

Development Happened. Did Aid Help?¹

Lant Pritchett

Introduction

The title's punctuation is the paper's message. Development happened. Period. Nearly all indicators of human material well-being (income, poverty, health, education, nutrition, access to basic infrastructure) in developing countries improved during the "development era" (1950-2020) by more than they had improved in all of previous human history combined. The extent of progress in human development was tightly associated with national development (Pritchett 2022), especially for the basics (Pritchett and Lewis 2022).

"Did aid help?" Real question mark. The question is not whether development (both human and national) happened but the magnitude of the causal contribution of "aid" to this amazing progress, on average, in developing countries.

There are useful analogies to the question "did aid help?" from sports. From 2000-2019 I lived (mostly) in the Boston area. During that period the local American football franchise, the New England Patriots, has one of the most successful periods of any team in any sport, winning six championships. During this period (mostly) Bill Belichick was the coach and Tom Brady was the quarterback. There is a lively debate about the relative contributions of Belichick versus Brady to the team's success. But everyone understands that the phenomenal success is the fact and the tricky details of the Belichick-Brady debate are creating compelling counter-factual(s)-

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“what would have happened if....?”—and acknowledge that parsing out attribution persuasively may be impossible².

In contrast to the clear understanding of the facts versus attribution questions in the Belichick-Brady debate, the debate about the contribution of aid to development is often deeply confused because the typical “person on the street” in rich countries has stunningly false beliefs about the facts. As Hans Rosling so colorfully put it, his Swedish master’s students in Global Health knew less about the facts of development than monkeys (random guesses) because at least monkeys knew nothing, whereas what his students (thought they) knew just wasn’t so. Gapminder (2019) reports that on 18 questions about global conditions with three possible answers only 5 percent of humans outperformed monkeys (random guessing). 85 percent of Americans think global extreme poverty has gotten worse or stayed the same over recent decades. This is like having a debate about Tom Brady as a quarterback premised on the completely false belief that he had won no championships, as opposed to the seven he actually won—three more than any quarterback ever.

Given their false beliefs about development progress, when people (including influential non-experts who shape policy) hear development economists say things like “there is very little rigorous evidence showing positive impact of development projects” or “the evidence on the impact of aid is mixed” this easily leads to false conclusions like “development progress failed to happen because aid failed.”

This paper makes two big points. One, only by getting the basic facts about the successes and failures of development right can one hope to get to the right questions—and there are three

² In Pritchett (2017) I use a similarly provincial sports analogy in asking whether Bill Russell or Wilt Chamberlain was a greater basketball player. There is no question whose teams won more championships (Bill Russell played on 11 championship teams to Wilt Chamberlain’s 2) but about attribution of the individual contribution to those team wins.

commonly held, but false, facts. Two, once we get to the right question it is easy to see that many methods used to study development cannot really help answer the question “did aid help?”

Facts before Counter-Factuals: Three False Narratives About Development

National Development and Human Development in the Development Era

World War I fractured existing national and global orders and in the aftermath of World War II a new global order was self-consciously constituted, with three features that emerged and consolidated between 1945 and the early 1960s. One, de-colonialization and hence a “proliferation of sovereigns” (Braun et al 2004) as a large number of countries became politically independent (although many developing countries had long since been independent (e.g. nearly all of Latin America, Egypt), some countries have never been colonies (e.g. Ethiopia, Thailand). Two, new organizations were created with the intent to “win the peace” by establishing organizations to promote economic progress of both the victors and vanquished of WWII and create organizations to mediate incipient conflicts to avoid future wars. This led to the creation of the Bretton Woods institutions (International Monetary Fund to regulate exchange rates, the (envisioned) World Trade Organization to facilitate the liberalization of goods trade, the International Bank for Reconstruction and Development (IBRD) to finance reconstruction) and (separately) the United Nations as an umbrella organization to mediate conflicts and to facilitate global action on a variety of fronts. Three, the Cold War broke the global order into two blocs, with countries in various conditions of alignment or non-alignment with those two blocs (hence the moniker “third” world).

This new global order created a set of international, regional, and national organizations whose explicit objective was to provide “development assistance” and a distinct “field” (in the

broad sense of a social field of Bourdieu (1984, 1993), not an academic discipline) called “development.” I therefore label the post-World War II period the “development era.” The field of development in this broad sense included politicians and statesmen in both developed and newly independent developing countries, organizations, academics (in developed and developing countries) who perceived themselves as engaged in the process of “development.”

The concept of “development” implies that something changes to become a better, fuller, instantiation of what it ontologically is. *Acorns develop* to become oak trees, *tadpoles develop* to become frogs. Development is intrinsically both dynamic and teleological. The field of development has always maintained two ontologically distinct notions of what was “developing” during “development” with notions of how these two were causally linked.

National development was the process of a sovereign *country* becoming a more developed *country*, generally understood as a four-fold transformation towards: (i) higher productivity, (ii) greater administrative capability of organizations (including, but not only, government organizations), (iii) a more responsive state, and (iv) more equal treatment of individuals within the country around a shared identity. “Modernization” was a popular, if now outmoded, theory of national development.

Human development was the process whereby *individuals* could more fully realize their goals, wishes, ambitions, values, visions for their own lives.

Linking these two was the idea of bi-directional causality as (i) the four-fold process of national development of countries would, through a variety of avenues, allow individuals living in those countries to achieve more fully their goals and hence lead to higher levels of human development. And that individuals with higher human development would be able to contribute more to national development. But, just because one can calculate the level of human

development of the set of people living in a given country/region, human development is not ontologically a country level process. Health, education, nutrition, wellbeing generally, happen to a person and levels of human development are measured starting with an individual and aggregating according to any chosen characteristic, so one could measure human development for left-handed people and right-handed people. In contrast, national development is itself a non-reducibly social phenomena and is an emergent property of complex systems, like “markets” or a “justice system.”

I am not asserting there is or was a complete consensus about any of these. But the contours of contestation about development are often along three lines: “what is national development (conceptually and empirically)?”, “what is human development (conceptually and empirically)?”, and “what are the causal determinants (at various levels from proximate to deep structural) of each notion of development, including what is the relationship between the two?”

