lead us to expect.

Since completed years are the result of an interaction of the supply of schooling and demand, this means that standard “demand” explanations based on an income elasticity of demand for schooling of households met by an elastic supply relationship (which could either be public or private), cannot explain the entire increase. This implies either increases in demand for a given income and prices, which could be the result of increases in the returns to schooling, or the relative

⁵ The calculation also could be run in reverse by “retro-dicting” 1960 levels of schooling based on the 2011 cross-section relationship of income and schooling and the levels of income in 1960 and that produces similar results, that much of the increase in schooling is not due to income shifts.

price of schooling fell considerably (which would be the result of an expansion of the supply).

The expansion of supply could either be (a) “market” phenomena based on perhaps a technology shift that made schooling cheaper (as appears to be the case in health) or (b) a policy choice. For instance, the decomposition in Figure 3 is like that observed in health outcomes, that there is strong cross-national relationship between life expectancy and per capita income (often called the “Preston curve”) and that this relationship has shifted up over time so that life expectancy is higher at any given level of income. However, the most common interpretation of the shift of the Preston curve is the advent of new health technologies (e.g., improved medicines, vaccines, public health knowledge) made it cheaper to achieve health outcomes. This however is not a very plausible explanation of the upward shift in the years-income relationship for schooling as in Figure 3. First, there is little evidence there has been an increase in the technology of schooling that lowered the cost. Education is generally regarded as a “productivity resistant service” subject to Baumol’s cost disease (like the performing arts). In the USA, the price of a television (quality adjusted) *fell* in absolute terms by 98 percent from 1986 to 2016 (you could buy the same television for half as much), whereas the cost index for college and university *rose* by 227 percent. All measures of “learning per dollar” in the USA, the OECD, and six East Asian countries show a massive *negative* shift in expenditures per unit of learning (Rothwell, 2016; Gundlach, Woessmann and Gmelin, 2001; Grundlach and Woessmann, 2001).

This means that the massive improvement in levels of schooling is likely the result of some combination of (a) increases in the wage, income, and other returns to schooling that made parents more willing to sacrifice foregone income and direct costs to send their children to school, (b) increased demand due to income increases, and (c) policy driven reductions in the costs of schooling as governments chose to reduce the costs of schooling by expanding the supply of

schooling and not charging full cost recovering fees; hence these policy actions reduced both travel and direct costs, thereby increasing schooling.

The question of *why* governments would devote large and increasing resources to expanding the supply of schooling is a first key *political* question, and it is a *political* (though also perhaps *social*) question, as the increase appears to be much larger than the result of economic forces that would drive private decisions alone.

Fact 1b: The expansion in schooling is remarkably uniform across countries

A second fact that is to be explained, and which sharply constrains the range of possible political explanations for the expansion of schooling in the developing world, is the remarkable similarity in the expansion of schooling in general, and particularly across “types” or characteristics of governments. A seemingly “common sense” explanation of why governments chose to expand schooling is that schooling is a good thing and governments are under pressure to do good things for their citizens. The difficulty with that explanation is that it would lead to a prediction that “good” governments—those most responsive to citizen demand—would do lots of schooling expansion and “bad” governments would do less, perhaps none at all. But this intuitive reasoning has a hard time with some basic facts.

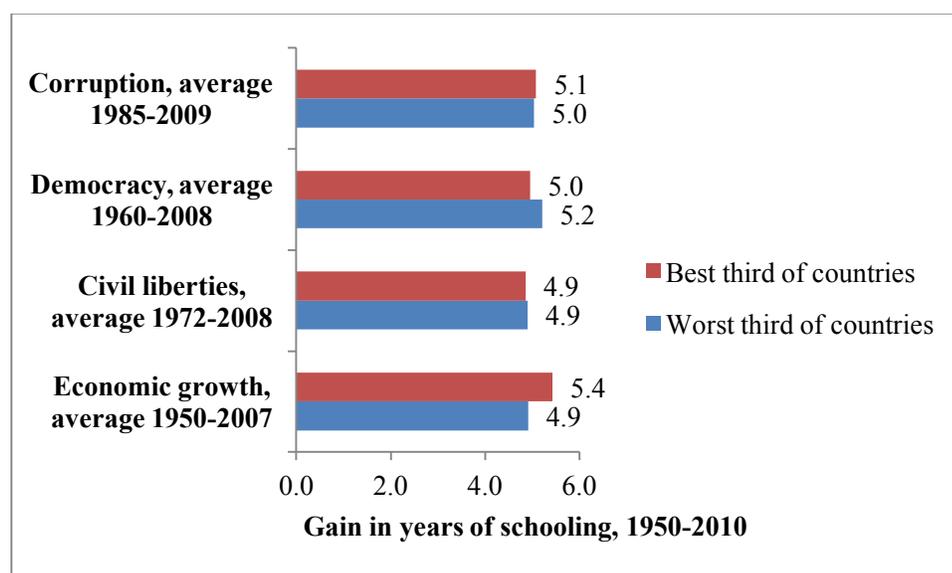
Figure 4 shows the expansion in years of schooling from 1950 to 2010 by various measures of “governance” (the timing of these measures and country samples are determined by availability on the measure of governance). The striking feature is the similarity of the absolute expansion in schooling completed by adults across these measures. For instance, if we group countries by a standard measure of “democracy” into the “worst” third (least democratic) and “best” third (most democratic) then the least democratic third of countries measure had slightly *faster* absolute growth in schooling (5.2 years) than the best third (5.0 years).

Similarly, the *most* corrupt third of countries saw completed schooling expand by 5.0 years which is only .1 year less than the *least* corrupt third of countries.

The countries with the *worst* civil liberties had schooling expand by exactly the same amount (4.9 years) as countries in the *best* third of good civil liberties.

A simple political explanation that “good” countries did lots of schooling and “bad” countries did less schooling is obviously not correct (or at least not obviously correct).

Figure 4: Expansion of schooling was roughly the same for “good” and “bad” governments and economic performance



Source: Pritchett (2013)

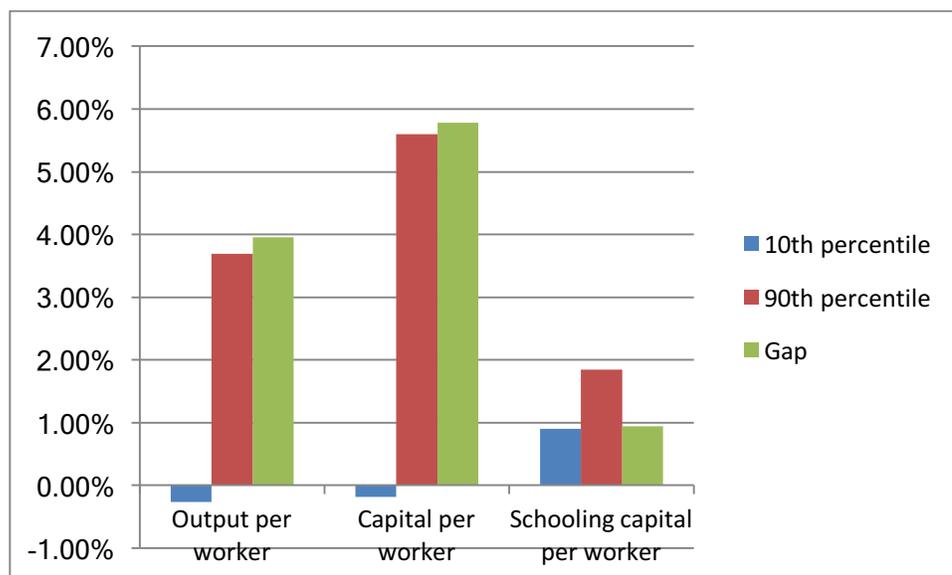
This small difference across types or characteristics of governments is in part because the expansion in schooling was so uniform across countries so that the variability is itself just small. One way of illustrating that the variability is small is to compare the growth of “schooling capital”⁶ with the growth of “physical capital”

⁶ “Schooling capital” is a measure of the economic value of the years of schooling rather than a quantity of years of schooling measure alone. A measure of schooling capital has to make assumptions about the economic rate of return of a year of schooling and, as shown in Pritchett 2006 the functional form of moving from years of schooling to

or “output per person.” The difference between countries that accumulated physical capital rapidly (90th percentile) and those that did so slowly (10th percentile) is over 5 percentage points per year. These growth rate differences extended over 30 years imply that countries with rapidly growing physical capital stocks had *five times* more capital at the end of 30 years than the slow capital growth countries.

