

HOW MUCH FARTHER CAN WE SEE?

The policy recipes being retailed in the 1970s had the advantages of simplicity and clarity: to grow, countries needed to raise the level of investment and to channel as much of the capital they could into industry. Capital accumulation that leveraged embodied technical progress and learning by doing was shown to produce results in capitalist economies such as Germany and Japan and in socialist economies such as the China and the Soviet Union. Rising investment also seemed to account for the performance of developing economies such as Brazil, Kenya, and Pakistan. By the early 1980s, the East Asian tiger economies added success at exporting manufactures to the list of recipes.

Conditions during the 1980s shifted the policy focus to adjustment supported by measures promoting reliance on market forces and openness. Starting in the 1990s, and in line with changing academic and popular perceptions in the advanced countries, the notion of an industrial Big Push fueled by capital and low-wage workers was gradually superseded by a far more ambitious and complex pro-poor approach to achieve

growth. This approach recognizes the significance of many intersecting complementarities. In certain respects, it echoes the balanced-growth thinking of the 1950s. Capital is one ingredient, but rapidly ramping up capital spending is no longer a major objective. Instead, the approach emphasizes the following goals: (a) strengthening market institutions and improving the allocation of resources (a theme central to several *WDRs*), (b) whittling away the transaction costs of doing business, (c) following a multipronged strategy for augmenting human capital and its quality and for deepening technological capabilities so that more and more countries can realize the dream of smart growth based on inspiration, and (d) achieving desirable structural changes.

This approach seems to be a far cry from the old model of development that depended on a bucketful of perspiration: the input of labor and capital into the productive sectors.¹ It is a promising model supported by numerous microlevel findings that appear to validate specific details, but the big test of the model lies ahead in Sub-Saharan Africa and in South Asia. Can countries with low savings, low rates of capital accumulation, limited manufacturing capabilities, and ramshackle education systems achieve high growth by adopting the recipe emerging from the recent *WDRs*? After running 2 million regressions, Sala-i-Martin (1997, 2002: 19) confesses that “we have learned a lot about growth in the last few years. However, we still do not seem to understand why Africa turned to have such a dismal growth performance . . . Understanding the underlying reasons for this gargantuan failure is the most important question the economics profession faces as we enter the new century.”² It is not the only one. Why are the Russian Federation and Eastern Europe lagging behind East Asia in high-tech manufacturing and technological prowess? Can India maintain high rates of growth with a small manufacturing sector? What is the secret of innovativeness, and why is Europe’s innovativeness so hard to increase? Why are Latin American countries marking time with growth rates of 4 and 5

1. The inspiration versus perspiration approaches were popularized by Krugman’s (1994) article on the “Asian miracle.”

2. The trouble with growth economics is that it looks mainly at the supply side and fixes its sights on the very long run: periods of 30 years or more. Short-term demand shocks that account for the perturbations that are the stuff of everyday policy concerns simply cannot be explained, which is unsatisfactory. Short-term fluctuations can have long-run echo effects because they influence investment decisions.

percent at best? And so on. There is no dearth of research and informed conjectures, but in several important areas, our understanding remains shallow, and there have been few significant gains on the policy front.

Growth through Perspiration

Currently, the two fastest-growing economies in the world, which have kept up this tempo for 10 years or more, are China and India. China's rate of investment is 43 percent and has been since the early 1990s. India's rate is almost 37 percent and could rise further if high growth is sustained. Other fast-expanding economies in East Asia, such as Singapore and Vietnam, also have notably elevated levels of investment, averaging 34 percent and 29 percent, respectively, during 1996 to 2000. In Sub-Saharan Africa, the acceleration in growth evident since 2001 to 2002 is directly related to demand shifts through increased spending on infrastructure, urban real estate, and resource development. It is also associated with rising prices of energy and mineral exports that have led to a boom in consumer spending.³

A reading of the experience of the fastest-growing economies would lead one to conclude that high and rising rates of capital accumulation are as significant as they were 30 and 50 years ago: they augment productive capacity; they introduce embodied technological change; they promote learning; they permit industries to realize scale economies and to diversify; and they facilitate infrastructure building and urban development, which further boosts productivity. In a world in which trade barriers are far lower and distances have been truncated by falling costs of transport,⁴ countries that invest in capacity and become competitive

3. Nevertheless, gross domestic investment has increased relatively little, and earlier research by Devarajan, Easterly, and Pack (2001) fails to link faltering growth to low rates of investment in Sub-Saharan Africa. The growth surge in Sub-Saharan Africa is vulnerable to a decline in the prices of petroleum and raw materials and to decreasing flows of capital from overseas.

4. On this issue, see Hummels (2001). Unfortunately, Sub-Saharan Africa has benefited less than other parts of the world. The logistics cost of a typical import transaction amounts to US\$2,000 in Africa and takes 58 days to complete as against US\$1,130 and 33 days in East Asia (Eifert, Gelb, and Ramachandran 2008; see Portugal-Pérez and Wilson 2008 on the border and behind-the-border costs). It is interesting that Jacks and Pendakur (2008) find that the 50 percent drop in freight rates between 1870 and 1913 contributed minimally to the boom in trade during that period. With fossil fuel prices on an upward trend, one question that arises is whether the trade in certain kinds of goods will be affected and what will happen to the sprawling international value chains for manufactures and agricultural products. By mid 2008, the cost of shipping a 40-foot container from Shanghai to the U.S. East Coast had risen from US\$3,000 in 2000 to US\$8,000 ("High Seas, High Prices" 2008).

can command global markets for their products. Those left behind are the ones that have cut back on capital accumulation. Even though billions have been poured into infrastructure in developing countries, it remains an Achilles heel for most economies. The emphasis of the 1994 *WDR* was as appropriate then as it is now. A report on infrastructure in East Asia (Asian Development Bank 2005) estimated that countries in the region would need to invest close to US\$200 billion annually over the next five years in new infrastructure to keep pace with growing demand and to maintain the existing facilities. Recent evidence of acute shortages of power in Indonesia, tightening power supplies in China as older coal-fired stations are closed, and infrastructure constraints more generally throughout South and Southeast Asia reinforces the point (“Indonesia: Power Problems” 2008; “International: Asian Infrastructure” 2008). The relatively high failure rate of such projects in the region and the limited funding available from private sources (5 percent) places the burden of responsibility on the public sector both (a) to improve the contractual and regulatory environment to attract more private capital and (b) to find the resources to make up for the difference. Meeting energy requirements will be one of the biggest challenges in view of global warming concerns and the tightening world market for hydrocarbons. Overall, the International Energy Administration projects that US\$22 trillion will have to be invested in energy supply infrastructure between now and 2030 to meet rising demand, three-fourths of which will come from developing countries (“Developing Countries” 2008). If energy supplies become a binding constraint, one can expect slow progress or no progress on the poverty and redistribution front.

Now the story becomes complicated, because after decades of research, the mystery of how to raise investment through policy incentives remains mostly a secret. The 2005 *WDR* maintains that if the investment climate can be improved, the flow will increase, but the link between the investment climate and investment is uncertain. Other *WDRs* over the past decade have stayed away from the macroeconomic highway to growth. Conventional fiscal and financial instruments and exchange rates apparently have only a very limited effect on resource mobilization, investment, and growth, as Easterly (2005) shows. Very bad political circumstances can lead to macroeconomic policies that depress investment, total factor

productivity (TFP), and growth.⁵ This conclusion is supported by findings based on Bayesian “model-averaging” techniques that show that the imbalances and inflation arising from excessive government spending can affect growth (Durlauf, Kourtellos, and Tan 2008). However, macroeconomic policies of a middling sort do not influence macroeconomic performance. In fact, as Easterly (2005) and Tabellini (2004) both point out, when political institutions are controlled for, the effect of policy on growth is negligible.⁶ Easterly (2005) views growth as a function of history and of shocks. The correlation between per capita incomes in 1960 and 1999 is 0.9, suggesting that a political economy milieu has long-lasting effects and is slow to change. The correlation in growth rates in successive periods for a large sample of countries is almost zero, reinforcing the point that, in the majority of cases, accelerations and decelerations arise from shocks rather than policies. These shocks, writes Rodrik (2007: 38–39), can be quite mild. “Small changes in the background environment can yield a significant increase in economic activity. . . . An attitudinal change on the part of the top political leadership . . . often plays as large a role as the scope of policy reform itself.”

If institutional factors do not stimulate resource mobilization and growth, the state can take the lead in mobilizing savings and enlarging public investment. From the Bank’s standpoint, however, investment by public entities or underwritten by directed financial lending by either state-owned or state-controlled financial institutions is deemed risky or wasteful. Nevertheless, in China, Malaysia, and Singapore, the lion’s share of investment was and is by public entities, and in the Republic of Korea and Taiwan, China, directed investment by public or quasi-public banks largely fueled industrialization.

5. Unfortunately, inefficient policies can persist longer than they should because they generate large benefits for small, influential groups and their costs are diffused in small per capita amounts over larger numbers of people (Dixit 1996: 4).