Phenomenal success, on average, but with large variation, in economic growth – one component of national development

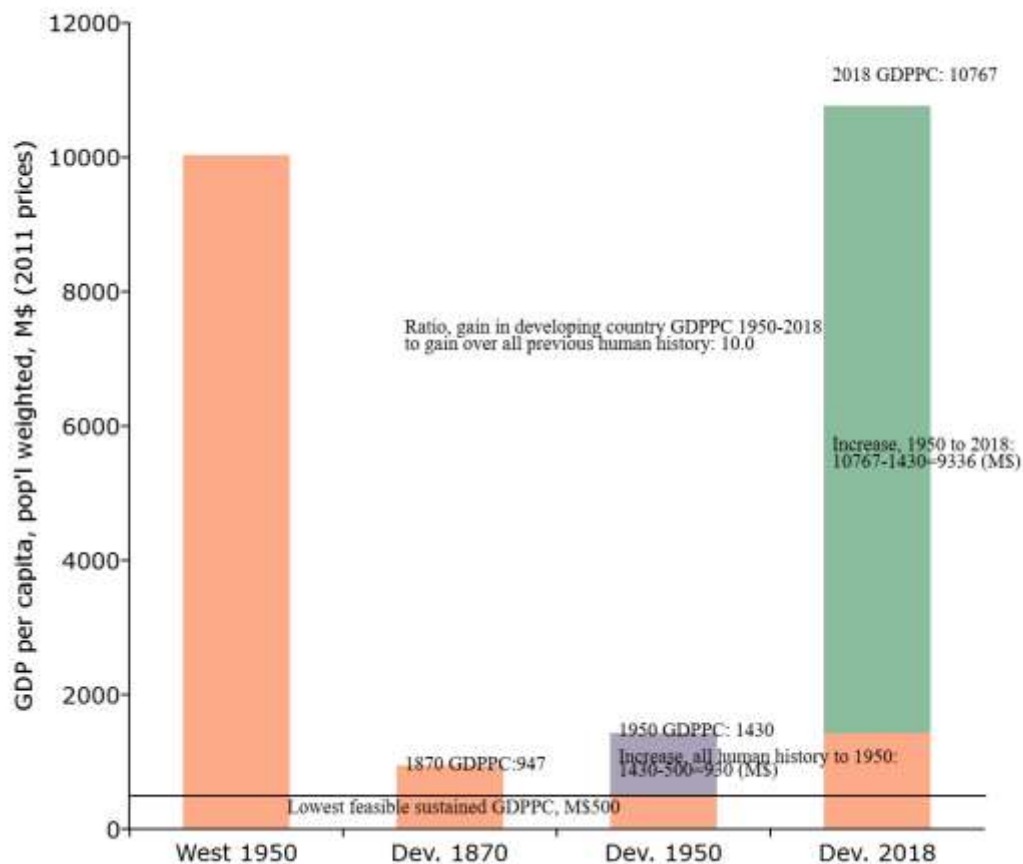
First, that *on average* progress in developing countries has been enormously rapid relative to historical growth rates.

The key fact of economic history is the “hockey stick” graph which shows that, while there were waves of progress and retrogress, the level of economic productivity or material standard of living (say, wages, or hours of work per calorie) was roughly constant from the dawn of time to at least around the late 18th century. Sometime in the late 18th or 19th centuries a set of countries entered a phase of sustained exponential growth of both population and output per person such that a graph of income per capita against time looks like a hockey stick with a very

long period of roughly stagnation followed by steady (roughly) 2 percent per annum growth sustained for 100 years from 1870 to 1970 which produced an increase in the GDPPC of the “developed” countries levels of a factor of 7.

During the development era the (most of the) rest of the world moved into “hockey stick” growth. Figure 2.1 uses Maddison-style historical GDPPC estimates (Bolt and Van Zanden 2020) to show that developing country (regional) population weighted average GDP per capita rose from only M\$1,430 in 1950 to M\$11,888 in 2018 (where “M\$” denotes the Maddison PPP estimates). The 2018 average exceeded the average GDPPC of the Western countries in 1950. If we assume the lowest GDPPC that has been historically sustained is around M\$500 (as just food production to sustain caloric intake produces a GDPPC around that amount), this implies the total gain in GDPPC from the dawn of mankind to 1950 was only M\$930 (a rough tripling). Suppose we assume that in year 0 the GDPPC of the developing world was M\$500 the implied per annum growth rate over the subsequent 1,950 years is only .052 percent per annum (ppa) whereas the growth rate from 1950 to 2018 is 3.01 ppa. Economic growth in the developing world was 56 ($=3.01/.052$) times faster in the development era than in the long historical stretch that preceded it. The Maddison-style actual historical data suggests growth from 1870 to 1950 was only .51 ppa, so “modern” growth rates and the turn of the hockey stick had not yet spread to the developing world before 1950 (not surprisingly, as much of it was still colonialized).

Figure 2.1: During the “development era” of 1950-2018 the (population weighted) GDPPC of developing countries rose by 10 times more than in all previous human history



Source: Author’s calculations with 2020 update of the GDPPC estimates of the Maddison project in 2011 PPP adjusted dollars (Bolt and Van Zanden 2020). “West” is Western Europe and Western Offshoots, “Developing” is all other regions except for countries of the Soviet Union and Eastern Europe.

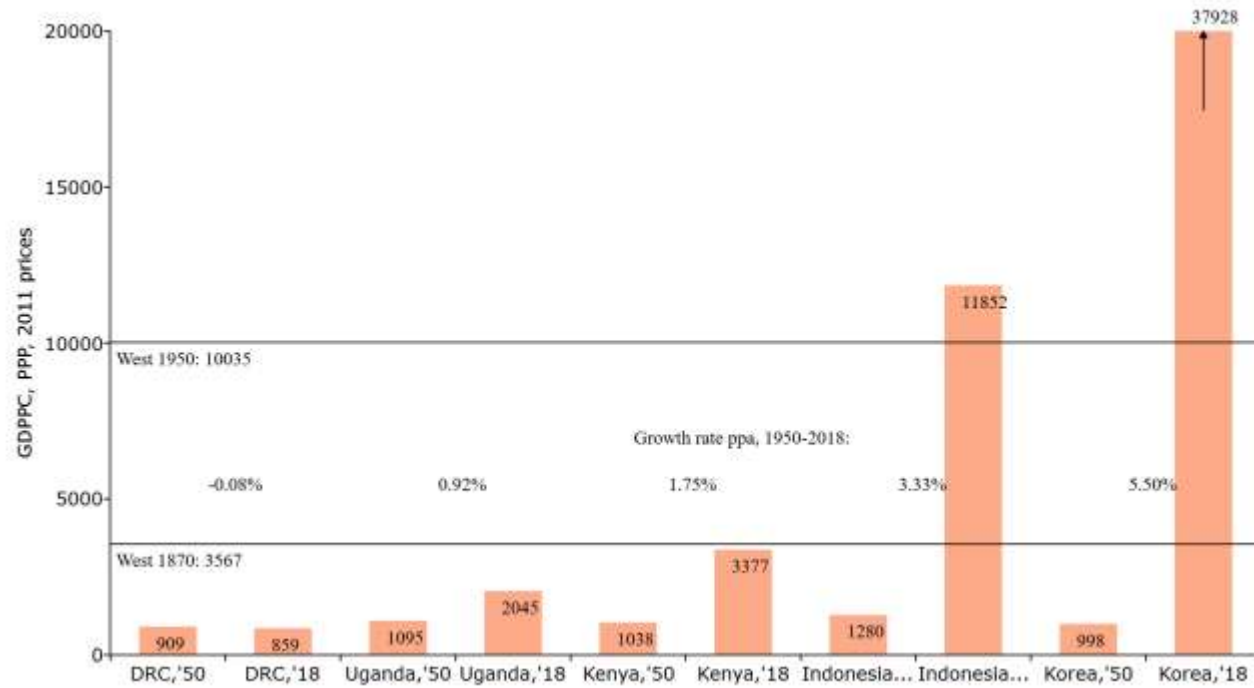
Variation in growth across countries

While *on average* there has been success (especially in population weighted terms as India and China have done well) there has been a substantial increase in the spread amongst those

countries considered “developing.” Figure 2.2 shows the 1950 and 2018 of level of GDP per capita for five countries showing the range of growth. South Korea is literally off the chart, now at roughly OECD levels (and is in the OECD) whereas the Democratic Republic of Congo is still at, roughly, ground zero. The difference in cumulative gain between a country with about average growth, Kenya, and a country roughly a standard deviation higher, Indonesia, is striking.