In sharp contrast, the difference between countries in which “schooling capital” expanded rapidly (90th percentile) and slowly (10th percentile) is only 1 percent per annum. With schooling capital, the 90th percentile of growth country had only 34 percent more schooling capital than the slowly schooling growth (10th percentile) country.

Figure 5: The differences across countries in the growth of schooling are small



Source: Author's calculations based on data from Pritchett (2006)

This small difference implies that even across very different economic growth rates, the rate of expansion of schooling was quite similar. Figure 3 shows that while the top third of countries by growth rate had an increase in schooling of 5.4 years, this expansion was 4.9 years, even for countries in the bottom third of economic growth rates.

This implies that an interesting political question for a model of the growth of physical capital might be: “Why did some countries have such slow capital accumulation and others have such fast capital accumulation?” The 10th-90th gap in growth rates of physical capital per worker is almost 6 percent per annum. But with schooling, the question is: “Why did countries have such remarkably *similar* rates of the expansion of schooling?”

So, the question to be explained is why governments around the world have expanded the supply of schools so aggressively and why this expansion in the decades since 1960 has been so remarkably homogenous across countries, types, characteristics of governments, and even across levels of economic performance.

Interregnum: What “normative as positive” is, and why it does not help

One particularly pernicious approach to political economy explanations, often implicitly used by economists (but equally often explicitly rejected by economists), is what I call “normative as positive” (Pritchett (2010)). I will first explain what “normative as positive” (NAP) is and then why it is completely wrong (and we return to this issue as NAP is a pernicious mental weed).

A typical approach to normative economics (or “public economics” or “welfare economics”) is to construct a model of the economy that has “market failures.” In a model with “market failures,” the equilibrium assessed in normative terms by a “social welfare” function (which is some benign weighted average of the underlying “utility functions” or subjective assessments of the people in the model) can be improved upon. That is, if there were a “super-agent” added to the model (the mythical “social welfare planner”) who had as their objective the

maximization of the well-being of the agents in the model *and* that agent has an array of instruments to influence the equilibrium of the economy (including an ability to redistribute income), then there often exists a policy P^* such that the social welfare at P^* is Pareto superior to social welfare at the market equilibrium. This creates a normative case for policy P^* .

A standard example is a negative externality from pollution. In the market equilibrium, market actors will not internalize the costs to others of their polluting behavior so that an agent seeking to maximize social welfare could impose a tax on pollution (often called a Pigouvian tax after the economist Arthur Pigou) such that social welfare were higher and, if the social welfare planner could also make lump sum distributions of income, he/she/it could impose such a tax on pollution plus set of transfers to make *every single person* better off (this is the definition of Pareto superior).

This is the standard way the game of normative or public economics or welfare economics is played. All well and good. An interesting intellectual exercise.

The problem would come if one observed real governments actually imposing a tax on pollution or on polluting industries. The temptation would be to confuse an economic *rationale* as to why a tax as a policy instrument that *would be* beneficial with a *reason*, that is a positive causal explanation, of why an actual government imposes an actual tax. This would be an example of “normative as positive”—that is, asserting that the normative causally explains the positive.

In the domain of education this often takes the form of asserting the existence of various potential market failures in the domain of schooling. For instance, many assert a positive externality to schooling (so that the total benefits to the education of a single child are greater than the private benefits to that child), which would be a *rationale* for a hypothetical (and fictitious) agent who acts to maximize social welfare to provide a subsidy to schooling. Then, having asserted that the theoretical rationale exists to explain that actual governments build and operate schools *because* the *positive* explanation of the actual

behavior of real-world nation-states is that they are acting to remedy this “market failure.”

This “normative as positive” (NAP) reasoning is convenient and attractive and hence is often casually and sloppily invoked. It is inadequate as a positive theory of why governments expanded schooling for many reasons, which are articulated in Pritchett (2008) and just summarized here.

First, NAP often simply begs the question of *why* things happened by attributing to actors’ various beliefs and motivations. That is, NAP only works as an explanation of behavior if actors act on a belief about a model and evidence. But economists using NAP often do not present adequate evidence that the *magnitude* of the intervention is justified by the *magnitude* of the market failure. This is often because this evidence is lacking, contradictory, or not compelling. But without strong and compelling evidence saying that policy makers chose policy P^* *because* they believed the model and evidence required for P^* to be optimal, but held those beliefs without evidence of their being true, is a very strange begging of the question, not in fact an adequate positive model at all. That is, it begs the question and becomes circular because it does not articulate why people had those particular beliefs to support P^* in the absence of (compelling) evidence.

Second, the NAP argument fails logically because in order for NAP to be the explanation of a particular policy, call it P^* , one would not only have to argue that P^* is one possible policy that improves over the default of “no policy,” but that P^* is the *optimal* policy response. That is, suppose there were four possible policies, P^1 to P^4 . Suppose that each of them addressed some aspect of expanding schooling, but that P^2 was the best policy to address the market failure invoked. Then NAP cannot work as a complete explanation of why, say, P^4 was adopted. That is, even if P^4 is better than “no policy” for expanding schooling NAP cannot be the explanation of the adoption of P^4 rather than P^2 as really one would need another model to explain why P^2 was optimal, but P^4 adopted. But then this isn’t NAP at all and from an Occam’s razor point of view, why have NAP

to explain why some policy was chosen plus another model to explain the policy choice among options?

Here is a simple hypothetical example. If one were using NAP to claim governments were building schools to increase enrollment in school, then governments should choose where to build schools to optimally increase enrollment per dollar spent. If some children were already in private schools, then the net enrollment rate increase from a government school would be smaller if it attracted students from private to public as that is just displacement from one kind of school to another. So, a NAP model would imply governments would at least attempt to locate schools in a way that minimized displacement (P^* is “enrollment increase maximizing location”). But in fact, in the early history of the expansion of public schooling in many countries, governments often deliberately chose to build schools in ways that attracted students from private to public schooling (or even took over private schools that obviously would have zero net enrollment increase). This policy ($P^{\text{Displacement}}$) cannot be explained as the optimizing response to a market failure that leads to insufficient schooling, which means that as a simple matter of logic, one cannot invoke NAP as a positive explanation of a policy that does not minimize like $P^{\text{Displacement}}$. That means, one would need a model that says something like, “Governments have a policy of expanding enrollment because it is a social welfare maximizing response to a market failure, but we need an additional model to explain why, among enrollment expanding policies, they don’t minimize displacement.” But then perhaps, once articulated, a positive model that explained why displacement was not minimized might be able to explain all the phenomena without NAP at all.

As a specific example, Paglayan (2017) demonstrates that in the late 19th century, the government of Chile responded to incipient social unrest in a specific region of Chile (Atacama) by a massive expansion of schooling directed at that region. One could have a NAP model that says, “Chile’s government was expanding schools because it was social welfare maximizing” and another distinct model that says, “Chile expanded schooling in this particular region to

suppress civil unrest,” but then possibly the model with the features in which governments use expansion of schooling to maintain power and forestall social and civil unrest (with no particular concern for welfare-maximization), actually explains all behavior, and hence by Occam’s Razor NAP is unnecessary.

Third, NAP is a terrible positive model to explain the *generality* of actions across a large range of developing countries. That is, one can imagine that some governments, at some times, in some political configurations of constraints on their actions by citizens or others, act as if they were guided by maximizing well-being. But this is hardly a general theory of government as many governments do many things that are indifferent or hostile to the well-being of many of their citizens. So, the idea that countries that did not respect human rights were, with respect to schooling, acting like social welfare maximizing planners to adopt optimal market correcting policies with the objective of maximizing social welfare is, well, surreal.

2 *Facts about the modality by which governments support schooling*

The second set of facts are about the modality by which governments in the developing world carry out their policies towards schooling. This is both that (a) most governments channel support of (especially) basic schooling only through the *production* of schooling by public sector entities and (b) these public sector entities are mostly quite large.

Fact 2a: Most governments discharge their responsibilities for provision of schooling by direct production of schooling and delivery ‘in kind’

An obvious fact is that most basic education in the world is directly *produced* by the public sector, not simply *provided* via indirect mechanisms. That is, governments actually build, own, and operate schools, almost exclusively by hiring teachers into regular government, civil service like, employment. While many governments *allow* private schools, most private schools are generally not supported by public funds.