6. According to Feng (2003), political repression, uncertainty, and instability all impinge on growth. Democracy indirectly affects growth by introducing a predictable process of regime change. Thus, given the weaknesses of economic policies, growth in developing countries not surprisingly was slower during 1980 to 2000 than it was during 1960 to 1980, even though macroeconomic adjustment policies were being used more forcefully in the former period than in the latter. Growth rates of countries have differed widely between 1960 and 2000 irrespective of initial starting points, and past growth has proven to be a surprisingly weak predictor of future growth (Durlauf, Johnson, and Temple 2005).

The perceived difficulty of influencing investment through market incentives and conventional policy instruments has increased the importance attached to TFP, and the preferred path to growth now leads through the garden of “inspiration.” Researchers are coming to the view that over the long haul, TFP is what counts, and TFP grows as a result of technological advances that improve fixed capital through improvements in the quality of human capital and through disembodied progress that floats down like the proverbial manna from heaven (Durlauf, Kourtellos, and Tan 2008; Lipsey and Carlaw 2004; Tabellini 2004; World Bank 2008a).⁷ In mature, industrial, high-income economies with stable or declining rates of investment and very low rates of growth of labor supplies, TFP, however constructed, is visibly the main driver. Raising productivity with the help of institutions and knowledge deepening is becoming the favored approach to growth in middle-income countries as well.

From Machines to Institutions

In light of the false starts and failures in the 1960s and 1970s in much of the developing world (as indicated in several *WDRs* during the 1980s and early 1990s) and with macropolicies not holding out much hope, having turned away from public investment in industrial and directly productive activities, the Bank, in keeping with the current thinking, is looking to institutions and services to help generate sustained growth by boosting TFP. Investment is assumed to be weak or not sufficiently productive because market and nonmarket institutions that promote entrepreneurship and efficiently induce and allocate private investment are missing or frail or slow to mature. Financial systems remain shallow, and too few resources are mobilized and funneled into the right sectors. The risks for entrepreneurs rise above a tolerable level. Market signals are absent or distorted. A variety of supporting services that investors require are not forthcoming. Consequently, “animal spirits” are dampened and investment is suboptimal. The “institution gap–institution drought” story is rich in anecdote,

7. Craft’s reestimation of what caused the spurt in the growth of the British economy from 1780 to 1860 tips the scales in favor of TFP. Of the 0.78 percent per year increase in labor productivity, 0.38 percent was because of TFP. Capital deepening plus TFP accounted for 0.68 percent of the total—not much, but 0.5 percent per year more than the increase from 1700 to 1780 (Crafts 2004b).

example, and sophisticated theorizing. It emphasizes property rights, the enforcement of contractual obligations, market failure and how it can be remedied, missing markets, the role and efficacy of regulation, and the effectiveness of enforcement mechanisms. In brief, the failings of growth are ascribed to weak or missing institutions, which results in lower than desirable levels of savings and investments, misdirection of investment, low returns from capital spending, and capital flight.⁸

When institutions are imported into the growth framework, the story is made richer and more believable, but the task of the policy maker is made no easier. The line running from institutions to outcomes is not straight at all. It can have several branches, as the experience of East Asia makes abundantly clear.⁹ Unappealing political institutions can have good outcomes in terms of human capital development and poverty reduction.

Institutional shortcomings are blamed on stage of development, absence of complementary institutions, ignorance, bad policy, and immaturity of economic thinking (see for instance the 2002 *WDR*).¹⁰ They are blamed on

8. The economics profession has demonstrated a special knack for finding new “failures” and “gaps” and also a remarkable facility for worrying about these for years without alighting on robust and widely applicable solutions. For example, market and coordination failures seemed to require intervention by the state or some institutional remedies, as did idea, object, and information gaps (Romer 1993). However, after government failures became uncomfortably visible in the 1970s, the discipline was forced to walk a fine line and propose smaller, indirect, and better-quality doses of state intervention and regulation. Government failures also discredited industrial targeting, the much dreaded “picking of winners.” Instead, some in the profession are now proposing that governments work with industry to “discover” promising new production activities to diversify into and ensure that these activities are coordinated with other supplementary actions, broadly mimicking the not entirely unblemished Korean experience (Rodrik 2007). Rodrik (2004: 9) writes, “What is involved is ... ‘discovering’ that a certain good, already well established in world markets, can be produced at home at low cost.” Moreover, the height of tariff barriers appears to promote “self-discovery” of new exports because it minimizes competitive pressure. This process of discovery could lead to losses, just as picking winners can, but this possibility has been rationalized as a risk that is attendant on such decisions, whether the government makes them or a businessperson does. In fact, Rodrik (2004) maintains that a government that is not incurring sufficient losses is not taking enough risks. The advantage of balanced growth is being recycled to avoid “coordination problems” as when “profitable new industries can fail to develop unless upstream and downstream investments are coaxed simultaneously” (Rodrik 2004: 13). “Coaxed” can be a euphemism for the visible hand of the government providing subsidies, protection, or venture capital (Rodrik 2004: 11).

9. Among the variables most significantly related to growth, the East Asian dummy is at the forefront. This finding emerges from a Bayesian model-averaging exercise by Sala-i-Martin, Doppelhofer, and Miller (2004).

10. For improving transparency of the judicial system, institutions that maintain statistical databases with information on individualized clearance rates and times to disposition for judges have proven helpful (as in Colombia and Guatemala). Complementary institutions such as strong civil society groups and the media, acting as outside monitors, have often changed the behavior of judges and lawyers in developing countries (for example, Poder Ciudadano in Argentina and the CourtWatch

the stubborn resistance of most institutions to removal or modification. The work of La Porta, López-de-Silanes, and Schleifer (2007) on Anglo-Saxon and continental traditions of law and finance underscores the persistence of entrenched modes of doing things. Now, Acemoglu and Zilibotti (2001) are claiming that growth might be a prisoner of institutions that are linked to colonial conquests, resource endowments, and geographic location. If so, then drafting policies that bear on the making or unmaking of institutions becomes a formidable undertaking unless the meaning of institutions is trivialized to encompass the simple furniture of doing business—institutions for licensing and issuing permits, clearing customs, and so forth.

Instead of relying on fiscal and financial policies to promote investment, growth is now pursued through “institution building” carried out incrementally or in some unbalanced way or, alternatively, institution building that is coordinated along a broad front so that the entire structure is not imperiled by remaining gaps and flaws. The fly in this ointment—it is not a trivial one—is that, except in rather general terms, development economics (as revealed in the 2002 and 2004 *WDRs*, for example) has not come up with a well-articulated theory of institutions suitable for a world populated with heterogeneous economies that have checkered histories¹¹ and are at different stages of development.¹² An attempt to discern whether institutions lead

project established in 1992 in the Philippines by the National Citizens Movement for Free Elections and the Makati Business Club). In Brazil, for example, specialized courts—namely, small claims courts—have halved times to disposition and expanded access to justice. Similarly, the specialized commercial court established in Tanzania cut the average time to disposition from 22 months to 3 months. The presence of such institutions in competition with the formal judicial system is associated with reduced opportunities for corruption. Experience from New Zealand shows that specialized regulatory tribunals are needed to provide sufficient oversight for service providers, given the stage of technological development of the sectors within infrastructure and the reliance by governments on competition authorities to enforce their laws through the court system. Using grounds similar to those on which countries centralize their regulatory authority, groups of states have set up supranational regulatory organizations. For example, the Organization for Eastern Caribbean States created a regional regulator for telecommunications, and in 1995, the countries of the Southern African Development Community formed the Southern African Power Pool to coordinate national-level power production and regulation.

11. Nunn (2008) blames the slow growth of many African countries on the slave trade.

12. Institutions mean different things to different people, and most tend to lump all kinds of rules, regulations, customs, and organizations under the term *institution*. However, as Stiglitz (2000: 3) reminds us, “while it is easy to identify the outcomes of good institutions and to cite examples of institutions which work well and those which do not, it remains far from clear how to go about creating these good institutions. As a result the international community has increasingly resorted to exhortations for good governance in the public and private sector but without correspondingly clear prescriptions of how to achieve that goal in general.” Easterly (2007a) challenges the top-down view of institution development. He maintains that expecting experts to determine the contextually

to growth using Bayesian model averaging (see Hoeting and others 1999) is unable to find a direct relationship, although indirect links through proximate determinants such as macroeconomic policies might well be operative. Durlauf, Kourtellos, and Tan (2008: 338) suggest that the reason others have found a relationship is that “they have often restricted the analysis to (competing) fundamental theories in isolation and used kitchen sink regressions for comparison.”

The 2002 *WDR* offers an assortment of examples of institutions plucked from the four corners of the globe, but individually and collectively these institutions do not amount as yet to a workable framework for achieving sustained growth. Relative to Latin America, for example, and other regions, East Asia remains more regulated, with little change since the beginning of the decade, but it grows robustly. The uneven, long-drawn, and still incomplete efforts of China and India to remove market-unfriendly institutions and replace them with market-compatible institutions coupled with mechanisms for enforcement pose some serious questions. If these two countries can rack up rates of investment and growth that are the envy of the world under the most makeshift of institutional conditions, need other countries more attuned to the market strive after greater perfection? China was growing when it had few if any market institutions; as its institutional structure has strengthened, it has continued growing with investment serving as the principal driver without a clear relationship running from the specifics of institution building to growth.¹³ Latin American countries aggressively reformed their policies and institutions in the 1980s and the 1990s but were not rewarded with growth (Rodrik 2007). Other high-performing countries in East Asia have seen their growth performance flag while their institutions have matured,

appropriate optimal institutions and policy makers to actually implement the recipes they propose is a stretch. Easterly (2007a: 4) thinks that such a view represents the “aid agencies’ agenda for a second generation of institutional reforms.” He points to research done by the Bank showing that land titling has had no effect on investment in agriculture in Africa and in farmers’ access to credit. In Easterly’s view, the only viable approach is the slow grassroots building of institutions through local effort. In a similar vein, Amsden (2007) maintains that each country must find its own path and that external tutoring is rarely helpful.