The combination of mean and variance of growth rates implies that during the development era the differences in GDP per capita have grown larger and there are several distinct sets of countries, not just an undifferentiated “developing” world. This creates potential confusion in discussions of “development” progress as if one looks at some regions, say, East Asia, it has been the best of times and other (sub) regions it has (at times) the worst of times (central Africa), and in some regions these are interspersed, with South America having both, say, Chile making steady progress and Venezuela collapsing from one of the richer countries in the world to penury.

Figure 2.2: There has been massive variation across countries in the pace of economic growth, generating enormous differences in current GDP per capita among developing countries that in 1950 had similar levels



Source: Author's calculations with Maddison-style estimates of historical GDP per capita (Bolt and Van Zander 2020).

While there are certainly errors in the measurement of GDP, the broad facts of rapid progress in GDP on average but with large variation across countries can be triangulated in a variety of ways from non-GDP data such as nighttime lights (Pinkovsky and Sala-i-Martin 2016, Hu and Yao 2021) or food shares in household consumption (Pritchett and Spivack 2013) and tell roughly the same story.

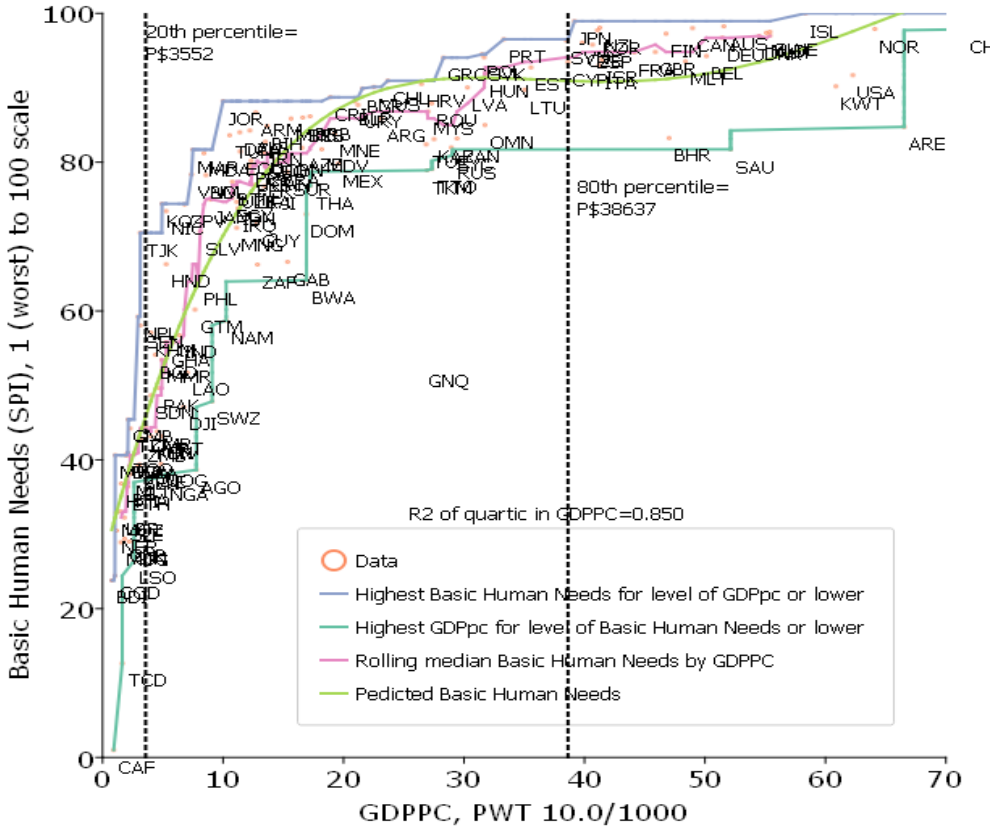
Since the standard headcount measures of poverty are very tightly associated the GDPPC (Dollar and Kraay 2002, Dollar, Kleineberg, and Kraay 2016)--and the correlation even tighter between poverty and median consumption/income (Pritchett 2020)—it is not surprising that headcount extreme poverty (the World Bank ‘dollar a day’ standard) has declined massively since 1950 (Roser 2021). And, while there has been considerable attention to the changes in income/consumption inequality over time, the growth of about any inequality adjusted measure of income is almost completely correlated with the growth of average income (Dollar, Kleineberg, Kraay, and Guriev 2015) and hence nearly completely will reflect these overall trends and cross-national differentials.

National development delivers on human development

A second key fact about development is that any measure of human development, and particularly measures of “basics” (primary health, malnutrition, basic education, water and sanitation) are very strongly related to levels of standard measures of three components of national development (GDPPC, State Capability, and Democracy), particularly at low levels of development. Pritchett and Lewis (2022) show that no matter how one constructs an omnibus indicator of the *basics* of human material wellbeing (e.g. whatever indicators or weights) it is very strongly (and non-linearly) related to level of GDPPC. For instance, the Social Progress

Initiative, an organization whose stated mission is to advocate for non-economic measures of human wellbeing (as opposed to GDPPC) created a Basic Needs measure and Figure 2.3 shows the strong, non-linear, association between Social Progress Index component for Basic Needs and GDPPC.

Figure 2.3: There is a very tight, non-linear association between GDPPC and the basics of human material wellbeing



Source: Pritchett and Lewis (2022)

National development appears to be a sufficient condition for high levels of human development, broadly (Pritchett 2022) and more particularly for basics (Pritchett and Lewis 2022) in that there is no country with high levels of national development that does not achieve

high levels of human development (with omnibus measures based on physical indicators), National development also appears to be a necessary condition as there is no country with low levels of national development that achieves high levels of overall human wellbeing (Pritchett 2022) or even of basics (Pritchett and Lewis 2022).

There are a few exceptions to the rule of a strong GDPPC/human development link (e.g. Equatorial Guinea). But achieving high levels of the broader concept of “national development” has (almost) never failed to produce high human wellbeing.