There are of course exceptions, but few. Some European countries, like the Netherlands, provide public support to both state and non-state (religious) schools. Others, like Chile in 1981, have adopted “money follows the student” like policies and provide public funds to most (though by no means all) private owned and operated schools.

Whatever one’s views on the appropriate actions of governments and what responsibilities governments should assume, there is another debate about the *modality* by which those legitimate and appropriate state obligations are discharged.

Many countries for instance help the poor by subsidizing food or kerosene or cooking oil or housing. Some, but very few, governments decide that the most effective way to subsidize food is to own and operate farms, whereas most (if they decide to subsidize food), do so through means other than direct production, such as purchasing food. Nearly all governments take responsibility for providing electrical power, but even if one decides that electrical power is a governmental responsibility, the *modality* question arises is whether to meet that responsibility either through the regulation of private providers, contracting with private producers, or by directly building, owning, and operating facilities that generate electricity. Similarly, many governments take responsibility for providing at least certain types of health care services. Again, one could do this by either building, owning, and operating facilities, or by allowing private sector providers of health services and having “money follow the patient” and *providing* for health care by financing providers with a variety of ownership structures (public, private, private non-for-profit), rather than exclusively direct production.

So, the question needing an explanation is why governments so very generally choose to *produce* schooling as their dominant (or only) modality of support for primary/basic education.⁷

⁷ I hope posing this question does not provoke suggestions that even the posing of this question is a “neo-liberal” or “Anglo” agenda. These modality questions are not debates about the “role of government” but rather narrower about how best to discharge a given responsibility. The results are often surprising from a narrowly ideological view as, for

“Normative as positive” could be the answer. That is, it could be that governments produce schooling because that is the most efficient way to promote education. While, as I pointed out above, “normative as positive” is not really a very good positive model, but understanding the deviation between the “optimal” policy and the actual policy is often a good way of exploring what a good positive model needs to explain.

For instance, there is general agreement on the desirability of achieving universal primary schooling. But there are many things for which universality is achieved without any government production. For instance, many countries require every driver to have automobile insurance. A legal mandate to purchase such insurance achieves the goal of universality (at least among those that own a car) without any public sector direct production of insurance and even without any public spending on insurance.

NAP has a hard time explaining *any* government production. Mark Blaug’s (1976) review of the economics of education, although now almost 40 years old, remains roughly true: “what needs to be explained about formal schooling is not so much why governments subsidize it as they do, but why they insist on owning so much of it in every country. On this crucial question we get no help, and cannot expect to get help, from the human capital research program, even when it is supplemented by the theory of externalities and public goods of welfare economics.” (p. 831) That is, there are “market failures” in the markets for education or equity reasons for support to children to get schooling schools does not explain why that support should ever (much less nearly always) take the form of direct production and provision in-kind. That is a *political*, not economic, question.

instance, urban water supply is done in France by private corporations, the Netherlands and Belgium have the highest percent of private students in the OECD, and many traditionally “socialist” European governments have privately produced, though publicly financed, universal health care services.

Fact 2b: A common mode of public production of school is through very large units

Governments often (though not always) organize schools into very large political units (nations, large states/provinces) and control key features of schools, including the human resources of hiring and assigning teachers, via a large bureaucratic organization. For instance, in India's federal structure, basic education is a responsibility of the states, and in many states, teachers are hired at the state level. This leads many states of India to employ over 200,000 teachers—which makes them amongst the largest employers in the world, larger than even the enormous US private firms. There are 10 Indian states who employ more teachers than the 25th largest private employer in the USA has total employees.

Table 1: Each of the 10 largest states of India has more government teachers than the 25th largest US firm by employment		
State of India or US firm	Rank of US firms by total employment	Number of teachers/employees
Uttar Pradesh		509,508
West Bengal		449,724
<i>McDonald's</i>	3	440,000
<i>United Parcel Service</i>	4	399,010
Andhra Pradesh		348,221
Bihar		347,330
<i>General Electric</i>	10	305,00
Maharashtra		289,067
Madhya Pradesh		268,471
Rajasthan		266,505
<i>FedEx</i>	19	255,513
Karnataka		228,681
Gujarat		206,203
Odisha		205,335
<i>Verizon Communications</i>	25	193,900
<p>Source: Pritchett (2014), Table 3, based on DISE 2011 State Report Cards, and https://en.wikipedia.org/wiki/List_of_largest_employers_in_the_United_States</p>		

This is a fact to be explained, as it is not at all obvious *why* this mode of production—large Weberian bureaucracies—is so popular. To what purpose is an organizational structure of a national (or large state) ministry of education “fit for purpose?”

The usual economic explanation of the size of an organization is that there are economies of scale (unit costs decline as production gets larger) or scope (activities are more productive when bundled into the same organization). However, there are counter-vailing forces tending toward small organization size, as in some activities there are few economies of scale or scope, and managing and motivating the key contributors to value gets harder in a large organization.

One way to think about this is the idea of “thick” versus “thin” information. The anthropologist Clifford Geertz described his method as “thick description” making the distinction between “thin” descriptions of individuals by objective characteristics (tall/short, male/female, old/young) or thin descriptive social or economic roles (mother, worker, peasant) versus the way each of us sees ourselves as a “thick” person with a rich and complex inner self embedded in multiple ways into complex relationships with other individuals and social structures. Think of the difference between whether a teacher is tall or 56 years old or has a bachelor’s degree (thin) versus whether the teacher is nice or concerned or dynamic (thick).

These trade-offs in firm size create very different typical sizes among organizations handling different types of productive activities. Many professional activities in market economies operate in units that are very small compared to the overall scope of the market. Dentists, lawyers, architects tend to work in very small firms. In contrast, organizations which deliver packages (a prototypically “thin” activity with substantial economies of scale due to coordination) tend to be very large—whether in the public or private sector. UPS and FedEx are private corporations, but are almost as large as the US Postal Service and organized very similarly.

Table 2: How the importance of ‘thick’ information and economies of scale affect expected organization size

		Extent to which successful creation of value in the activity relies on application by front-line workers of specialized knowledge too difficult to externally observe features of the particular case	
		Thick	Thin
Extent of economies of scale or scope	Small	<p>‘Practices’—small organizations, often owned by professionals as sole proprietors or partners</p> <p>Examples: dentists, architects, lawyers, medical specialists</p>	
	Large	<p>‘Franchises’—large organizations that reap economies of co-ordination in some areas (e.g., marketing) while relying on small units for ‘thick’ aspects of operation</p> <p>Examples: fast food, budget hotels, armies</p>	<p>‘Bureaucracies’—large organizations, owned by large anonymous shareholders or non-profits, nearly all workers on salary</p> <p>Examples: postal services, railroads, automobile producers</p>

Source: Pritchett (2014)

What makes the very large organization sizes of many public sector organizations something to be explained is that many characteristics of effective instruction appear to be “thick.” When instructional services are provided in the private sector, they tend to be done in very small organizations which (at least so far) show little ability to scale. There is a large and flourishing market in

instruction of all types—music, dance, sports, religion, crafts, and tutoring, and most of the activity in these markets (with the notable exception of instruction aimed at standardized testing) is done by a single person or very small firms.⁸

Another analogy is colleges/universities. In the relatively open market in the USA for higher education, where mostly “money follows the student,” one notes that the top end of the market consists of units that are tiny compared to the market. That is, none of the top-rated colleges or universities in the USA have more than one tenth of one percent of the total enrollment (e.g., the top-rated university for undergraduate education, Princeton, has about 5,000 undergraduates of the 12 *million* total enrollment or the 5 *million* private enrollment). The top 22 *combined* have 1.2 percent of the enrollment (Pritchett, 2014). One would suspect that if these places could become much, much larger successfully, they would have.

The size and scope of the allocation of responsibilities in the production of schooling in the public sector does not appear to be based on economic or accountability criteria (Pande and Pritchett, 2006). The size and scope of the organizations engaged in the production of schooling appear to be primarily *political* decisions.

3 Why are (some) systems so awful and some so good?

The third set of facts which need a political explanation cover the effectiveness and efficiency of schools, particularly public sector schools, but also those operated privately (with or without public sector support).