13. This is not to deny that China’s growth over the past quarter century is undoubtedly the result of its distancing the economy from planning and gradually backing into a market system. But the contorted efforts to establish, for example, that the property rights conferred by the quasi-public ownership of township and village enterprises really did perform the same functions as market-based and legally enforced rights blurs the “institutions” thesis.

albeit slowly. However, all these economies have also witnessed a decline in investment and a partial withdrawal of the state from the forefront of economic decision making.

In attempting to learn from cross-country experience (in particular, the experience of the East Asian economies), *WDRs* published during the 1980s and early 1990s—particularly those on the institutional aspects of industrializing countries—were prone, in the interests of brevity, to simplify. Rarely discussed in any detail is the historical setting, the timing of the development process, and the changing pattern of constraints and incentives that shaped the behavior of market participants and created both a “policy logic” and a “market logic” (Zysman and Doherty 1995: 25). “In identifying policy, actions are in a sense added up, rather than seen as generating interaction that creates a particular dynamic. When distinctions are made (among countries and situations), they are descriptive and not analytic” (Zysman and Doherty 1995: 26). Except for the simplest ones, institutions are difficult to tailor, to embed, and to develop to a functional level. Carpentering institutions is not simply a matter of following rules, because there are no straightforward instructions. Moreover, the strength of institutions grows with time, adaptation, experience, voluntary adherence by those affected, and the efficacy as well as the perceived fairness and accessibility of the mechanisms for enforcement.

Do we need to get institutions “right” first before an economy will begin growing rapidly, and does getting them right mean rising to the level of best practice? This vexed question is a long way from being solved. “For every paper that endorses one kind of institution or policy,” writes Dixit (2007: 137), “one finds another that makes precisely the opposite claim.” He then gives examples of the claims and counterclaims for the role of institutions. That economic growth can create the pressure or preconditions for institutional development, which could then sustain growth, is perhaps easier to believe, given the experience of China, Korea, Singapore, and Vietnam—all countries where a number of supposedly key market institutions began taking shape mostly after growth had gathered momentum. This causality is demonstrated by Paldam and Gundlach (2008), who pit the growth-first argument against the one arguing for the primacy of institutions. As Paldam and Gundlach (2008: 66) observe, “the concept of institutions is *woolly*,” and when Rodrik (2008) talks of “second-best

institutions,” it becomes even more amorphous. He maintains that trying to achieve first-best institutions so as to minimize transaction costs, which the World Bank preaches, ignores country characteristics and the potential interactions of some new institutions with other institutions elsewhere in the system. For example, Rodrik (2008: 4) writes that “an effort to strengthen judicial enforcement can easily do more harm than good in the presence of relational contracting.” He adds that protection and entry barriers that generate rents for incumbents are desirable under some circumstances, because without them the incentives for entrepreneurs to take risks might be too weak. In other words, depending on the experts’ reading of the situation, institutional changes can be delayed, watered down, or modified. No yardstick or blueprint exists in this second-best thinking, only good judgment and pragmatism, or what in East Asia is known as “development with Chinese characteristics.” Anything goes, if it works (Rodrik 2007).¹⁴ When this argument is combined with the long historical view of how institutions arose and their tenacious persistence, all verified with instrumental variables that (occasionally) strain credulity,¹⁵ the institutional approach appears woollier still.

One approach in making institutional reform manageable is to narrow its scope, for example, by defining a number of simple rules that are assumed to be responsible for the “investment climate,” and to trace a path to growth through a process that attempts to correct obstructive rules. The 2005 *WDR* reasons that every economy has a reservoir of entrepreneurs with latent initiatives, but that in many instances, these investors are unable to mobilize resources and are discouraged from setting up a business because of a multitude of land, financial, and labor market frictions and transaction costs, some arising from institutional constraints (Djankov and others 2002). By identifying as many of these deterrents as possible by administering questionnaires to market participants, the Bank

14. Or as Deng Xiaoping memorably phrased it at the Seventh Plenum of the Third Communist Youth League in 1962, “It doesn’t matter whether the cat is yellow or black as long as it catches the mouse.” This old saying from Sichuan province made a profound impression then and has acquired legendary status since (Ming 1994: 4–5).

15. See for example, Albouy (2008) and Bardhan (2005) on a paper by Acemoglu, Johnson, and Robinson (2001) that used mortality rates of European settlers to determine whether they decided to establish resource-extracting institutions (with long and negative echo effects) or to settle in the region.

has sought to provide policy makers with the means of smoothing some of the bumps in the pathway to growth.

That delays in obtaining licenses, acquiring land or loans, hiring and firing workers, and satisfying other administrative or regulatory requirements can depress investment; that corruption raises the costs for business; that rules governing land use, zoning, and labor retrenchment can become seriously obstructive are all plausible problems and can have practical remedies. The call to reduce transaction costs and to lower the hurdles to doing business is coextensive with the discourse on institution building because many of the hurdles to be removed would facilitate entry, market competition, and efficient functioning of a market economy. Some evidence presented in the 2005 *WDR* suggests that a better investment climate stimulates productivity. Indeed, it would be surprising if such ground clearing had no effect.

As with other institutions, however, the magnitude of the effects and their persistence remain open to questions. How much can patient improvement of an economy's plumbing raise the level of investment and the returns from each unit of investment? Can such efforts push growth rates from, say, the 3 to 4 percent norms to the sought-after 7 to 9 percent levels for economies still at an early catch-up stage and then keep them at those levels for two decades? Did Botswana, Chile, China, India, and Mauritius as well as the East Asian economies achieve growth mainly by mending the investment climate and taking the market institution-building route or through what Rodrik (2007: 38–39) denotes as “attitudinal changes” on the part of the leadership? Affirmative responses to the first two questions are hard to find. However, looking ahead one can take the view that in an integrated world economy, the cumulative effect of many relatively minor transaction costs and corruption can diminish the competitiveness of an economy and eat into its potential growth rate. The investment climate story has useful policy content—how much is hard to tell. It continues to underscore the primacy of investment for growth, and it points to previously unacknowledged problems that could reduce investment and the return on investment. Hence, it is a net addition to our understanding of the development process, and on balance it enlarges the scope for policy action. It does not promise higher or more stable growth.

Inspired Growth

The contribution of knowledge to growth is well known,¹⁶ and Arthur Lewis emphasized mass education in his early writings (Lewis 2003; Tignor 2006: 71). It was highlighted for professional economists by Robert Solow in a landmark paper published in 1956.¹⁷ Solow showed that growth was not just a matter of combining capital and labor but drew heavily both on advances in capabilities embodied in human capital and equipment and on those of a disembodied sort. It was only in the early 1990s, however, that knowledge was respectably integrated into growth economics, following the path-breaking work of Lucas (1988) and Romer (1989). They argued that people who are more skilled generate externalities and can raise the productivity of others; in other words, the social returns to education are greater than the private returns (Lange and Topel 2006). As a consequence, the TFP of the economy is increased. The 1998/99 *WDR* helped bring this argument into the policy mainstream. Efforts to raise investment in developing countries with fiscal and financial incentives were not seen to be bearing much fruit, and knowledge offered a worthy alternative means of raising the growth rate. Recall the Internet and information technology (IT) came into bloom in the 1990s, and they were seen as the harbingers of a new economy in which more of the growth impetus could be derived from intangible sources—in particular, advances in knowledge, new forms of organization, and new ways of doing business—and from a vast range of IT-based services requiring minimal inputs of physical capital.

Now that capital is being nudged imperceptibly into the background and growth is all about TFP, the foreground of growth economics is filling with variables serving as proxies for institutions or representing knowledge in one form or the other, such as human capital, research capital, research and development (R&D) spending, and IT spending. The 1998/99 *WDR* and the 2007 *WDR*, for example, sketch a future in which knowledge and human capital development could be the mainsprings of growth and poverty reduction.

16. Van Ark, Mahony, and Timmer (2008) estimate that Europe's slower pace of knowledge development explains the persisting and widening gap in productivity between Europe and the United States.

17. See Helpman (2004) and Warsh (2006) for lucid accounts of the role of technology and knowledge in growth.

Knowledge development is a capacious concept that is variously unpacked. The essential ingredient is human capital, measured by years of schooling; its quality; and the share of science, engineering, and math skills. It also includes spending on R&D and tertiary education in general, the outlay on IT capital, and the infrastructure of a national innovation system. Especially in the context of developing countries, knowledge development extends to institutions that promote the dissemination and trading of information, institutions that give rise to technology markets and address the problems of information asymmetry, and the “public good” nature of information.