Human development Improved More Than Growth (and more uniformly)

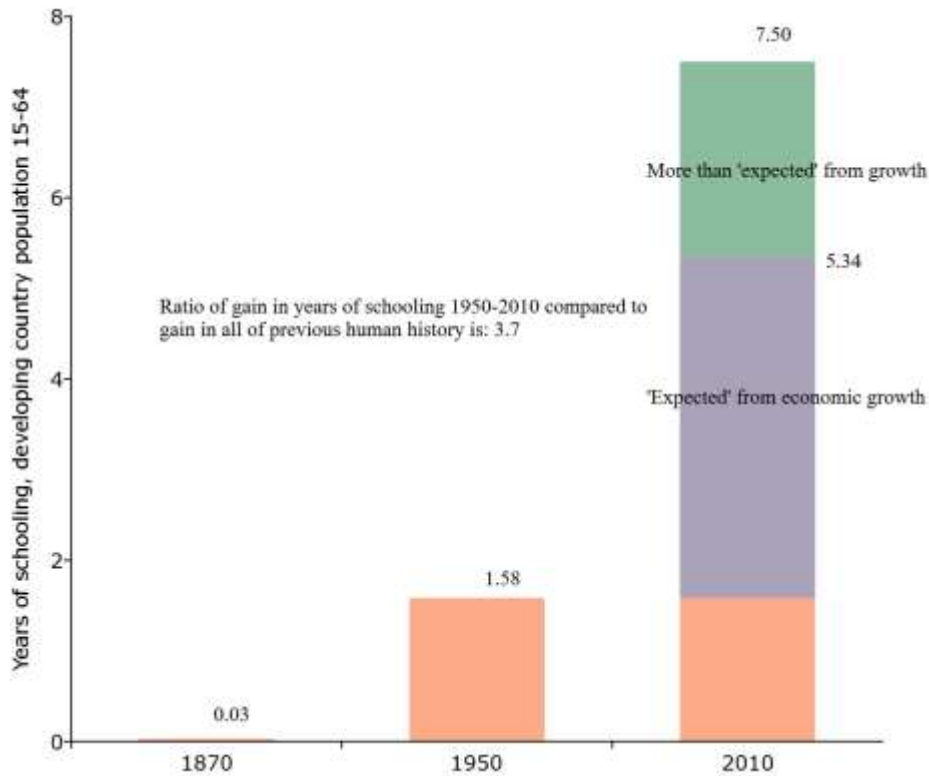
In the standard long-run data (Lee and Lee 2016) the average years of schooling of adults (aged 15-64) in the developing world was very close to zero in 1870 and in 1950 was around 1.6. By 2010 (the end of the Lee and Lee 2016 data) it was around 7.5. In all of human history to 1950 the developing world reached only 1.6 years of schooling then, over the next 60 years the massive expansion of schooling added almost 6 years to that total. The gain from 1950 to 2010 was 3.7 (5.9/1.6) times larger than all of previous human history.

One would expect that, as the incomes of households expanded along with general economic growth, the private demand for every good thing (like schooling) would go up and hence, even without any special policy or investment or effort or advocacy of governments or development actors, the demand for schooling would expand. I do the simple exercise of regressing the level of schooling in 1950 on the Maddison estimates of GDPPC in 1950 with a flexible (cubic) functional form and then predict the level of schooling for each country using their 2010 level of GDPPC. This gives the level of schooling ‘expected’³ on the assumption the statistical

³ This use of “expected” is in scare quotes as it is just the mathematical ‘expected value conditional on X’ not the broader sense of what one might have expected to happen.

relationship between schooling and GDPPC had remained exactly as it was and countries had only moved along that relationship through increased GDPPC. The 'expected' years of schooling at 2010 income with 1950 regression estimates is 5.34 years. This implies that actual years of schooling in 2010 were about 2.16 years higher than 'expected' and hence about 36 percent of the total increase in years of schooling was due to factors beyond just increased GDPPC, which could have been many factors: norm shifts about the priority of schooling, reduced costs of schooling from government's expansion of supply and subsidies to schooling, etc.

Figure 2.4: There has been almost four times as much progress in expanding the years of schooling of the population from 1950-2010 as all previous human history—and more than would have been ‘expected’ from economic growth alone



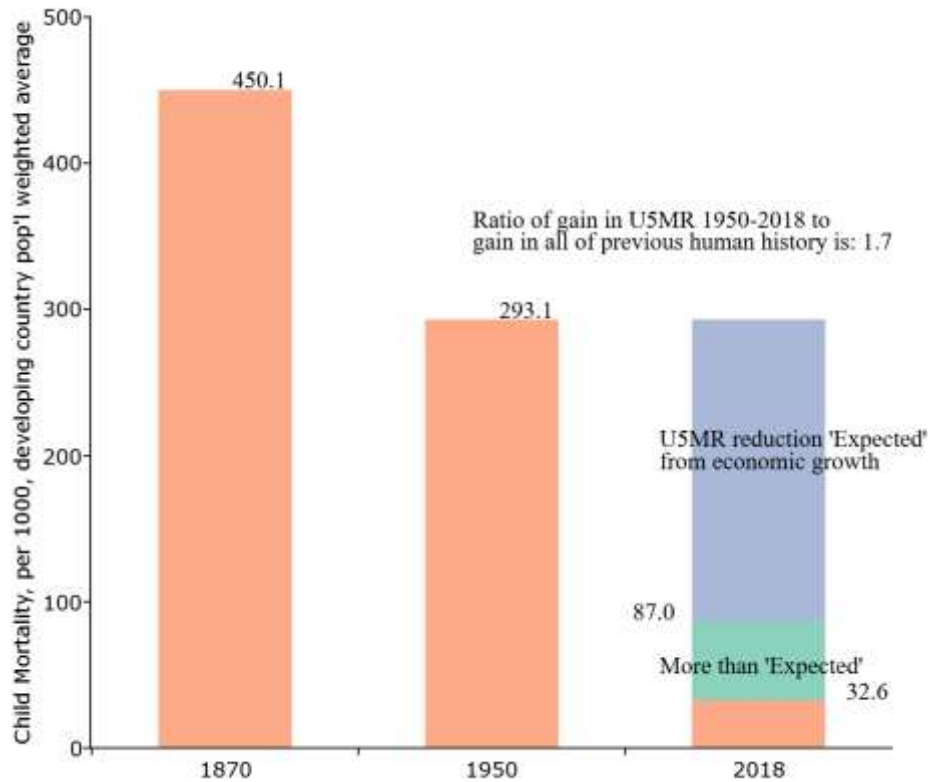
Source: Author's calculations with Lee and Lee (2016) data.

Two points. One, the expansion of years of schooling was much more uniform across countries that was the expansion of GDPPC (Pritchett 2006) as many countries with slow or negative growth nevertheless had substantial expansions in schooling and many of the high growth countries had about average expansion in years of schooling. Two, I have been careful to refer to “schooling” rather than the sloppy (if ubiquitous) practice of treating “schooling” and “education” as synonyms. There are massive variations across developing countries in the level of learning from a year of schooling (Patel and Sandefur 2020, Pritchett and Viarengo 2023). Very recent evidence suggests the current levels of learning achievement for a given year of schooling are the result of very different long-run trends over time in the evolution of, say, whether an adult can read conditional on having completed five years of schooling (Le Nestour, Moscoviz, and Sandefur 2021). Therefore, I am using “years of schooling” without the implication this is a comprehensive or complete measure of the progress in “education” or “human capital” or “human development.”

Figure 2.5 show similar calculations for under-5 child mortality. The data show a reduction in child mortality from 293.1 child deaths per 1,000 live births in the developing world in 1950 to only 32.6 today. It is almost impossible to overstate the gains in human wellbeing from this dramatic reduction in the number of parents who lose a child to early death.