Fact 3a: Learning profiles are (at times) strikingly flat and learning outcomes low

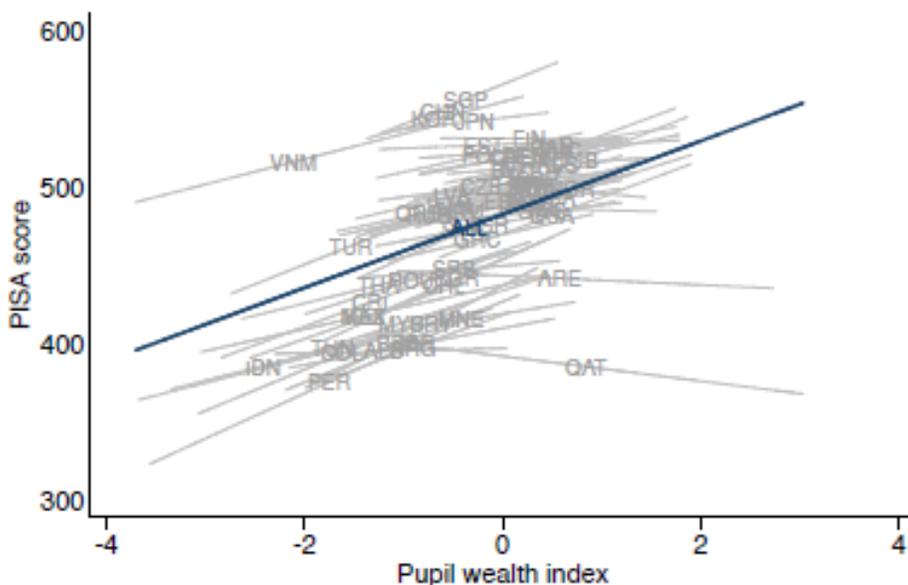
While it is hard to judge exactly what learning outcomes are possible in any given context, particularly because a consistent finding is that student and student background characteristics account for a large part of the variation in assessed

⁸ In the USA, there are some emerging firms like “School of Rock” that are attempting to expand national franchises. It remains to be seen whether these are feasible and what market share they capture.

levels of learning, it does seem that learning outcomes are noticeably higher in some country/regional contexts than others, even controlling, as best one can, for the influence of background characteristics.

Sandefur (2015) used the PISA data to compare the test scores of children of similar household wealth using an asset index based on questions about a child's household. Figure 6 shows the results where each grey line is a country with a country label at the average for the country. For instance, households in Vietnam (VNM) and Peru (PER) are at roughly comparable levels of the wealth index, yet the PISA score average in Vietnam is at least 100 points greater (which is a massive gap as the test is normed so that a student standard deviation across all OECD countries is equal to 100). Notice that, while richer students in both countries perform better than poorer students (the grey line is upward sloping), the richest students in Peru do less well than the poorest in Vietnam because of the massive gap across students at each level.

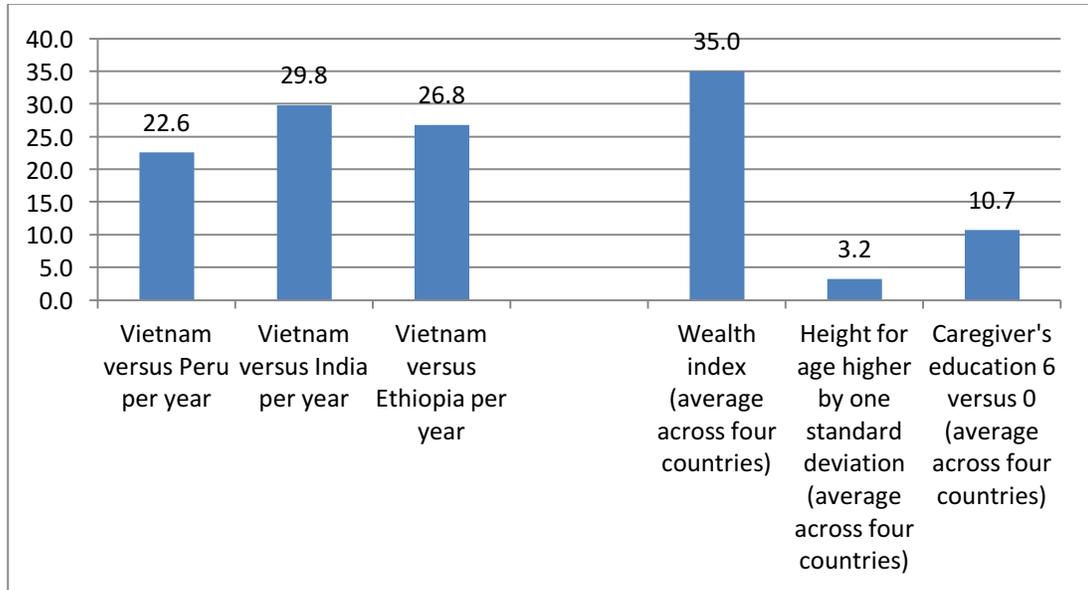
Figure 6: There are differences across countries in the learning performance of students, even controlling for the wealth of the households.



Source: Sandefur (2015)

Singh (2014) goes further in documenting the differences in the effectiveness of schooling in transmitting learning by tracing the emergence of differences in learning gaps across four countries by tracing the same children over time. In the Young Lives data, children were tested for ability at age 5 and then tested in mathematics at age 8. One way of showing the differences in learning is to compare the gain in mathematics competence per year of schooling completed across countries. A child in Vietnam gains 55.2 points from a year of school, while a child in Peru gains only 32.6 points, India 25.4 points, and Ethiopia 28.4 points. This means a child in Vietnam gains 22.6 more points than in Peru—even controlling for the child's nutritional status when 5, caregiver education, time spent in various tasks, wealth of the household. For comparison, a child with a caregiver having six more years of schooling would have scores higher by 10.7 points. A child a standard deviation taller (often a proxy for malnutrition) would have scores higher by only 3.2 points. A richer child would have scores higher by 35 points. This is consistent with Vietnamese poor children having much higher scores than rich children in Peru, as the additional gain per *each* year of schooling in Vietnam versus Peru swamps the impact on the *level* of learning from being from a wealthier family.

Figure 7: Mathematics competence gained per year of schooling for children between 5 and 8 years old is almost twice as high in Vietnam as in other countries...much bigger than nutritional differences or caregiver schooling



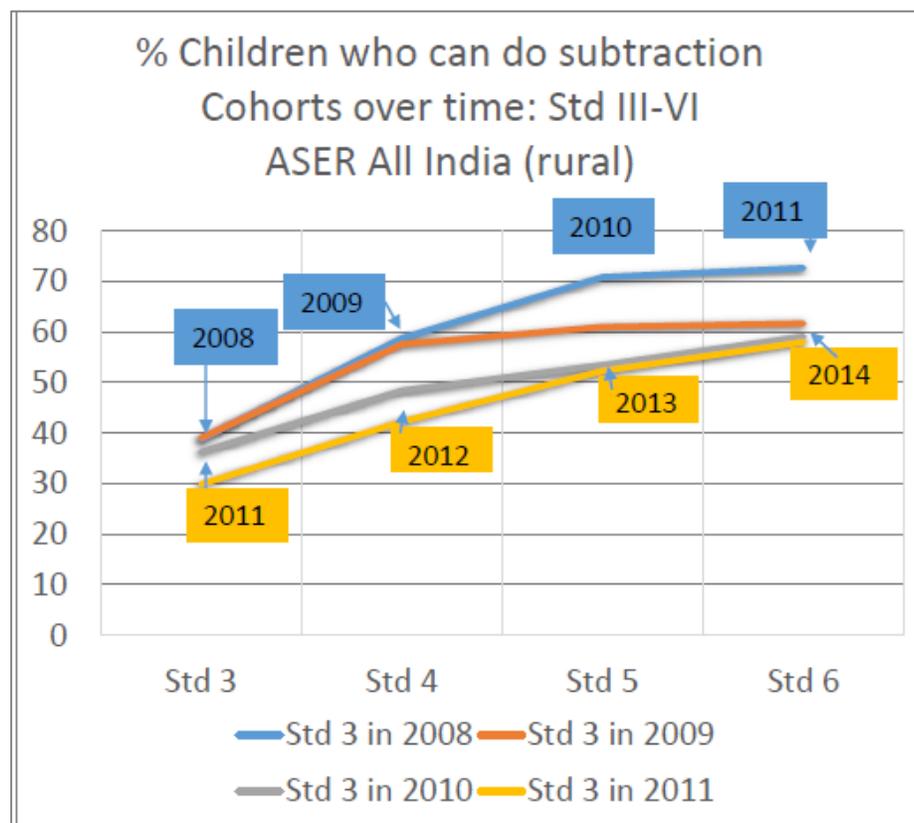
Source: Adapted from Singh (2014), Table A.5.