The significance assigned to human capital is in tune with the Bank’s objective of reducing poverty and income disparities.¹⁸ Growth of per capita gross domestic product (GDP), associated with a rising stock of human capital, is a two-pronged approach to tackling poverty and income inequalities. With more human capital of better quality, countries, in theory, will find catching up to and closing productivity gaps easier and will thus make progress toward equalizing earnings.

The human capital-intensive, knowledge-based development strategy could be an avenue to shortening or skipping the stage of early and

18. Studies showing high private and social returns to primary and secondary education in low-income countries (Psacharopoulos and Patrinos 2002) and handsome returns also to health interventions such as immunization and better early childhood nutrition support the efficacy of policies that add to the human capital of the poor. Moreover, the returns to higher education appear to be perking upward as technology becomes more skill intensive (Boarini and Strauss 2007; Lutz, Cuaresma, and Sanderson 2008; Psacharopoulos 2006; Topel 1999), but these findings have not been fully validated by macrolevel research showing that human capital enhances growth performance. In fact, Benhabib and Spiegel (1994), Bils and Klenow (2000), and Pritchett (2001), do not find such a relationship. More recent studies are showing that the quality of secondary schooling affects growth (Hanushek and Woessmann 2007), and better data averaged over longer periods are beginning to reveal the desired relationships (Boarini and Strauss 2007; Lutz, Cuaresma, and Sanderson 2008). However, Pritchett (2006) is skeptical. He observes that growth of the leading Organisation for Economic Co-operation and Development countries has been stable over long periods even though schooling levels have increased massively. Schooling levels have also risen enormously in developing countries without this change showing up in the growth statistics. Pritchett (2006) sees no evidence that the evolution and dynamic of schooling affect growth, and he finds no evidence of excess social returns to schooling. He believes either that the relationship between quality and growth is picking up the effects of an omitted variable or that high test score results are correlated with a country’s institutional quality. Pritchett concludes that the investment in education stems from its being a merit good and from the belief that it generates externalities whether or not the belief can be validated. The Commission on Growth and Development (2008), while supporting the case for investment in education and human capital, also equivocates about presenting evidence on the relationship between human capital and growth. And simulations done by Ashraf, Lester, and Weil (2008) suggest that improvements in health lead to minimal gains in per capita incomes. Their findings are vigorously challenged by Bleakley (2008), and the debate continues.

low-value-adding industrialization for some countries, based on their natural resource endowment.¹⁹ Accumulating human capital does not, however, obviate the need to (a) increase rates of investment (as noted previously) and (b) build the physical infrastructure and, in most instances, the manufacturing capacity associated in the past with economic modernization and growth. In fact, the two are complements. The great upsurge of IT-based services; the large gains in the productivity of U.S. service providers in sectors such as finance, retailing, and logistics; and India's recent success in building a thriving export industry based on IT have encouraged some to think of growth options for developing countries that do not entail the time-consuming and capital-intensive creation of a manufacturing industry and its supporting infrastructure. In this model, a kind of "weightless" growth derives from human capital and entrepreneurship that gives rise to numerous small-scale and productive activities (Coyle 1998; Quah 1999). Such a model might be feasible for some smaller economies, such as an Ireland, a Mauritius, or a Singapore, but is unlikely to work for larger countries. Even in the cases of Mauritius and Singapore, the current prosperity is mainly the outcome of success at manufacturing, and only in the past decade has the contribution of services to growth become sizable. In Singapore, the investment in state-of-the-art infrastructure has been critical to success. Past experience with productivity growth in most services argues for caution, as pointed out by Baumol and Bowen (1966) and reaffirmed by Nordhaus (2008). Productivity in many services has grown slowly; value added can be low, which can worsen income inequality; and export prospects for many developing countries are limited. Thus far, neither advanced countries nor developing countries appear able to forsake manufacturing and to expect to prosper (Dasgupta and Singh 2005; Nicholas 2005).²⁰

19. For example, countries can have different opportunity sets depending on whether they have abundant forestry resources or abundant mineral resources, according to Álvarez and Fuentes (2005).

20. Observing the vanishing of manufacturing activities in the United Kingdom, Sir John Rose (2008: 9), chief executive officer of Rolls Royce, reminds policy makers: "High value added manufacturing brings huge benefits. It penetrates the economy of the whole country rather than London or just the Southeast. It pays well but avoids bewildering distortions of income; it drives and enables a broad range of skills; it demands and supports a wide supply chain and it adds value and creates wealth."

The relative neglect of industrialization in the 2005 *WDR*²¹ and the near-exclusive focus on services delivery, institutions, and building of human capital to rid the world of poverty are debatable. Building industrial capabilities and thus multiplying well-paid jobs in industry benefits from a lowering of entry barriers and transaction costs. It benefits from better governance and openness. But industrial capabilities increasingly require a mix of incentive policies aimed at the several components of the national innovation system; the provision of risk capital from the state to catalyze the formation of high-tech industrial cum services clusters (in particular, the coalescing of suppliers and the orchestrating of innovations) in key urban centers; and financing together with regulation to raise the quality of the urban, transport, and telecommunication infrastructures (Gómez-Ibáñez 2006; Hayami 2003; Sutton 2000). The 1998/99 *WDR* made a first pass at the national innovation system, the 1994 *WDR* tackled infrastructure, and the 2009 *WDR* examines spatial issues. However, these issues need to be yoked together with industrial development instead of being dealt with piecemeal.²²

As previously noted, the most successful economies of the current decade are certainly leveraging knowledge capital as swiftly as they can; however, they are also accumulating physical capital and pouring it into industry at a feverish pace. China and India are deriving a significant share of their growth from TFP,²³ but capital is still the most important source of growth. Moreover, much of the gains in TFP are coming

21. The 2005 *WDR* conventionally views industrialization as a process of discovery and warns against targeting.

22. Unfortunately, empirical realities are unfolding in developing countries in a way at odds with the way economics would lead us to think that they should. Technology diffusion, increasing stocks of human capital, expanding domestic markets for goods and finance, and an integrating global economy should all lead to rising returns to physical capital and a coalescence of returns across firms. But as Banerjee and Duflo (2004: 10, 11) find otherwise. Returns demonstrate wide dispersion, and the average of the marginal rates of return is not very high—not much higher than the 9 percent or so that is the usual estimate for the average stock market return in the United States. Economics and common sense would lead us to believe that the return to education ought to be higher in developing countries than in developed countries because human capital is scarcer in the less developed parts of the world. Again, we would be wrong on both counts. To quote Banerjee and Duflo (2004: 12), “The returns to education ... range from 6.9 percent for the country with the lowest education level to 10.1 percent for the country with the highest education level. This is a small range. There is, therefore, no *prima facie* evidence that returns to education are much higher when education is lower, although the relationship is indeed negative.”

23. From 1993 to 2004, the estimate for China is 4 percent and for India, 2.3 percent per annum (see Bosworth and Collins 2007). Other estimates, for example, by Kuijs (2006) are somewhat lower.

from the transfer of labor to the newly emerging or expanding cities—voracious users of capital—and technology embodied in (imported) production equipment (Bosworth and Collins 2007). Durlauf, Kourtellos, and Tan (2008: 344) conclude from their review of old and new models that the new growth theories account for less than 1 percent of the total variation in growth of income per capita. Physical capital accumulation accounts for 40 percent. This is the traditional model of development—with a larger role for market forces, but recognizably akin to the conventional wisdom of the 1970s. Whether policy making has been enriched by the research on knowledge and human capital is an open question.

Resource Balances and Capital Flows

The 1980s and a part of the 1990s were a time of domestic resource imbalances that were mirrored by current account deficits and mounting external debts. The Bank's response in the 1981, 1985, and later *WDRs* was to call for adjustment, which involved an increase in revenue effort by mobilizing financial resources through a deepening of the banking system, a strengthening of regulatory and governance-related institutions to enhance efficiency, and an easing of restraints on overseas capital flows.

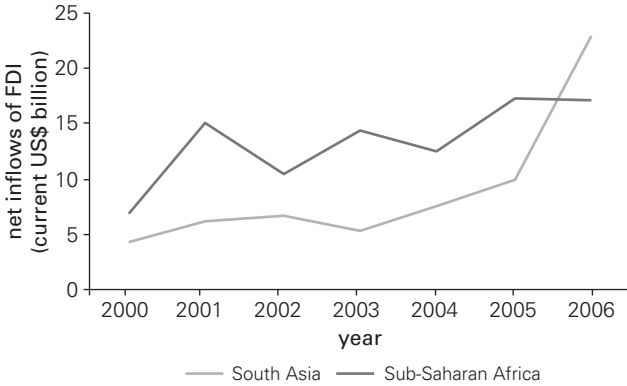
The issues of resource equilibrium and adjustment have faded from the *WDRs* because of several developments. First, a perception exists that the capital intensity of growth is on a decline. Certainly middle-income countries are investing less, but they are also growing more slowly. Whether incremental capital-output ratios will trend downward in low-income countries remains to be established. Second, because of the expansion of trade from 2003 to 2007, many developing countries have been less pressed for resources.²⁴ The substantial increase in foreign direct investment (FDI) and in the flow of private portfolio capital to countries in South Asia and Sub-Saharan Africa has eased resource constraints in the two regions that were previously short of capital (table 3.1 and figure 3.1). This situation has reinforced debt-forgiveness deals that have attempted to reduce the burden of past accumulated external obligations on some of the poorest countries.