As with years of schooling, one would expect, given the importance of child survival to parents, that as household income expanded child health and survival would improve, and the 'expected' U5MR at 2010 GDPPC but 1950 relationship between U5MR and GDPPC is 87. Again, the progress in child health is faster than one would have expected from economic progress alone and this is a well-documented fact for health: the causes of the improvement in the "Preston curve" (Preston 1975) relating life expectancy and GDPPC has a very large literature. Whatever the 'development field' did or did not do, the fact is that child mortality improved dramatically, and by more, not less, the growth alone would 'predict' which given the improvements in medical technology and the emphasis on addressing child mortality and the campaigns for universal vaccination for childhood diseases is not at all surprising.

Figure 2.5: There has been massive progress in reducing child mortality in the developing world since 1950—much more than would be ‘expected’ from economic growth alone



Source: Author’s calculations with Gapminder data on child mortality and Maddison-style estimates of GDP per capita (Bolt and Van Zander 2020).

At times the assertion is made that the “mainstream” field of development *over-*emphasized economic growth specifically (and national development more generally) and *under-*emphasized “human” development. But, whether or not “human development” was “optimally” emphasized by national and global development actors or not, the fact is that many commonly used core indicators of “human development” (like schooling and child mortality) improved by substantially *more* than expected from growth alone, and this progress was more uniform across countries than was economic growth.

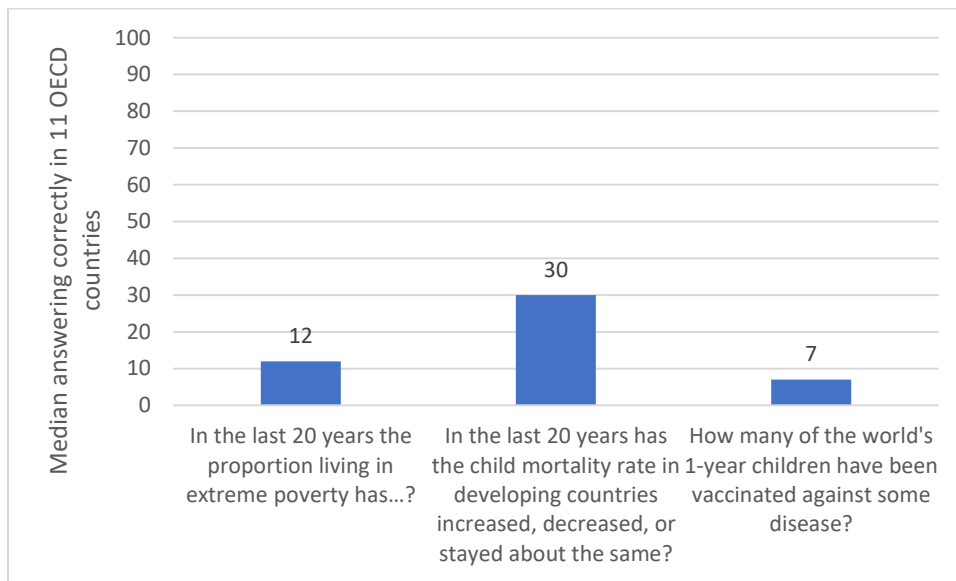
Beliefs about development progress are mostly wrong

The three facts above (progress in economic conditions (including poverty), tight correlation of GDPPC/National development and human development, and rapid progress in human development, are neither new, nor hard to discover. Many others have pointed out the amazing progress in the developing world: the Rosling's book *Factfulness* (2019)--and his wonderful videos and the easily available Gapminder data and visualizations, Steve Radelet's *The Great Surge* (2015), Angus Deaton's *The Great Escape* (2014), Charles Kenny's *Getting Better* (2011). And one need not even go to books as the work of Max Roser and the team at Our World in Data have made these facts easily available, with great visualizations and summary articles on important topics like the evolution of extreme poverty (Roser 2021), child mortality (Dattaini et al., 2021), global education (Roser and Ortiz-Espina 2022) and others⁴.

Yet the "person on the street" in OECD countries is not just ignorant but consistently wrong in a pessimistic direction about the basic facts of development. Figure 2.6 shows that people in the developed world get questions about poverty progress right only 12 percent of the time, about vaccination only 7 percent, and about child mortality only 30 percent of the time. For some reason, people in rich countries are just stubbornly in their ignorance and refuse to update their excessive pessimism about progress in developing countries.

⁴ This just focuses on the literature specifically about development and developing countries, not the larger literature by economic historians on the causes and consequences of the onset of modern economic growth (the first 'hockey stick' turn) (e.g. McCloskey and Carden 2020 (a summary of McCloskey's larger work) or more general assessments of the long-run historical improvement in the human condition such as Pinker (2018), which also tend to show massive pessimism and ignorance about the magnitude of progress.

Figure 2.6: People in the OECD are wildly wrong about the trends and conditions in developing countries, with very few believing there has been progress in global poverty or child health



Source: Author's calculations from IPSOS 2017 'Perils of Perception.'

Did aid help?

That development happened does not imply aid helped. Questions of cause and effect cannot be settled with the *ad hocery* of *post hoc ergo propter hoc*. Resolving that question requires a theory of the causal mechanisms where by “aid” was expected to assist “development.” We should expect the question “did aid help?” to be very hard, perhaps unresolvable. Questions about whether aid helped are inevitably going to be questions about counterfactuals, about ‘what would have happened if X, which did happen, had not happened, or had happened in a different way, Z?’

I start this section with an extended personal example that illustrates just how hard the question of the “impact” of a development project is going to be.

In August of 1998 I was working with the World Bank and moved to Indonesia to work in the Resident Mission in the Social Development division. In August of 1998 Indonesia was deep into an overlapping and related set of economic, financial, political, and environmental crises. A devaluation of the Indonesia rupiah that was unexpected by government, multi-lateral agencies, domestic banks or foreign investors that started in 1997 accelerated into a massive economic crisis after failed IMF programs in October 1997 and January 1998, which the currently having plummeted from around 2,200 (where it had been steady for many years) to a nadir of 17,000 to the dollar in January 1998 (in the absence of any previous price inflation or any crisis in government debt). Suharto, who had ruled the country since 1967 resigned on May 21, 1998 after increasingly intense student protests were repressed with fatal force, leaving his Vice President in power. The new leadership (it was not yet a “new government”) committed to holding new elections in 1999. In July 1998 the IMF agreed to another program with Indonesia, based on a new budget and this new program committed the multi-lateral organizations the massive emergency fiscal support, with the World Bank expected to provide on the order of 6 billion dollars in quick disbursing operations for the 98/99 and 99/2000 Indonesian fiscal years.