The cumulative level of competence is the result of a learning profile—the trajectory over time/across years of schooling in competency in a given domain. Unfortunately, most assessment is done at a single point in time and hence the dynamics of the learning profile are not revealed. However, a number of citizen-led assessments using a simple instrument in a non-school setting reaches all children in a given locale and hence, can estimate the level of learning for all children and therefore also show the relationship between grade attainment and performance.

Figure 8 illustrates two striking things by showing the fraction of children who can do subtraction (a Grade 3 curricular objective) in Grades 3 to 6 in rural India. First, the flatness of the learning profile. By Grade 3, about 30 percent had mastered subtraction. By Grade 6, less than 60 percent could do subtraction. This implies that of the roughly two thirds of children who could not do

subtraction in Grade 3, only half mastered it after *three additional years* of schooling. Put another way, only *one in ten* children acquired a simple foundational arithmetic skill per year of additional schooling. Second, the learning profile is shifting *downward* and getting *flatter* so that learning achievement in Grade 6 is *falling*.

Figure 8: Learning profiles in India across grades and for different cohorts



Source: ASER 2014.

The intellectual puzzle with the expansion of years of schooling was why it had been so similar across countries—why the variability was so small. In stark contrast, the question for learning is why the difference in learning profiles and the cumulative acquisition of skills and capabilities is so large. For instance, recent research using the Demographic and Health Surveys (DHS) allowed us to

estimate the likelihood that young adult women who completed six years of schooling (but no more) could read a single simple sentence. The results vary from very near zero (only 3.5 percent in Sierra Leone) or 12 percent in Nigeria, to nearly 100 percent in Bolivia or Rwanda. Figure 9 illustrates the learning profiles for some representative countries. In shallow learning profiles countries like Bangladesh and Nigeria, almost no one who achieved only three years of school retained literacy.

Figure 9: Learning profiles in representative countries

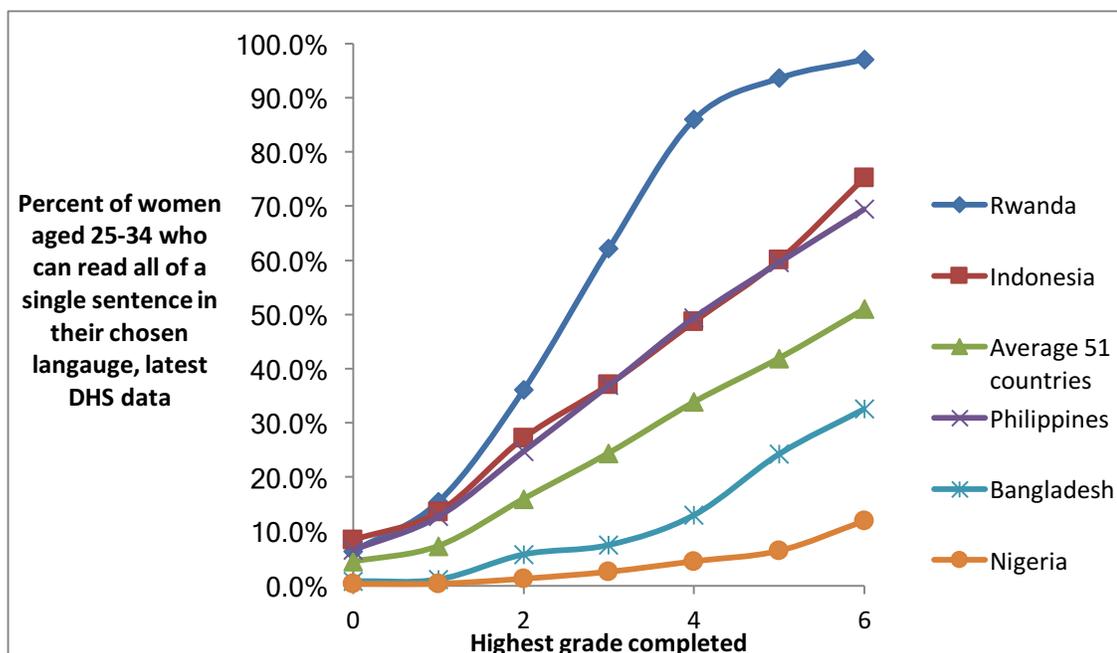
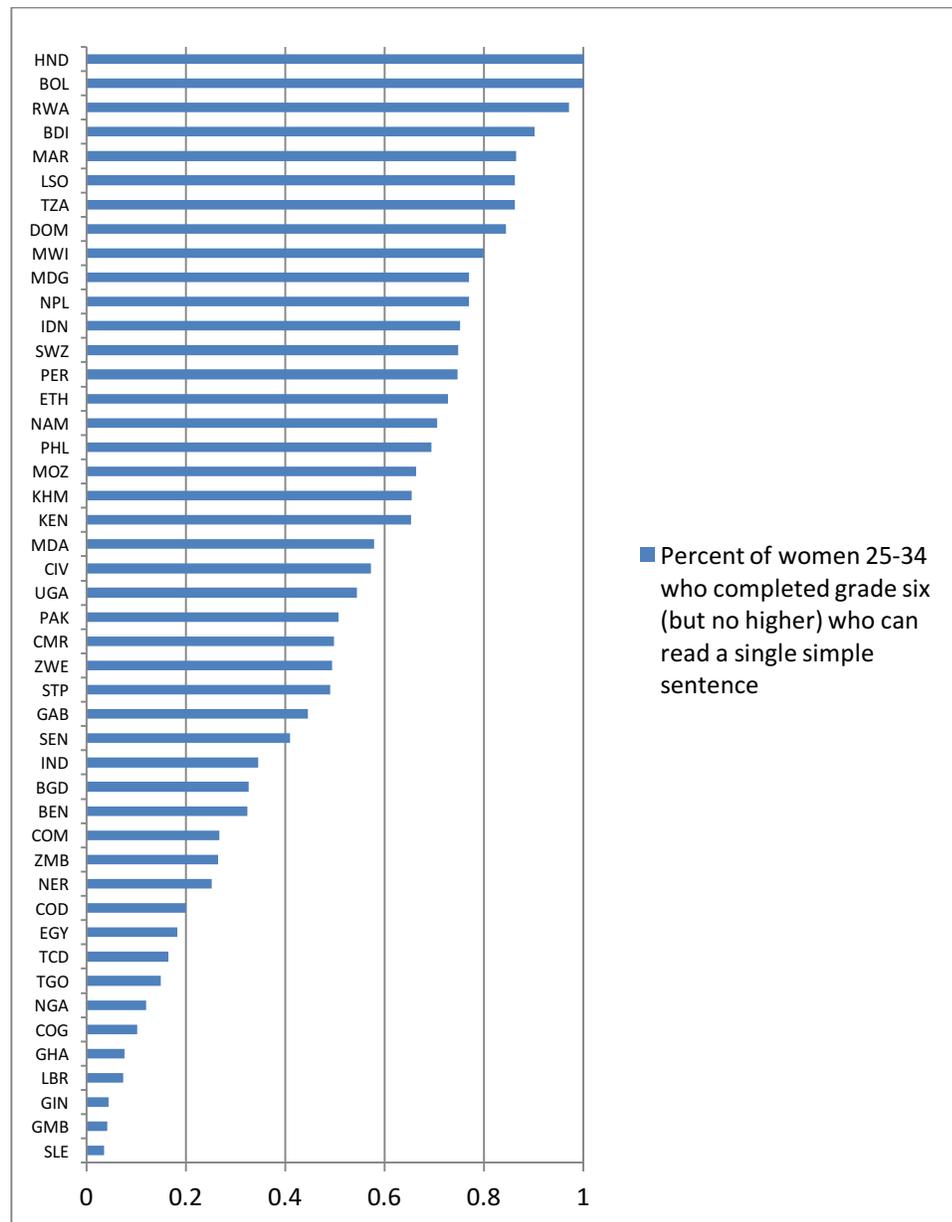


Figure 10 shows the variation across all 50 countries with recent DHS data. The variability in literacy (by a very low bar of reading a single sentence) ranges from roughly 0 to 100 percent.