24. An associated—and surprising—factor is that investment rates in developing countries are not spiraling upward. The global pool of savings is large and growing, but profitable opportunities to invest those savings are not.

Table 3.1: Net Foreign Direct Investment in South Asia and Sub-Saharan Africa, 2000–06

Region	Net FDI (current US\$ billion)						
	2000	2001	2002	2003	2004	2005	2006
South Asia	4.4	6.1	6.7	5.4	7.6	10.0	22.9
Sub-Saharan Africa	6.8	15.1	10.5	14.4	12.5	17.3	17.1

Source: World Development Indicators database.

Figure 3.1: Net foreign direct investment in South Asia and Sub-Saharan Africa, 2000–06

Source: World Development Indicators database.

Third, developing countries, including the economies of Sub-Saharan Africa, grew faster—at 5 to 6 percent annually on average from 2000 to 2007—helped in no small part by strengthening demand for their resource-based products. This phenomenon is relatively recent and may prove short-lived;²⁵ however, it is a welcome break after the doldrums of the 1970s on through the early 1990s and the brief spell of international panic that erupted when the East Asian crisis of 1997 and 1998 threatened to paralyze several icons of the developing world.

Fourth, techniques of adjustment and achieving resource balances are now a part of the common parlance (and the *WDRs* have assisted in making them so) and are being put into practice with varying degrees of success across the developing world. Some countries continue to perform

25. Should the resource-led boom resume once the world economy recovers its stride after 2008, the resource-rich countries of Sub-Saharan Africa will also have to show greater agility in sidestepping the “resource curse,” which has dampened growth in the past.

below par mainly because of poor governance, but most are reaping the benefits from the adjustment efforts that gathered momentum in the 1990s. The medicine administered to troubled economies, which later came to be known as the “Washington Consensus” (and which appeared piecemeal in *WDRs* starting with the 1981 *WDR*), was surely painful because it curbed demand, affected governments’ ability to finance a variety of activities, and opened economies to trade and capital flows. With the benefit of hindsight, however, it may have helped set the stage for greater macroeconomic stability in the industrializing countries during the past decade. The Washington Consensus comprised 10 reform items.²⁶ Some of them, when appropriately tailored, were sensible candidates for a reform package in the 1980s. Fiscal discipline, public expenditures that were growth promoting, a buoyant and broad-based tax system, secure property rights, and deregulation of some entry barriers administered the best medicine that economics could offer at that time to countries plagued with macroeconomic instability. More controversial were liberalization of interest rates, maintenance of competitive exchange rates, trade liberalization, opening of the capital account, and privatization. The controversy revolved around how these last were administered and their sequencing. Dogmatically applied, they could cause more harm than good, and critics of the Washington Consensus frequently complained more about the dogmatic one-size-fits-all approach of the World Bank, which appeared to mirror the agenda of major shareholders, than about the utility of the instruments.

For countries whose development policies relied on financial repression, rapid liberalization of interest rates was unwelcome advice. The political economy of exchange rate policy also generated resistance to change. With the benefit of hindsight, privatization has contributed to efficiency and profitability, but for many countries—especially the transition economies unprepared for a wholesale transfer of assets—the costs of some types of privatization were high and deeply resented. An opening of the capital account was widely resisted and associated with pressures from financial institutions in the United States. Again, with the benefit of hindsight and

26. See John Williamson (2003) for the original 10 policy guidelines and how they have morphed following intensive debates, which are puzzling in view of the limited and uncertain effects of policies on key target variables.

the distressing experience of the East Asian crisis of 1997 and 1998, we see that the dismantling of capital controls, after regulatory checks on the banking system and rules providing shareholder protection among others are in place, does more good than harm. A summary of the evidence by Jeffrey Frankel (2003/04) and papers by Gourinchas and Jeanne (2003) and Klein (2003) point to modest gains overall, more for middle-income countries with a mature infrastructure than for low-income ones.²⁷ Even a reappraisal of the effects of capital controls in Chile and Malaysia during 1997 and 1998 suggests that the two countries derived scant advantage, and in Malaysia, controls might have facilitated rent seeking (Corbo and Hernández 2006; Johnson and Mitton 2001; Johnson and others 2006; Prasad and Rajan 2007).

These outcomes leave trade liberalization, about which the consensus is that on average it promoted efficiency and growth, although the reallocation of resources once trade barriers come down imposes costs on those who stand to lose protection.²⁸ The case for protection as one strand of an industrial strategy to acquire comparative advantage remains unsettled.

The Washington Consensus became a lightning rod for criticism in the 1990s because the pain caused by undifferentiated doses of medicine administered to countries in distress outweighed the short-term gains. If anything, adjustment policies worsened poverty and income distribution. However, macrostability and openness that began accruing from 1995 to

27. As several of the leading economies endure one of the worst financial crises in a generation during 2008, a glance backward over past crises indicates that banking crises are correlated with greater capital mobility (Reinhart and Rogoff 2008) and with financial innovation that increases leverage (Bordo 2007). See Felton and Reinhart (2008) for a potpourri of interesting analytical and admirably brief articles on the recent crisis; and Eichengreen and Baldwin (2008) for a first of what will undoubtedly be many rounds of suggestions on how to resolve the crisis and to minimize the damage. For lighter and equally absorbing fare, see Morris (2008). The above-mentioned findings strengthen the argument for better regulation prior to liberation, except that regulation is always playing catch-up; regulators seem chronically unable to cope with the challenges posed by openness and innovation; and financial entities, because of herding behavior and moral hazard, seem not disposed to learn from past mistakes.

28. A robust relationship running from trade to growth has eluded economists; nonetheless, tireless econometric effort has yielded enough consoling evidence of gains in productivity and growth deriving from trade. See the surveys by Kneller, Morgan, and Kanchanahatakij (2008); López (2005); and Winters (2004). As Winters (2004: F18) observes, after putting all the evidence to date through the wringer, one emerges with a “strong presumption that trade liberalization contributes positively to economic performance.” López comes to broadly the same conclusion after taking into account evidence that the more productive firms become exporters—and it is not exporting that makes them more productive.

2007 allow us to look back at the policy recipes retailed by the *WDRs* of the 1980s and the first half of the 1990s in a more positive light. Some useful lessons were learned, and the *WDRs* certainly helped stir debate by spelling out the mainstream thinking and the policies. From this debate has come a more nuanced reading of the Washington Consensus policies, their adaptation and calibration for a variety of situations, and the desirability of prior or parallel institutional developments to maximize the net gains from liberalizing the economy and downsizing the public sector (Williamson 2003). The financial crisis that began in 2007 and 2008 will inform us whether progress of a sort was achieved.²⁹

Serious adjustment problems with global implications directly confront one or two of the advanced countries, but a significant slowing of the world economy and high energy and food prices could give rise to or worsen adjustment problems in a number of African, Latin American, and Asian economies. The messages of the *WDRs* (from the 1980s and 1999/2000) on adjustment, finance, public finance, and trade defined good practice that has largely stood the test of time. The broad principles remain unchanged. Research following the East Asian crisis of 1997 and 1998 added to the literature on shocks and quizzed the role of contractionary monetary policies, but its contribution to policy making is less obvious because, as we are discovering in the case of the United States, public agencies are too often ill equipped to monitor and regulate complex markets where innovation is proceeding apace, to forecast problems, and to make timely interventions. In most developing countries, only very straightforward innovations in the financial sphere and the sphere of public finance can be productively implemented and regulated.

29. The crisis, triggered by the collapse of the subprime mortgage sector in the United States, has revealed the continuing inability to anticipate financial and banking shocks (Schroeder 2008) and to identify bubbles at an early enough stage—Robert Shiller is among the few who pointed to the growing housing bubble in the United States (Shiller 2005)—and the reluctance of monetary authorities to nip a boom by means of precautionary credit, interest rate, and regulatory policies that could contain innovations and slow growth and would be politically unpopular. The response to the crisis also shows that the instruments available are few, are slow acting, and when used indiscriminately can store problems for the future. Whether fiscal policy can do better is also questionable: most countries have limited budgetary flexibility; however, western countries have demonstrated considerable aggressiveness in deploying budgetary resources to combat the financial crisis in 2008. What will remain of the Washington Consensus, and what kind of new pragmatic consensus emerges, only time will tell.

The Role of the State

The 1980s saw the beginning of a long, slow retreat from highly interventionist state, a large public sector, and a relatively closed economy. The *WDRs* in the 1990s (for example, 1991, 1996, and 1997) drove home the message that market institutions and the forces of competition would be far more effective in allocating resources. Building on the *WDRs* of the 1980s, they argued that a market-guided economy that was more open to trade and to international capital flows would have superior growth prospects.