This put the World Bank in a difficult position as in the new era of open criticism the World Bank’s long-term close relationship with Suharto’s New Order government was obviously under fire. Moreover, the World Bank tacitly admitted (through a leaked memo) that, although its procurement policies had been scrupulously enforced these practices, in and of themselves, were not a sure-fire guarantee against the endemic corruption of that Suharto era. The World Bank country leadership formulated a strategy via a set of quick disbursing policy reform

operations, one of which, was a \$600 million dollar operation to support the launching of government 'safety net' programs to mitigate the human impacts of the crisis on poverty, education, and health. Since it was a quick disbursing operation there was no direct, accounting-trail, connection between the project's disbursements and specific government spending items (as there is with a standard World Bank investment project) but rather the operation disbursed against negotiated conditionality about the government's adoption and implementation of social safety net policies and programs.

I became the Task Team Leader (TTL) responsible for the design of this loan--Social Safety Net Adjustment Loan (SSNAL)—negotiating an agreement with the government (still the basically unchanged government, minus Suharto), getting it approved by the World Bank's Board, getting it disbursed (in order to support the budget), and getting it implemented. To balance the tensions between the need for quick disbursement and the need to defend the funds devoted to the Safety Net programs from corruption the SSNAL became a two-tranche operation, with a first tranche disbursement against policy actions and the second tranche against implementation, including the adoption and implementation of a number of innovative actions to promote transparency of the SSN budgets and "ringfence" the SSN programs from corruption.

The results during 1998 and calendar 1999 were complex. There were massive SSN programs launched, particularly a program that provided subsidized rice, that, according to household data, reached on the order of 100 million households (Pritchett, Sumarto, Suryahadi 2002). Even though there was massive progress, the targets for second-tranche disbursements were not met, and moreover the newly elected government the IMF had a breach and disbursements of IMF adjustment lending were halted in early 2000, and hence the second-tranche of the SSNAL was never disbursed.

In August of 2000 I took leave from the World Bank and moved to the Harvard's Kennedy School of Government. After each World Bank project closes the managing unit of the operation chooses someone, who was not the TTL when the project closed, to write a Project Completion Report that describes the results and rates the operation as successful or not. Believe it or not, as I was not at the World Bank, I was hired as a consultant to write the PCR on the SSNAL.

Was the SSNAL successful development assistance or not? It might seem obvious that since a two-tranche "pay for performance" loan did not disburse the second tranche because the performance conditions were not met the project was not successful. My argument in the Project Completion Report was that the SSNAL was a success, because the SSNAL was just one element of an overall *strategy* of the international supporters of Indonesia during the crisis (IMF, World Bank, IDB, Japan, Australia, etc.) that strategy had three objectives. The three objectives were (i) end the economic crisis, (ii) have poverty and human development indicators restored to pre-crisis levels and (iii) in part via the above two, create conditions in which Indonesia could hold free and fair elections to put in power a democratically elected government with legitimacy (and hence avoid the many and real risks of chaos, a military coup, anti-Chinese ethnic violence, provincial separatism (beyond East Timor), violent Islamic insurgencies, etc.). All of these strategic objectives were in fact met.

Hence I argued in the SSNAL PCR that the key question was: "In the counter-factual condition of the absence of massive inflows of financial support from the development actors (structured into a variety of distinct lending operations, such as the SNNAL) to the Indonesian government during the immediate aftermath of Suharto's resignation was it likely/probable that the three strategic objectives (an end to the economic crisis, poverty and human development

recovered, and free and fair elections) would have been achieved?" I argued that among those living in and through the Indonesian crises from 1997 onwards the consensus was "no" and moreover most of those involved were in August 1998 pessimistic that, even with the strongest support the partners could mobilize, those three objectives would be achieved as quickly and completely as they had been by 2000. All in all, things were amazingly better by, say, August of 2000 than was the "consensus" prediction in August of 1998, even conditioning the expectation on massive and successful support. Therefore on "diff versus diff" comparisons of actual outturn versus ex-ante counter-factual the strategy must be counted a success and, as the SSNAL was perceived to be an *ex-ante* essential tactical component of the strategy, the SSNAL as an operation must too be counted a *strategic* success.

Now, this may seem as just obvious and blatantly self-serving rationalization of failure and a typical instance of the defensiveness and unwillingness of development organizations and their self-serving bureaucrats to admit failure. One can easily and rightly claim there is no "rigorous" evidence for claims the SSNAL (or for that matter the entire range of development actor support in the crisis) was a success. But there *cannot* be rigorous evidence because the objectives were national (both economic and political) and the particular historical (economic, social, political) conditions were only going to happen once. My response to most arguments about success or failure is: "you weren't there"--which is not at all facetious. The team devising the strategy and the structure of the operations and the granular design of each operation were working under real-time conditions making judgments based on the best information at our disposal. Perhaps we were too pessimistic about the "no outside assistance" counter-factual for Indonesia, but it sure did not seem like it, especially for the World Bank staff who had been evacuated from Indonesia in May 1998 in the aftermath of fatal shootings of students during

protests and based on intelligence reports that different military units were about to clash in Jakarta for control of the country. Perhaps the survival to a democratic election in June 1999 of the lame-duck GOLKAR government would not be enhanced by a large emergency “safety net” crisis to mitigate the impact of the crisis on households, but it sure seemed like it would be.

But the main point here is not who is right and who is wrong about whether the SSNAL should be classified as a successful World Bank project or not. The point is that these questions are complex and involve subtle and sophisticated judgments about “probabilities” in and during events that are unique once-off happenings in a specific context and hence for which there are no “probabilities” in the usual sense but only massive Knightian uncertainty, both *ex ante* and, almost as much, *ex post*. And the point of *that* point is that everyone should expect pretty much every question about “did aid help?” to be at least this hard and at least as unlikely to have a simple, compelling, consensus answer.

There have been three main empirical literatures about development impact: project, national, and global.

The impact of development projects tells us nothing about the impact of aid

As many development agencies rate their projects *ex-post*, there is a large empirical literature on the correlates/determinants of the success or failure of aid-financed projects. While this literature comes to some interesting conclusions⁵, it is obvious that nothing about the success or

⁵ For instance, Isham and Kaufmann (1999) used World Bank project ratings to examine the impact of country conditions on those investments, Honig (2018) uses project ratings to show that “top down” control of the implementation of aid projects leads to greater failure of project when country conditions are fluid and unpredictable, Denizer, Kaufmann and Kraay (2013) use the ratings of World Bank projects to show, *inter alia*, that the quality of the individual managing the project has a big impact on whether the project is a success or failure (as large as country conditions).

failure of aid to help development can be inferred from the success or failure of the specific projects financed by aid agencies, for two reasons (elaborated more fully in World Bank 1998).

First, with full fungibility (and many country budget systems, such as India's, were explicitly designed to produce full fungibility of donor financing) the net impact of additional aid is not the impact of the funded project but the impact of the *marginal* project(s) made possible by the incremental funding. As the choice of which projects are funded by which donors is a complex negotiated process, there could be either positive selection (donors take on the easy, likely to succeed projects) or negative selection (the donors take on the hard projects) but in either/any case the aggregate rate of return on one (or all) donor's projects is just not the aggregate rate of return on the projects the donor(s) financed as fungibility confounds the connection.