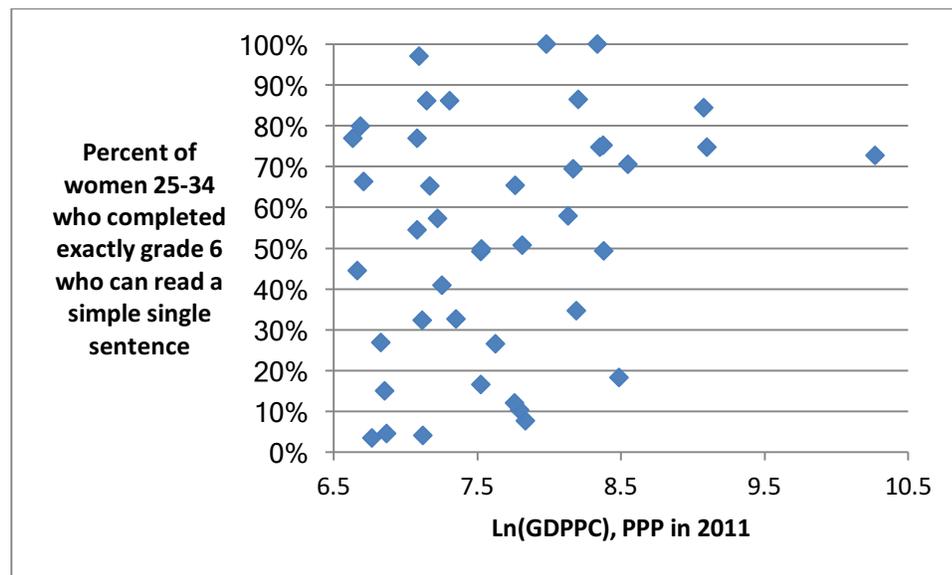
Figure 10: The fraction of women who completed exactly Grade 6 who can read a single, simple sentence, ranges across countries from near 0 to 100 percent



Source: Pritchett and Sandefur (2017)

These DHS countries are generally at a much lower level of GDP per capita than those who participate in PISA. Figure 11 shows the association between GDP per capita (in PPP from PWT8.0) and the percent of Grade 6 completers who can read. Even for countries at roughly the same level of GDP per capita, the learning spans almost the entire range of the possible.

Figure 11: Percent who can read from the DHS surveys and GDP per capita are uncorrelated and the range for countries at similar GDPPC ranges from near zero to 100 percent



Source: Pritchett and Sandefur (2017) and PWT8.0 data on GDP per capita

The fact to be explained is why the variation across countries in learning outcomes are so very large, even for countries in similar economic circumstances.

And we should expect the solution to this puzzle to be complex. It might be easy to explain that some countries “wanted high human capital” and others “did not want high human capital”—but then the obvious way to get to “low human capital” is by not spending a lot and not expanding schooling. But why some countries got to “low human capital” through expanding schooling (and hence,

undertaking significant public sector expenditure), but at very low levels of learning (even compared to those that appeared to be achievable at similar levels of income) is a hard question.

Fact 3b: In some instances, public schools are economic cost inefficient

The last fact is that even where schooling is moderately effective (children do learning something), all evidence suggests that public sector schooling is (at times) not efficient, in that they are not achieving the learning gain possible with given resources or, alternatively, are not cost-effective. There are three primary ways of demonstrating this fact.

First, as shown by Filmer and Pritchett (1999), the conditions for efficiency are that the incremental gain per incremental cost of inputs is equalized across all inputs. Many empirical estimates have shown that this “marginal product per dollar of inputs” is not equalized, but rather differs by orders of magnitude across inputs. Filmer and Pritchett argue the pattern of deviations of input use from the economically efficient allocation strongly appears to be politically driven.

Second, efficiency would imply that units with more resources should produce more than units with less resources, as all efficient units would be on (or near) a possibility “frontier.” Yet studies at many levels (across countries, across regions, across schools) often fail to show any relationship between costs and outcomes. This implies that better outcomes could be achieved with the same resources.

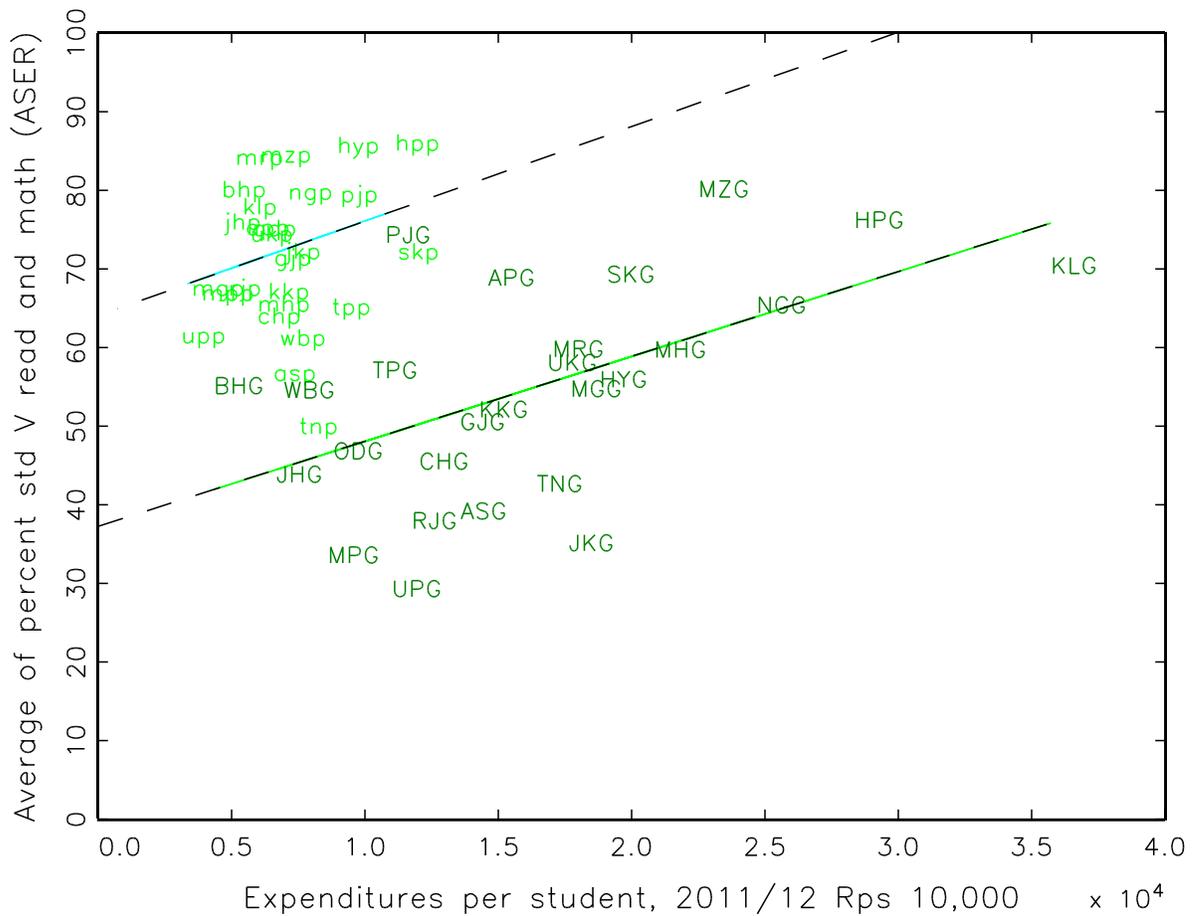
Third, the private sector does not uniformly outperform the public sector. In countries in which the public sector schools work well, the advantage, if any, of private schools in cost-effectiveness is small (or zero).⁹ However, in other countries where costs are high and effectiveness low in the public sector, the inefficiency can be demonstrated by showing that private schools produce

⁹ There is a very heated debate in the USA about whether, once controlling for selectivity of students and other factors, private or charter schools are more cost effective than private schools. However, heated the debate, there is actually near consensus as some groups argue the advantage is zero whereas others argue it is, on average, small (5 percent or less).

equivalent or better results with much less cost. In Pakistan, the “cost per unit gain in learning” is roughly three times higher in the public sector than the private sector, even controlling for student background (Andrabi, Das, et al., 2007). A recent randomized experiment in India that allocated vouchers to students to attend private school (if they chose) based on a lottery, found that the impact of attending private school was to raise learning on some subjects (while staying the same on others) and to do so at one-third the cost of public sector schools (Muralidharan and Sundararaman, 2013). This is direct evidence that public sector production is not cost effective.