Following the start of denationalization in Europe in 1985, a shrinkage of the public sector became an integral part of the message on the state, because state-owned or state-controlled assets were viewed as performing less efficiently and less profitably than privately controlled assets, whether in industry, in banking, or in public utilities. The issue of privatization took on much greater urgency after the dismantling of the Berlin Wall confronted the Bank with a major challenge: what position to adopt on the speed and extent of denationalization now that the forces of the market system had apparently carried the day? The Bank embraced privatization as a necessary step for countries seeking the advantages of a market-based system but hedged its bets on the scope and speed of privatization and with respect to the necessary conditions for it to be a success. Instead of a Big Bang, the Bank favored a phased process, starting with smaller manufacturing enterprises that could be easily privatized and following with the larger ones as and when capacity emerged. However, the Bank did urge against long delay that could undermine support for denationalization and dilute the benefits. Advantages also existed in privatizing the banking system (and introducing foreign investment into the sector), the utilities, and some of the natural monopolies. In those cases, however, positive longer-term outcomes in terms of investment, efficiency, and quality of services were linked to creating an effective regulatory infrastructure; receiving an infusion of capital, technologies, and management from foreign strategic investors; and building up local experience with managing these complex entities.³⁰

30. As the experience with privatized entities has lengthened, the difficulties of effectively regulating prices and quality of services have become more apparent, and the enthusiasm for privatization has been tempered even in the pioneering industrial economies such as the United Kingdom (Kay 2002; Köthenbürger, Sinn, and Whalley 2006; “Special Report: Privatisation in Europe” 2002).

Few had anticipated how messy privatization in the transition economies would be and how uneven the outcomes. Sales to insiders at low prices, asset stripping, and “tunneling” diverted many of the state assets into well-connected hands with long-term consequences for income and asset distributions. Weak managerial capabilities, limited competition, and ineffectual regulation all conspired to limit the anticipated improvements. And inevitably, resistance from vested interests and the absence of credible private buyers meant that many assets remained in the public sector, as for instance, in China, Russia, and other Commonwealth of Independent States countries. On balance—and especially with respect to manufacturing enterprises—privatization was and is a sound idea. Its scope, pacing, and regulation were not well understood in the 1990s. The risks were underestimated, and the challenges of creating a workable regulatory infrastructure confounded newly formed governments and their foreign advisers. The obstacles to creating autonomous and effective regulation have proven to be highly recalcitrant in both developing and developed countries, and the experience with privatized utilities is definitely mixed. No one maintains, however, that the counterfactual—that is, a continuation of the old nationalized system—would have been superior to the partial privatization that ensued.

In reaction to the experience with stalled or misdirected industrialization in the 1960s and 1970s, the *WDRs* on adjustment in the 1980s and on the role of the state in the 1990s stoutly cautioned against industrial policies, at times airbrushing the actions of East Asia’s fast developers. The state, argued the Bank, needed to manage the development effort and create a “conductive” macroeconomic and institutional environment, but policy needed to be pursued with the help of market-friendly or market-conforming policies (or, more recently, as a process of discovery). Picking industrial winners and assisting them with targeted incentives was strongly opposed because of the risk that the chosen industries could turn out to be losers and resist closure (then and more recently in the 2005 *WDR*).

In taking a stand against industrial policies, the Bank chose to interpret the “East Asian miracle” as a triumph of market-conforming industrial policies that were continually tested by exposure to international competition through liberalizing trade policies, allowing weak performers to

fail.³¹ Korea, Singapore, and Taiwan, China, were all depicted as pursuing market-friendly approaches consistent with the lowering of the state's policy-making profile.³² Through such interpretation, the Bank enlisted the success of East Asian economies to the cause of market-led development, and the *WDRs* attempted to forge a coexistence between a strong development state and a vigorous market economy. The later emphasis on transactional costs and on institutions was part and parcel of the effort to establish the case for few and streamlined regulations, effective market institutions, and accountable administrative infrastructures as the foundations of a fast-growing economy. The role of the state was to create these, to ensure their smooth functioning through timely interventions and enforcement mechanisms, and to supply those services that the market was unable to provide. The state so depicted was there to serve and complement the market; it was not a powerful entity that managed and directed markets. Instead of defining the role of the state, the *WDRs* sought to expand the role and significance of markets and to firmly tether this role to institutions. To have assisted in bringing institutions to the center of the discourse on development policy is no mean achievement. We need to be clear, however, that what we now know about the making, the working, and the effectiveness of institutions in promoting growth, reducing poverty, and distributing the benefits relatively evenly is difficult to translate into effective policy instruments that can be put to good use in a variety of developing countries.

31. Such a willingness to withdraw support from industries that proved to be unprofitable is not borne out from a review of the experience of the East Asian tiger economies. Korea, for example, did not abandon a single major industry, with the possible exceptions of copper smelting and fertilizer, despite losses incurred over a decade and more. Other East Asian economies have also not shown a readiness to cease supporting their ailing industries. The desirability of the state taking a proactive role in promoting industrialization using directed credit and protection is the theme of books by Chang (2007) and Kozul-Wright and Rayment (2008), who draw attention to the reliance on such policies by western countries at earlier stages of their own development.

32. Hsiao and Hsiao (2003) and Kohli (2004) remind us that both Korea and Taiwan, China, had achieved rates of per capita GDP second only to those of Japan in the late 1930s. Hence, the recovery and resumption of growth in the 1950s and 1960s was foreshadowed by institutional and human capital potential already partly in place, as in pre-World War II Japan and Germany. As Kohli (2004: 5) describes it, "during the 1930s and well into the Second World War, Korea underwent very rapid industrialization." This largely state-sponsored effort, which focused on engineering and chemical industries, extended a base of light industries that had begun to gel in the 1920s. Although the Japanese colonial authorities and firms supplied much of the impetus, Korean business groups emerged and participated in this process. Some of these groups, again under government tutelage, later morphed into the *chaebol* of the 1960s, including leading firms such as Samsung and Hyundai.

Reducing Poverty

As long as the magnitude of poverty was uncertain and the trickling down of growth was conveniently assumed to be enough to enable the poor to rise out of poverty, the focus was on maximizing growth—a demanding task in itself. Once the Bank undertook the task of measuring poverty and made the elimination of absolute poverty its primary mission and ethical responsibility, almost every *WDR* since 1990 has attempted to identify avenues for reducing poverty and to multiply the number of dedicated policy instruments in the policy toolkit. Poverty reduction should not depend only on whether a country was growing fast or not. Meanwhile, counting the poor and measuring the depth and dynamics of poverty has grown into an ambitious multicountry activity pursued through detailed surveys. The Human Development Index constructed by the United Nations Development Programme for its *Human Development Report* has provided another yardstick for assessing the human condition, and many specialized papers have refined the measures of poverty yet further. Adding the reduction of inequality to the poverty agenda has enlarged the scope of what needs to be accomplished but unfortunately does not augment the policy toolkit.

A related reason for looking more closely at the microlevel is that the data-collecting efforts that gathered momentum in the 1980s and 1990s produced household panel data that made possible analysis of the plight of individual units and assessment of the dynamics of poverty. These data suggest that households affected by shocks have difficulty growing out of poverty, that unequal distribution of income and assets weakened the effects of GDP growth on the poor, and that inequality would, in turn, begin to hold back growth (Kanbur and Vines 2000). The possibility that inequality could exert a negative feedback effect on growth apart from interfering with the distribution of the benefits, if it has validity, strengthens the case for remedial policies. Although the 2006 *WDR* maintains that higher inequality can constrain future prosperity, the matter is by no means settled. Theoretical arguments aside, the practicalities of testing lead, as always, to some findings that support and others that contradict this view (Banerjee and Duflo 2003; Easterly 2007b; Kanbur 2000). Meanwhile, as Kanbur (2000) observes, the objectives of growth and equity are not being jointly realized as was hoped; instead, many countries show signs of greater divergence.

Ad hoc efforts to meet the basic needs of the poor, which were popular in the late 1970s and early 1980s and noted in the 1980 *WDR*, soon fell from favor. Since then, *WDRs* have attacked poverty from different directions, trying to construct an effective but pro-poor development strategy.

Today it is a truism that faster growth derived from trade policies, financial deepening, better infrastructure, and industrial or agricultural development will most likely benefit the poor. This was conventional wisdom already in the 1970s. What the *WDRs* did was add detail and emphasize the gains to be derived from reinforcing the effects of growth with social policies (see Ravallion 2001 and 2002). They made clear that rural roads could improve the lot of poor farmers and that rural poverty could be reduced by adjusting prices of agricultural products and inputs, by introducing new technologies, by improving water management, and by enhancing access of small farmers to credit. These instruments are reliable and have been in use for decades, but they have not eradicated poverty. Even the thinning of the rural population as millions have migrated to cities has left large pockets of poverty in many countries. Furthermore, some poverty is migrating to cities, most notably in Latin America (Ravallion and Chen 2007). Moreover, a deteriorating distribution of income in many developing countries has partially negated the gains from GDP growth for the poor.

The pro-poor policy innovations proposed in the *WDRs* can be grouped under four categories: services, safety nets, distributive measures, and participatory schemes that are inclusive and give the poor voice. Policies to control population growth, which were actively pursued in the 1960s and 1970s, faded from the *WDRs* after the 1984 report.