Second, donor projects are often "cocooned" and allowed to operate in ways that government projects cannot (e.g. pay project managers much more than civil servants implementing government projects) in ways that may raise the likelihood of a donor project being a success while not raising—or even lowering—the rate of success of all other government projects. In fact the pressure for "accountability" and "rigorous evidence" of the success of donor projects in development may well prove to have had a largely negative effect on the impact of aid for three reasons.

First, the type of project most easily amenable to rigorous impact evaluation is one that produces benefits at the individual level so that "with" and "without" treatment outcomes are observable at numbers of observations that can produce statistical power, but since national development is ontologically not an individualizable process this may lead research/advocacy to focus on projects that can produce rigorous evaluations at the expense of projects that have

important impacts (Pritchett 2014). For instance, essentially all of variation in headcount poverty rates across countries and over time is associated with the income/consumption of the median household in the place/time and hence evaluation of the efficacy of aid funded anti-poverty programs may be of (at best) very marginal significance to the level and evolution of poverty (Pritchett 2020).

Second, accountability pressure on development agencies for clear and direct attribution of success on specific indicators over a limited time horizon may divert donors into engaging in projects for which attribution is clear at the expense of engaging in long-term, engagement with governments (and other actors), that leads to the implementation of complex nation-wide reforms for which donor attribution is both impossible on a rigorous basis and politically inadvisable—as governments need to “own” the reforms.

Third, the pressure on donors for demonstrable success (with “rigorous” evidence) may also lead to greater levels of “cocooning” of donor financed projects that are paired with impact evaluations, which can produce projects/activities that work in the cocooned environment (often at very high unit cost, especially if the design and implementation support that comes with impact evaluations is properly costed in) but do not work at scale in routine conditions⁶.

Evaluating aid’s contribution at the national level

Another large empirical literature takes a macro level economic indicator (e.g. economic growth, investment rates) as the development indicator and uses cross-national variation in measured financial flows of aid to ask whether countries that (exogenously) received larger

⁶ Vivalt (2020) assesses cumulative evidence from impact evaluations and finds, on average, government implemented projects have lower impact than evaluated projects implemented by NGOs or the researchers themselves. Bold et. al. (2018) shows that an “intervention” found to work in one district of Kenya in an RCT (Duflo et. al.) produced zero impact when implemented at scale by the Kenyan government.

support had better economic performance. As this literature will be reviewed elsewhere in the volume, let me just say three things.

First, on the macro side, after all the to-ing and fro-ing on the cross-country growth regressions, it is hard for me to avoid the conclusion that if capable and competent people can come away with the range of results in the published literature: the impact on economic growth is from negative to zero to modestly positive; similarly, the findings that there are, or are not, interaction effects of aid with policy, then it is likely the effects of the financial flows of aid at the macro scale are heterogeneous, but in ways we researchers have yet to—and may never—figure out.

Second, my current (tentatively held) belief is that when incremental donor financing is at low to moderate level (as a ratio to government expenditure, exports, GDP) it probably has about the rate of return typical in the country and hence a modest positive impact on economic growth (since investment itself has a modest effect on growth)—consistent with Arndt, Jones, and Tarp (2015). However, that when aid is important in the economy, the negative effects (Dutch disease (Rajan and Subramanian 2008), accountability of government (van de Walle 2005), perverse effects of aid volatility, etc.) make the overall package of high flows have a typical growth impact near zero (possibly negative). Edwards (2018) argues aid was bad for growth in Tanzania in the Nyerere period, as it supported and allowed to continue policies that were inimical to growth, but that later, once the government had set out on a more positive path for growth additional aid supported growth. Similar arguments can be made about differential effects of the donor engagement over time.

Third, one thing that, for sure, development actors (should have) learned is that the original “two-gap” models of economic growth based on a naïve application of Solow growth

models that assumed a rapid diffusion of TFP and hence high returns to accumulated capitals were completely wrong: it is TFP (whatever that means) that has (mostly) failed to converge. Hence some of the “disappointment” with the impact of aid is that in the two-gap/naïve Solow model the rate of return to aid in the form of investible resources, in foreign exchange, in the hands of governments should be extremely high. But the most important thing we have learned from empirical growth research is that the two-gap model is completely wrong and hence finding that aid did not have the impact it was “expected” to have in the two-gap model isn’t a criticism of aid so much as a criticism of that model and indirectly on development agencies that continued to rely on that model (at least rhetorically) long after it was dead (Easterly 1999).

Development as a global movement about ideas and ideals

The major difficulty with trying to answer the question “did aid help?” is that it is possible that a primary locus of action for the impact of development is global. The actions of country level actors (politicians, policy makers, implementers, researchers, advocates) may be heavily influenced by their being embedded in not just local and national discourse and norm-formation but also global fields (again, in the broad sense) that are both general and sector specific.

For instance, the hard question about the expansion of schooling around the world during the development era is why it was so very rapid and why the rapid expansion was so uniform—including often quite rapid expansion in countries that were undemocratic, corrupt, and not having rapid growth (Pritchett 2013, Pritchett 2018). The conventional answer to that question comes from the sociologist John Meyer (with others) who argues that countries expanded education because that was what countries did (Boli, Ramirez, and Meyer 1985). The pressure of “normative isomorphism” from global discourse and norms about what “real” countries do

had impact on country actions mostly separate from (or in addition to) the standard local/national operation of politics and policy formation.

It is possible that the main effect of the field of development and the agencies and organizations within it was to act as (i) a space in which a global discourse about what should be done was held, and facilitate within that space some modicum of research and evidence relevant to the problems faced by development countries and (ii) act as a vector for diffusing normative isomorphism about both “what” should be done (e.g. schooling) and “how” it should be done (e.g. public provision of a certain vision of “quality” schools).

If the mechanism for the impact of “aid” is global normative isomorphism (or other causes acting at the supra-national level) then the relevant counter-factual for assessing aid would be countries which were versus were not within the overall global development discourse. The “intensity” of exposure to this “treatment” (in the current faddish jargon) at the country level is not well proxied by the magnitude of financial flows to, or the numbers of projects in, the country. If this is the case it is pretty clear that it is going to be very hard to draw conclusions. Those countries outside the influence of global normative isomorphism (overall, or in specific sectors/domains) are, almost by definition, extreme cases, and these extreme cases come in types that also have deep confounding features.

One, were the countries ruled by Marxist/Leninist ideologies in the Soviet bloc (e.g. Hungary, Poland, Czechoslovakia) which is obviously a complicated counter-factual with many facets beyond “not getting development aid.” Two, countries with rulers with a Communist-like ideology but not in the Soviet bloc, such as Cambodia under Pol Pot, or North Korea or Venezuela today. Three, countries where an authoritarian regime decided to limit exposure to the outside world, such as Burma/Myanmar during military rule from 1962 until 2011(ish).

Fourth were countries that for religious reasons chose to isolate themselves from engagement in “Western” dominated development, such as Iran after 1979 (which pre-paid all its World Bank loans in order to sever ties) or Afghanistan under the Taliban. Five, countries that lack an effective state, like Somalia today. Six, countries like Bhutan, which under its monarchy has deliberately kept itself isolated.