Aiyar and Pritchett (2015) calculate the cost per student in public and private sector across Indian states and compare that with the ASER findings for learning for rural youth in those states. Figure 12 shows the state by state relationship between spending per pupil in the government (in capital letters, with “G”) and private sector (in lower case, with “p”) and the average percent of students in standard five who can do reading and math at a low threshold. The average state spends more than twice as much as the average private school (about 15,000 Rps vs around 6,000 Rps) and the fraction above a learning threshold in the same grade is about twenty percentage points higher. Of course, some large part of the performance differential is due to selection of the better and more socially and economically advantaged students into private schools, but even accounting for this, private schools are massively more cost-effective. A similar study across 8 Indian states found the typical (median) learning cost effectiveness for the private sector was 3.9 higher for literacy and 5 times higher for mathematics (World Bank, 2016). The reason for the cost effectiveness differential is obvious, the Indian states pay teachers up to 10 times more than the private sector wage and don’t appear to achieve superior teaching performance from this additional (accounting) cost.

Figure 12: The government schools in India have lower learning outcomes are much higher cost per student, with variation across states



Source: Aiyar and Pritchett (2015)

The differential cost effectiveness of schools across countries is a *political*, not primarily economic, question.

Again, “normative as positive” (Pritchett, 2010) cannot itself explain the deviations from efficiency. That is, the “normative” model is formulated by postulating an objective an actor is intending to maximize, and then examining the conditions in which the efficient solution would be reached. If one then rejects that the behavior of the actor is consistent with the conditions for efficiency, then it cannot be the case that the model also explains why this is so.

4 *Considering the three fact domains together for positive models*

There are a number of models of the economics or politics of basic schooling, but many of them focus on only one of the three domain areas (six facts), and hence are doubly partial models. That is, many seek to explain why schooling expanded in one particular country, at a particular time or at a particular pace, without acknowledging that schooling expanded nearly everywhere, often at a very similar pace (especially considering the starting point [Clemens, 2004]). This is a very partial model across contexts, and hence not a powerful general model or explanation.

A second way that models are partial is by considering only one aspect, like “why did schooling expand?” without considering the other questions of “why did schooling expand in the form and modality of public support that it did?” or “why did schooling expand at low (or high) quality?” Again, this leads to very partial models and models that are likely not very useful in framing an actionable theory of change for improving learning.

Insight I: “benign” models of politics cannot explain all facts of education systems

There is a strong tendency to associate good things with good motives. That is, it may seem obvious that if a good thing happened, it is likely because someone wanted a good thing to happen. However, one difference between system approaches and exclusively individualized teleological modes of causal explanation is that one can recognize that outcomes of systems may be emergent properties and not the conscious intent of any one agent. Adam Smith’s famous passage which argues that it is not through concern for my well-being that the baker supplies me with bread, is an early articulation of the ideas emergent properties of complex adaptive systems.

Since education is such a wonderful thing that has so very many positive benefits, both for the individuals who receive it and often for the societies in which it spreads, it is very tempting to formulate models in which the

expansion of education was the result of a “policymaker” or politician who chose to expand schooling *because* of the beneficial individual and social effects of schooling. This is the intuitive appeal of “normative as positive” models.

However, as we emphasize above, “normative as positive” models fail in nearly every respect. While expanding schooling has been a good thing, it is not as if the expansion of schooling has been pursued in the “optimal” way that standard formulations of normative as positive would demand (Pritchett, 2010). For instance, no one has ever formulated a NAP model that explains either the ubiquity (to near universality) of government production as the primary form of policy support, or the deviations to support of other suppliers of schooling. Without that, invoking NAP to explain expansion, but another model for other features of schooling, is the kind of *ad hoc*-ism Occam’s razor is designed to slice through.

The other, slightly less benign models, postulate that, while the politicians or policy makers may not themselves be benign, they are forced, constrained, or motivated to do so by political pressures through “democratic” political forces. In this case, the “benign” story is that “democracy” (another good thing) led to the good thing of universal schooling. Again, while there might be some historical instances in which this is not an implausible story, it is doubly partial. One, this fails to explain the expansion (and nearly equal expansion in quantitative terms) of schooling in countries without democracy or even civil liberties. Again, this leads to a very un-Occamesque situation in which the expansion of schooling by 5 years is explained by democracy and popular pressure in democracies, and the same expansion in demonstrably undemocratic environments is explained by another model and explanation (or by invoking that “popular pressure” somehow works even in environments that lack not only democracy, but even protection of human rights and civil liberties).

Moreover, the benignly motivated or democratically pressured models have a difficult time explaining the form and mode questions—after all, if people want the government to support schooling of their children, why direct production, and not vouchers the parents can apply to any school of their choosing?

The benign or pressured models also have a hard time explaining inefficiency and low quality. That is, if the government were benignly motivated to supply schooling, why would they not be effective and efficient in that supply? Again, at best these are partial models and other factors have to be invoked to provide a complete explanation of even a minimal set of facts.

This is important because many “policy recommendations” are unclear of whether they are “mistake/informational” or “hortatory” recommendations.

People often write about “policy recommendations” for improving education without any clear articulation of what they mean by a “policy recommendation” or exactly to whom a “policy recommendation” is addressed. One understanding of person X giving person Y a “recommendation” is that person X believes they have information that will enhance person Y’s well-being, as person Y currently understands person Y’s interests. In normal language use, if I “recommend” to you a restaurant I am saying “I believe that if you had *my* information about the quality of this restaurant and *your* preferences, you would eat at this restaurant.” This implies that I think you are making a “mistake” in your current choice of restaurants because you lack the information I am providing.

A fair amount of research is claimed to be done on the basis that its results would have “policy implications” because it would reveal information that, *if the policy maker were a benign welfare planner*, they would act on, on the implicit assumption that the current policy maker is benign, but is making mistakes due to lack of information. This whole framework is often simply a convenient intellectual pose as it is obvious that the status quo actions are not

a “mistake” due to lack of information, but a carefully considered, deliberately chosen, and difficult to change, policy stance.

For instance, there have been a number of papers demonstrating (sometimes on the basis of randomized experiments) that “contract teachers”—teachers hired on contingently renewable contracts—out perform in effectiveness and especially cost effectiveness regular “civil service” teachers. However, it has been pointed out over a decade ago (by Murgai and Pritchett [2006] among others), that “contract teachers” is, in and of itself, not really a “policy recommendation” as it is not a politically or administratively viable alternative to existing practices (and empirical evidence from Kenya [Bold et al., 2013] and a number of experiences in India I think bears this out).¹⁰

There is another kind of “recommendation” that is hortatory. That is, people often “recommend” that I be nicer to other people. This often does not take the form of suggesting that I myself would be better off if I were nicer (that being nicer was instrumental to my objectives), but that *other people* would be better off if I were nicer to them. It is not entirely clear what people’s expectations are from hortatory recommendations of this type, that is, what is the positive model of my actions such that “recommendations” of this type would have impact on my behavior. In a model in which I was maximizing my own well-being in a fully informed way, informed both about the impact of my behavior on myself and others, then this type of hortatory recommendation would be predicted to be of zero impact.

Without the specification of a positive model it is impossible to distinguish between “mistake/information” and “hortatory” recommendations. Either type of recommendation, if embedded in a more complete model could (in some instances at least) be predicted to have zero impact. Moreover, it is not obvious excessive reliance on the NAP model is not “worse than useless” (Pritchett, 2010) as it perpetuates actions, structures, and systems based on

¹⁰ At a recent conference, a prominent Indian policy maker in education called on researchers to stop devoting themselves to producing results about reforms that are politically impossible, and highlighted research on contract teachers as a prime example.

false premises. In particular, many of the “benign” models have assumed that “the state” is more concerned about education than parents of children (in general), and hence implicitly, if not explicitly, downplayed the role of direct and indirect engagement of parents and communities in the overall system of the governance of education. This has allowed the reduction of accountability of education providers to parents and students to be seen as a feature, not a bug, in design.

A quick illustration of this is to consider that the UN’s Universal Declaration of Human Rights specifies both that, “*Everyone has the right to education.*” (Article 26.1), but also that, “*Parents have a prior right to choose the kind of education that shall be given to their children.*” (Article 26.3). Over time, the emphasis on the “right to education” has been steadfastly maintained (e.g., Jomtien Declaration on Education for All, MDG, SDG), but the parental right to choose the kind of education for their child has disappeared from all goals. What is the positive model of achieving education goals for which parental choice (or voice) are unnecessary?