Poverty would fall faster and the distribution of income would become less skewed if the volume and quality of human capital could be raised. In the parlance of the 2004 and 2007 *WDRs*, this desideratum translates into giving the poor better access to education and health services, in particular, along with other services that make younger people more mobile and employable. How it can be done through public or private providers—especially the latter, in light of government failures—is explored at great length with copious examples. The *WDRs* have emphasized how to deliver services, how to finance them, and how to make service providers accountable through monitoring and competition. These process issues occupy acres of space in the recent *WDRs*. Instances of success exist, as well as a number of proposals for improving incentives for providers and for strengthening

accountability, but there are no dependable and widely applicable solutions. The rules governing center and local financing of services through user fees and assignment of fiscal responsibilities between different levels are well known (and widely neglected). Community participation and monitoring of providers, which became popular starting about a decade and a half ago, seemed to be a solution, but it works very fitfully. Moreover, most developing countries are far from perfecting the techniques for achieving high-quality services by introducing competition between public and private providers and by providing regulatory oversight. From the limited evidence on the effect of safety nets such as conditional cash transfer programs (in the 2006 *WDR*), these programs have generally performed well, both in terms of targeting and reducing poverty, in Bangladesh, Chile, Honduras, Nicaragua, and Mexico. On average, the share of program benefits going to the bottom 40 percent of the population was 81 percent (World Bank 2005: 153). As for poverty, communities covered by Mexico's PROGRESA (Programa de Educación, Salud y Alimentación) experienced declines of 17.4 percent in the incidence of poverty compared with the control group. However, in Brazil only a small reduction in the poverty index (1 percentage point) is expected from the federal Bolsa Escola program because of the simulated loss in labor income of children.³³

The *WDRs* have added to our knowledge of what has worked where and have enriched our understanding of why so many countries continue to flounder and to waste resources. Countries have not been standing still. In fact, ceaseless experimentation takes place, but progress (aided by impact evaluation studies) in speeding up the process of poverty reduction through better services to build human capital has been slow. The research

33. Depending on the overall cost of the program, this reduction in the poverty index need not be seen as insignificant (that is, the benefit-cost ratio might prove to be attractive). See Ferreira, Leite, and Ravallion (2007) on the relative contributions of growth, lower inflation, and social programs to poverty reduction in Brazil. Needs-based cash transfers discussed in the 2006 *WDR* have been shown to be fairly accurate in Latin America, where countries used a proxy means test (easily observable indicators of income). In other low-income regions, community-based systems have worked well in fairly homogeneous rural communities of Albania, Bangladesh, Ethiopia, Indonesia, Uganda, and Uzbekistan (World Bank 2005: 151). Chile's Puente program and Bangladesh's Income Generation for Vulnerable Group Development Program (run by the Bangladesh Rural Advancement Committee) have been effective in terms of targeting and removing disincentives to "graduate." Most other programs, such as public works, contributory pension, and social pension schemes, run into the problems of forgone earnings, low coverage, and cost-effectiveness. For example, evidence from various countries implementing large social pension schemes indicated that the costs were 1 to 2 percent of GDP (World Bank 2005: 154).

on improving education quality has revealed how weak the effects of classroom size, facilities, and textbooks are and how hard it is to incentivize teachers. Public health services work best when there are “silver bullets,” such as clean water, sanitation, a new vaccine or medical prophylactic, or bed nets, but delivering good medical services—especially for increasingly prevalent chronic diseases—is an immense headache. These problems were described by the 1993 *WDR*.³⁴ If people are living longer and healthier lives, that is mainly because of better nutrition, cleaner water, a better urban environment, and rising education.

Safety nets—whether these are crop insurance schemes, pensions, food subsidies, or income supports for the poor—have been examined in the *WDRs*, and again, the added value comes from many examples and a steady accretion of research findings that inform the student and the specialist. They do not necessarily ease the policy maker’s life. Designing and implementing cost-effective and fiscally supportable safety nets have proven to be a big test for governments. Given the scale of poverty in many low-income countries, only relatively frugal safety nets can be put in place, which are invariably insufficient. The simple arithmetic of fiscal cost is often at the root of partial failure, not sloppy design or crass inability to implement, although leakages and slippages in intervention are not trivial concerns.

Reading the *WDRs* encourages one to believe that much can be done to whittle down poverty and to improve distribution. The abundance of examples is certainly informative and encouraging. But poverty is most likely to retreat and to stay down when economies grow fast.³⁵ If growth

34. For example, the 1993 *WDR* pointed out that the Expanded Program on Immunization, which at that time protected about 80 percent of the children in the developing world against six major diseases (including tuberculosis, measles, and diphtheria), should ideally cover 95 percent of all children. Including micronutrient supplementation such as vitamin A and iodine would enhance the effectiveness of the vaccination programs. School-based health services designed to treat children affected with intestinal worm infections and micronutrient deficiencies through distribution of medications and supplements and that provide health education at the same time were estimated to cost US\$1 to US\$2 per child per year (World Bank 1993).

35. Son and Kakwani’s (2008) efforts to determine whether “growth spells” from 1984 to 2001 were pro-poor (that is, poverty reducing) come to disappointing conclusions. They find that per capita income growth was positive in only 131 (55 percent) of the 237 growth spells they studied, and growth was pro-poor in 55 of these, or in 23 percent of the cases overall. It was anti-poor in 32 percent of the cases overall. Moreover, they find that only the variations in inflation affected whether growth was pro-poor or anti-poor. The share of agriculture in GDP, the extent of openness to trade, and the rule of law did not seem to influence pro-poor growth. In their schema, *growth spells* refers to the periods of time spanning two successive household surveys for a given country. However, see Ravallion (2004) on Kakwani’s definition of pro-poor growth.

is slow, services and safety nets are not a substitute and become difficult to finance. In theory, human capital building, tax and transfer schemes, the changing sectoral composition of the economy, and greater productivity should all lead to a more even income distribution. In fact, income distributions are responding slowly, if at all, to policies and structural changes, and in some countries, they are becoming more skewed.

In his 1988 State of the Union address, President Ronald Reagan declared to his audience, “Some years ago the federal government declared war on poverty, and poverty won. Today the federal government has 59 major welfare programs and spends more than a \$100 billion a year on them. What has all this money done?”³⁶ This is the kind of question aid-giving agencies are having to field. Poverty is not winning, but it is far from being eradicated. Moreover, official development assistance (ODA) and the advice on development policy that has come with it appear not to have measurably affected the overall performance of economies. Between 1981 and 2004, the number of people living on less than US\$1 per day declined annually by 17 million. A drop of close to 200 million in the early 1980s was largely because agricultural reforms in China substantially raised household incomes (Chen and Ravallion 2007). By 2005, an estimated 1.4 billion people were subsisting on less than US\$1.25, with 162 million ultrapoor living on less than 50 cents per day, mainly in Sub-Saharan Africa (A. Ahmed and others 2008; Chen and Ravallion 2008). At the current rate of change, projecting into the future indicates that 800 million people will be living on less than US\$1 per day in 2015—the target date for achieving the Millennium Development Goals—and 2.8 billion living on under US\$2 per day (Chen and Ravallion 2007).³⁷

36. In defense of President Lyndon B. Johnson, who initiated the “War on Poverty” and the Great Society programs, Joseph Califano (2008) notes that when Johnson came to office, 22.2 percent of Americans lived in poverty. By the time he left, this percentage had fallen to 13 percent. The 1960s were a period of rapid growth, and poverty was declining sharply from 22.4 percent in 1959 to about 20 percent in 1963. This decline continued until 1973, when a low point of 11.1 percent was reached. Poverty rebounded in the latter part of the 1970s and reached 15.1 percent in 1983. It fell thereafter but was still 12.8 percent when President Reagan made his speech (Hoynes, Page, and Stevens 2005; Mangum, Mangum, and Sum 2003).

37. New purchasing power parity data for China and a revision of the US\$1 a day poverty line finds an additional 133 million people living in poverty in 2005 when consumption per person is used and an additional 64 million if income is used (Chen and Ravallion 2008).

Aid and Growth

If the principal mission of the World Bank is to try to rid the world of poverty, then the principal instrument it has is resource transfers. Advice on good policies through the *WDRs* or other channels is the icing on the cake. Development assistance can make a difference to the lives of people in low-income countries in many ways, and the *WDRs* are replete with examples of successful projects and myriad beneficial interventions financed by aid programs. However, one inconvenient fact cannot be wished away. Unless development assistance from the World Bank and other donors stimulates growth, its effects on poverty and standards of living will be meager. From early in the history of the *WDRs*, this issue was noted and discussed, but not much evidence was presented. Resource transfers were assumed to be growth enhancing. Unfortunately, this assumption does not appear to be true. The findings from several score papers overwhelmingly point to a nonexistent, weak, or negative relationship between ODA and growth in recipient countries. Even the finding that aid to countries pursuing good policies raised growth has proven to be very precariously pegged to a specific time period and a specific sample of countries. Change these factors, and the relationship disappears or becomes insignificant.

One measure of the utility of the knowledge encompassed by the shelf of *WDRs* is how it affects the quality of the Bank's lending and the assistance provided by other donors. If this knowledge leads to better policies, better institutions, and valuable cross-fertilization of development practices among countries, then official development assistance should result in improved performance of borrowers. Moreover, and in parallel, it should be reflected in the allocation of ODA among countries and projects. When the Bank has evaluated its lending operations, on average 50 to 60 percent of projects receive a passing grade or better. Clearly, many Bank-financed projects have yielded good returns and contributed to development.