A casual comparison of the experiences of those countries who were in the “treatment” of “participating in the mainstream global development field” and those who chose to isolate themselves suggests two things. One, lots of really negative (Burma) to horrific (e.g. Pol Pot, North Korea) experiences among the isolated countries. Two, it is also obvious that separating oneself from “mainstream” global discourse was not an “exogenous” (and hence “identifying” in the econometric sense) event that could cleanly reveal the “treatment” effect of engagement in “development” via “aid.” (Sorry about all the scare quotes).

That said, while the “development era” has seen big successes on average, there are also many countries that have been continually engaged in and with the global field of development and have had some successes on some (important) dimensions (expanding schooling, improving child mortality) but have not been either national or human development successes. Haiti, for instance, is an example of a country that has made little national development progress on standard measures (GDPPC, State Capability, Responsiveness).

This leads to what I call the “bird on the elephant” model of development. The existence of a big elephant (the development industry with more than a hundred billion dollars of official development assistance annually) creates an ecosystem for a small bird to live on top of the elephant. The bird is the space for research, policy discourse, advocacy, international pressures

and norms that affect not just what the specific elephant the bird lives on does but also, by, at times, being able to see farther or clearer can move the whole herd in a different direction.

So, for instance, I think the difference between my relatively positive view of the development industry and the more negative view of my friends Bill Easterly (2006, 2015) and Angus Deaton (2014) is not about the “elephant” (the movement of resources, projects). I believe the three of us are pretty skeptical of the benefits of most of what the development industry does day to day and about the impacts of the specific projects and funding vehicles the industry uses. Moreover, I believe all three of us are very concerned that the elephant tends to empower technocrats (both national and international) and certain “dirigiste” and “top down” approaches in ways that carry great risks (Scott 1998, Ferguson 1994). I also think we three think the “bird” (ideas, research, advocacy) gets it pretty wrong lots of the time and that the “conventional wisdom” in development is frequently more conventional than wise.

But the difference is two-fold. One, every now and again the bird (global discourse) gets things right and has influence that has massive effects through a generic (not mediated) diffusion of ideas. Two, I think you cannot have the bird without the elephant. Three examples (besides schooling and child mortality) of what I might mean by the value of the “bird” of global normative isomorphism driving a diffusion of mainly positive country level actions⁷.

One, the control of chronic high inflation. The IMF is an organization that has specific mandates and/but also serves as the central nodal organization for discourse about an array of topics. In the 1970s and 1980s chronic high inflation was a persistent problem and the “sacrifice ratios” of lost GDP from austerity to get out of chronic inflation were high. Centered around the

⁷ And these examples go beyond the examples of a more purely “technological” invention or innovation that then diffused, such as Green Revolution varieties of stable crops, which did have massive positive impacts to focus on examples where the normative element of “doing the right thing” as perceived by a global community of practice itself was a causal channel.

IMF there arose a discourse about lowering inflation and preventing the large periodic losses of output to defeat an inflationary spiral though greater “central bank independence” and “inflation targeting.” This was not originally an economist’s consensus nor an orthodoxy and these were not granular policies but rather ideals that could be instantiated in a variety of institutional modalities. Over time, chronic inflation (or rapid inflation) became more and more rare (until quite recently, sigh). I would argue this was more “bird” than “elephant” as the conquest of inflation was mostly driven by the adoption of ideas by domestic actors, not as part of the conditionality of Fund lending operations. I am not saying I would advocate a world in which the IMF had more control over countries’ fiscal and monetary policies, but neither do I think the world would, on net, be better off without an IMF as a mode of global cooperation.

A second example is from growth accelerations. Two of the largest and most rapid reductions of extreme (“dollar a day”) poverty in the history of humankind happened in China and Vietnam, which were the result of substantial growth accelerations (dated to 1977 in China and 1989 in Vietnam by the methods of Pritchett, Sen, Kar, and Raihan 2016). These growth accelerations involved a very substantial shift towards more “market-like” and “outward oriented” economies through very heterodox reform paths. In both of these cases the leadership by no means were “forced” or even “bribed” into reform by development actors and financial flows, but rather their leadership became convinced, through an engagement with their own experiences and with global actors, that a new path would bring greater benefits to their countries. The existence of a global, ongoing, contested, evidence based, debate about the causes of economic growth meant there was a body of work (if not “knowledge”) and possible growth paths that the leadership could incorporate into their thinking. A similar shift was visible in India in the early 1990s (growth acceleration dated by Pritchett, Sen, Kar, and Raihan (2016)

to 1993). Even if the “elephant” of development and development economics had no other impact that to be even a small, fractional, contribution to these domestic shifts in growth strategy the entire endeavor is justified by just those gains (which measure in the trillions of dollars (Pritchett, Sen, Kar, and Raihan 2016) and hundreds of millions moving out of poverty compared to a plausible counter-factual).

A third example is the global push for child vaccinations. The combination of providing the technical elements (available vaccinations) with global pressure for achieving universal coverage through mechanism’s such as WHO’s Expanded Programme for Immunization launched in 1974 arguably created much higher levels of vaccination around the world than otherwise would have been the case and that a large part of this impact cannot be traced to individual project by project engagement or country by country direct development financing of the campaigns but the diffusion through a body of public health professionals that this was something that needed to be done.

Of course, my own work has shown “isomorphism” can be an unproductive or counter-productive force as well when it becomes either coercive or “isomorphic mimicry” (Pritchett 2013, Pritchett, Woolcock, and Andrews 2010).

Conclusion

One could ask the questions: “Why did Usain Bolt never run 100 meters faster than 9.58 seconds?” and “Would have Usain Bolt run 100 meters faster than 9.58 if he had (counter-factually) trained in this way, or (counter-factually) had this diet, or (counter-factually) adopted this technique?” But it would be strange to ask that question without knowing the factual context that 9.58 seconds is the fastest that 100 meters has even been run by any human being, that the

world record before Usain Bolt first set it in September of 2007 was 9.77 seconds and that Usain Bolt is arguably the greatest sprinter ever.

Starting into the questions of whether has development, or development assistance, or development assistance, or 'aid' has been effective or cost effective or efficient in promoting (some definition of) development needs to start from the facts. Fact is, during the period in which "development" emerged as a "field" from 1950 onwards, the progress in developing countries in improving elements of national development was 10 times larger than the progress in all of previous human history. Fact is, many indicators of human wellbeing, like years of schooling and child mortality, improved in the development era by factor multiples more than in all of previous human history, and improved by even more than would have been 'expected' from the increase in GDP per capita over the period. Fact is, the basics of human material wellbeing in a country (however weighted) are very strongly correlated with measures of national development.

Of course, these gains have been massively different across countries (more so in income and income poverty, less so in schooling and child health) and there are today "failed states" where national development and human development are very low, either through slow progress (Haiti) or massive collapses from previous progress (Venezuela).

The factual framing of questions about aid should start with the question: "Why was progress in human wellbeing so much more rapid in developing countries since 1950 than previously?" within which one can raise the question, "What part of this massive success can be causally attributed to "aid" (with what confidence) and what were the causal channels of that impact?" That said, the magnitude of the contribution (if any) of a sustained, large, global

development industry contributed to the development successes we observe is going to be hard to estimate with precision or confidence.

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