Insight II: Isomorphism and transplantation

The second key insight is that the power of “isomorphism” is perhaps as strong as ever. The sociologist John Meyer argued early on that the spread of education was partly the result of global isomorphism. That is, changed conditions in some countries made education more attractive (e.g., a higher pace of technological progress [Schultz, 1961; Goldin, 2008]) due to the increased complexity of modern economies, politics and societies. However, the *universality* and *similarity* of the pace of expansion of education could not be explained by reference to domestic conditions alone. Some countries were expanding education, not because there were any domestic conditions that called for it, but just because they appeared to be copying what other countries were doing.

This is clearly consistent with the findings above that education has expanded, not just in countries that experienced economic growth, but also countries that stagnated, not just in countries with “good” governance, but also in those with poor governance.

Scholars (e.g., DiMaggio and Powell, 1983) identify three channels of isomorphism: “normative” isomorphism (I copy others because I am emulating a norm), “mimetic” isomorphism (I copy others because I want to appear like they appear), and “coercive” isomorphism (I copy others because they insist that I do so).

It is relatively easy to point to all three of those channels at work in the expansion of education with international professional networks and organizations often as the vectors of isomorphism. That is, as educators were trained at global institutions of higher education, they often adopted and internalized normative stances. Organizations that promote and fund education projects around the world often promote “best practices” that can be adopted in “mimetic” variants. There can even be “conditionality” embedded into funding that insists on the adoption of particular forms.

Isomorphism is potentially a powerful force, not just the expansion of schooling, but also in the form and mode. That is, the transmission of both government support via the production of education at a large scale (nation/state/province) and the mode of using Weberian bureaucracies can perhaps be explained as “optimal” choices, but could also be heavily influenced by the transplantation of systems from other places. The history of the early schooling expansion in the now “developed” economies (in which transplantation was less attractive as there were no other countries that were demonstrably more advanced) was not primarily one of the nation-state as the lead actor, but rather nation-states creating direct production after there was widespread (but far from universal) schooling.

Finally, global isomorphism may have facilitated an extended period of emphasis on expansion alone. If one looks at what international organizations measured about education it was almost exclusively enrollment, grade progression, and cumulative grade completion. The pressure on countries to create measurement systems for purposes of reporting their progress to be diagnosed and compared internationally was for enrollments.¹¹ Even today, countries are under little or no pressure to have regular, reliable reporting of progress on any learning metric (through there is increasing pressure on this as a result of the shift in the Global Goals towards learning). Initiatives like “community based assessment” and Learning Metrics Task Force, and the delegation of responsibility to UIS to develop learning metrics, are only now increasing the attention paid to learning.

If in fact schooling and education policies are determined in part by isomorphism transmitted via international networks and organizations, and not exclusively by domestic conditions, this could be good news. Good news because then changes in emphasis at the global level that move towards learning and system reform can potentially have direct and positive impacts on local conditions and practices.

Insight III: The inculcation of beliefs is not third party contractible

A third insight that needs to play into a positive model of schooling systems is recognizing two features of basic education.

One, basic schooling is about both skills and socialization. That is, every schooling experience—even one that might appear neutrally conveying skills like reading and arithmetic—inevitably conveys messages to the student about the social world and their role in that world. Moreover, governments are often deeply and strongly committed to schools that actively convey

¹¹ This was not due to educators ignoring learning. The Jomtien World Declaration Education for All in 1990 emphasized learning throughout the document (e.g., “*Whether or not expanded educational opportunities will translate into meaningful development - for an individual or for society - depends ultimately on whether people actually learn as a result of those opportunities, i.e., whether they incorporate useful knowledge, reasoning ability, skills, and values.*” However, when the non-educator driven MDGs were adopted in 2000, all references to learning were dropped in favor of a goal of completion only, that was simple and easy to measure.

beliefs, values, attitudes, and dispositions.¹² That basic schooling is about socialization is widely acknowledged by (nearly) everyone engaged in education.

Two, the inculcation of beliefs is not third party contractible because beliefs are not themselves contractible and the production of beliefs is difficult to accurately observe.

The first part of this is illustrated by the old saying: “Money cannot buy you love.” That is, since “love” is an interior mental state of another person, it cannot be contracted on because it can be faked. So, money might buy the appearance of love, but cannot buy love itself because no one could enforce a contract about whether person X truly delivered the contracted love to person Y.

The second part of this is how difficult it is to observe instruction that produces beliefs. It is worth noting that one can pretend to *not* have skills, but no one can pretend to have skills they do not. For instance, I can pretend that I cannot speak Spanish when I in fact can speak Spanish, but any attempt to pretend I speak French is discovered quickly and easily. This means if person X wants person Y to acquire a skill, they need to observe little or nothing about the conditions of instruction. If an employer wants person Y to be able to speak French they can offer an incentive/motivation of an addition to pay Z additional dollars a year, if person Y can speak French at a specified level of competence. Then person Y can use a commercial product like Rosetta Stone, hire a tutor, take a class, etc. to learn French. So “speaking a language” is both *directly* contractible (Y can hire person W to teach them) and *third party* contractible—I can give Y money to learn or for learning French.

¹² The new Global Goals themselves in goal 4.7 seek education that promotes a specific set of values: “...education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity...”

In contrast, suppose person X wants person Y to *believe* in some way (say, be a Muslim, or a Catholic, or a Marxist, or believe in “sustainable lifestyles,” or “culture of peace” as in SDG target 4.7). In this case, the desired outcome by person X is not contractible because beliefs can be faked in ways that skills cannot. Someone can pretend to believe in Catholicism, or Pancasila, or “sustainable lifestyles” even when one doesn’t. This implies that while instruction is directly contractible, it is not third party contractible—person X cannot pay person Y to acquire belief from person W because there is no way person X could prove to an objective observer that person Y had not acquired the belief or that person W had provided *insincere instruction*.

Many of the facts about schooling that are not explained economically are potentially explained by this feature that the inculcation of beliefs is not third party contractible and governments care about beliefs.

One, this can explain why some governments, and especially governments not otherwise particularly benign in other dimensions, expanded schooling rapidly (Lott, 1990). The greater the gap between a government’s preferred socialization and the “no schooling” socialization received by children from their parents and childhood communities, the greater the incentive for governments to produce schooling. This conjecture is obviously difficult to measure empirically but (Pritchett and Viarengo, 2015) show suggestive evidence from a variety of settings that governments with populations who hold beliefs less like those on which a government is legitimated (e.g., secular governments in strongly religious societies) expand schooling more than others.

Two, the form and mode of support is directly and easily explained in this way. Governments directly produce instead of indirectly provide for schooling via support to other schooling sources (e.g., “money follows the student” type mechanism) in part because it is more difficult (or impossible) to control socialization when support is indirect, and hence third party contracting. Pritchett and Viarengo (2015) show a number of empirical features of the

data, and in particular how tolerant or supportive governments are of private schooling depending on the incipient conflict in beliefs between government and significant parts of the population.

Panglayan (2017) argues that, “instances of widespread internal political disorder such as civil wars propelled elites to use mass education as a means to instill values that would help prevent future rebellions.” This highlights both non-benign motives for expansion of education from nation-states and the role of “values,” and hence the considerations of the mode of control of education processes that would induce the value the elite intended. She argues, for instance, that in some instances the value the education process was meant to inculcate was “respect for rule of law” and “obedience.”

Three, this also can be part of explaining how low learning and dysfunctional public production persists as the government’s primary motivation may not in fact be that children receive high quality learning, rather than that they are properly socialized, which may, or may not, involve high quality learning outcomes.

This also helps explain the “market structure” of alternative producers of schooling, as often the principal alternative producers of schooling are religious (or other belief motivated) organizations.

This public engagement in socialization is a core and potentially legitimate part of the goals of education. As Moore (2015) points out, what is “public” in “public schooling”¹³ is that there is an arbiter of value of education that is not simply the parents or child, but there is a public component to how children are socialized.

¹³ Education is not a “public good” to an economist’s typical definition of being non-rival and non-excludable. Instruction is clearly both rival and excludable which is why there are flourishing markets for instruction in all kinds of domains (e.g., music, sports, languages, dance, tax preparation) which could not be true if instruction were a “public good” in the usual economic definition.

Conclusion

A search for “recommendations” as to what to do to promote an acceleration in the pace of improving learning in basic education in the developing world, that go beyond the naïf or hortatory, has to be based on an internally consistent positive model of outcomes with reasonable (if not empirically validated) characterization of the motivation and capabilities of the actors in the system. This short essay has not attempted to even pose, much less validate or vindicate, such a model. It merely has shown directions being pursued that are unlikely to be promising (e.g., recommendations based on NAP) and three insights realistic models need to incorporate.

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