The picture tends to blur somewhat when we ask whether the Bank and other agencies have become more selective in their lending policies as their knowledge of what works and what is inimical to development has increased. Easterly (2007a: 27) finds no evidence of greater selectivity by the World Bank and other donor agencies and countries with

respect to need, policies, and institutions.³⁸ Forbearing donors have not attempted to penalize policy incompetence or corruption even after the end of the Cold War diminished the contingent necessities of supporting kleptocracies. Easterly (2007a) claims the Bank and other aid agencies have been persistently slow learners. All large public bureaucracies are reluctant to recognize and acknowledge failure; the Bank is no exception, according to Easterly, despite the much greater effort it has put into scrutinizing and diagnosing the twists and turns of development within and among countries. The Bank has been equally slow to spot failures and to adjust its operational practices (see Birdsall 2008 on the seven deadly sins of donors and how to remedy them). Moreover, as pointed out by Celasun and Walliser (2008), the persistent unpredictability of aid flows has been damaging for borrowers by curtailing longer-term investment spending.

A less gloomy picture of how bilateral donors are learning from experience is conveyed by Claessens, Cassimon, and Van Campenhout (2007). They find that assistance is becoming more closely tied to the needs of recipients and the quality of their policies and institutions. However, even these authors still observe considerable variability among donors in degrees of selectivity, suggesting either gaps in perception regarding policies and situations or the continuing force of other imperatives.

Perhaps the thorniest question is about the overall consequences of the assistance provided by the Bank and others. Did it raise growth sufficiently? Did aid and debt relief make the sought-after dent in poverty? Was aid more effective when it flowed to countries that by the standards of highly experienced donor agencies were implementing sound policies on a broad front? Inevitably, such issues are contested terrain, and the guns continue to blaze. A book by Easterly (2006b); a paper by Prasad, Rajan, and Subramanian (2007); a meta-study of 97 papers on aid effectiveness by Doucouliagos and Paldam (2006); a careful survey of the literature by Roodman (2007), which weighs the econometrics of the contending parties; and a study of debt relief by Chauvin and Kraay (2007) provide a reading of the results to date. In capsule, the findings

38. From 1979 to 1997, while regularly decrying the increasing indebtedness of borrowing countries, the Bank increased its own financing to highly indebted poor countries even as commercial borrowers pulled out (Easterly 2002).

are discouraging to say the least. Aid and debt relief³⁹ appear to have had virtually no effect on investment or growth⁴⁰ or poverty reduction. Whether they have directly influenced policies and institutions is also open to question, and some research shows that they have not. Prasad, Rajan, and Subramanian (2007: 5) raise additional questions regarding the benefits of external financing to developing countries. According to their estimates, “countries that had high investment rates and lower reliance on foreign capital grew faster—on average by about one percent a year—than countries that had higher investment but also relied more on foreign capital.” It would appear that “poor countries have little ability to absorb [foreign capital], especially when provided at arm’s length, and . . . when it does flow in, it would lead to overvaluation which hurts competitiveness” (Prasad, Rajan, and Subramanian 2007: 6).

These disappointing results suggest, in Roodman’s (2007: 275) words, that “aid is probably not a fundamentally decisive factor for development, not as important say as domestic savings, inequality or governance.”⁴¹ The heterogeneity of the findings, the continuing controversy over aid effectiveness, and the calls for vastly larger injections of aid raise two deeper issues. First, as observed earlier, despite great advances in methodological sophistication, in techniques of estimation, and in computing software, no econometric finding is ever remotely conclusive. All are at best tentative and provisional because of model uncertainty, inadequate data, endogeneity of variables, omitted variable bias, and aggregation issues, to name just the main culprits. Estimation is complicated by the deep geopolitical roots of ODA (see, for example, Kuziemko and Werker

39. Debt servicing problems became noticeable in the late 1970s, and starting with the meeting initiated by the United Nations Conference on Trade and Development in 1977–79, donor countries commenced a steady dribble of debt rescheduling and forgiveness under a variety of terms. In 1996, the Bank announced the heavily indebted poor countries debt initiative and expanded its scope in 1999 for a large number of countries that remained heavily indebted despite two decades of debt relief.

40. Burke and Ahmadi-Esfahani (2006) cannot find a significant effect of aid on growth in even the relatively buoyant Southeast Asian economies—Indonesia, the Philippines, and Thailand. However, Dovern and Nunnenkamp (2007), using a different methodology, show that aid can lead to short-term growth accelerations. How countries would have fared in the absence of any aid is impossible to divine.

41. The mixed outcomes of the Bank’s public sector reform lending were recently examined in an Independent Evaluation Group report (World Bank 2008a). Countries receiving International Bank for Reconstruction and Development loans generally did better than countries receiving International Development Association loans; the biggest reform mileage was in public financial management, and the least was in civil service reform and anticorruption.

2006).⁴² These roots were revealed by the decline in ODA as a percentage of donor GDPs following the ending of the Cold War. ODA fell from 0.35 percent of GDP in 1986 to 0.25 percent in 1996. This drop partly accounts for the weak or nonexistent relationship between aid and growth. Expensive and unproductive technical assistance and substantial costs of administering aid programs, all of which are lumped into ODA, are also to blame. Hence, important debates smolder indefinitely, leaving policy in limbo. Whether aid giving as it has been practiced to date should continue or be augmented is a vital question. The weight of evidence, however, seems not to convince, or possibly the economic case does not count for much in the scales of decision making. This brings me to the second issue.

Starting with the very first *WDR*, the Bank has argued for more assistance to poor countries through capital and knowledge transfers, and it continues to do so today. It strains credulity to even imagine that low-income countries might derive little benefit from more capital and additional insight on development, but 30 *WDRs* and the immense library of research fail to credibly establish that the gains achieved since the mid-1970s are the outcome of a conceptually and empirically deeper understanding of development and not a function of luck or happenstance or geography or leadership (Sachs 2003).

The debate goes on with voices raised on both sides. Some, such as Jeffrey Sachs (2005), are calling for a Big Push of aid to bring about a surge in growth, terms reminiscent of the 1960s and earlier.⁴³ Their hopes are buoyed by the technological opportunities that lie within reach if only the resources are forthcoming (Sachs 2008). No doubt a case can be made for larger infusions of ODA by looking into the future, a point I will take up in the final chapter. The inconvenient findings are troubling

42. Geopolitics and herding behavior also affect the almost US\$15 billion in aid extended by nongovernmental organizations from the Organisation for Economic Co-operation and Development countries, which tend to replicate the allocations of their home governments and their peers. Moreover, nongovernmental organizations favor former colonies and countries with familiar and shared religions, cultural traits, and beliefs (Dreher and others 2008).

43. The revival of terminology popular in the 1960s—*Big Push*, *poverty traps*, *takeoff*, and *sustained growth*—has also attracted sharp-eyed empirical scrutiny. Using data for the period 1950 to 2001, Easterly (2006a) cannot find low-income countries that become mired in poverty traps. Economies that can plausibly be described as having experienced a takeoff-like event, such as China; Hong Kong, China; Singapore; Taiwan, China; and Thailand, are exceedingly few, and none were recipients of a large aid injections.

for the World Bank, although they do not nullify the messages conveyed by the *WDR*. What they do make one wonder is why the advice given through policy dialogues, technical assistance, and lending operations to the developing countries that accepted assistance from the Bank did so little good for growth. Such policy advice—duly rendered operational and embedded in a scholarly apparatus—was clearly seen as adding value and contributing to the performance of the borrowing nations at least as much as the loans and credits. Could it be, for instance, that reforms that were introduced starting in the 1980s—reforms that initiated the building of market-friendly institutions, introduced macrostability, began improving the business climate, and paved the way to greater economic openness—are only now starting to bite after a lag of a decade and more? This is an attractive proposition, but could it be true? Do we just have to be patient? The recent accelerations in the growth of many countries in Sub-Saharan Africa and the higher average rates of growth in Latin America are a positive sign. However, it is hard to disentangle the effects of freer trade and large injections of resources into these regions following the rise in prices of energy and primary commodities since 2005. Also notable is that China and India—two of the most dynamic economies, which have accounted for most of the drop in poverty since the early 1990s—have followed a slow and cautious path to reform. They still sustain a large state sector, as well as a major state role in guiding the market, and they rank fairly low with respect to the “Doing Business” indicators. Moreover, other East Asian economies that went further with denationalization, openness, and building market institutions are now confronting a slowing of economic growth and an upward creep in economic inequality.

A *WDR* Policy Scorecard

In sum, the Bank through its *WDRs* has been powerfully instrumental in raising awareness on the extent of poverty and in exhaustively cataloguing the many ways of erasing it. Whether the policy medicines are potent enough is less than obvious, but certainly the challenges and policy options have been widely disseminated. Very likely, much of the poverty reduction stems directly—and indirectly—from GDP growth. In this regard, the Bank

has begun pinning more hope on growth derived through gains in TFP than from substantial increases in capital spending, which was the message of the early Big Push literature. The *WDRs* have progressively leaned toward human and knowledge capital to secure the sought-after traversal to higher and sustained rates of growth that can also bring significant gains to the poor. Provision of services to augment human capital and raise its quality is also central to the strategy for gaining the upper hand on poverty and containing income inequality. The approach has its attractions, and the knowledge economy is in the policy foreground; nevertheless, the past experience of the high-achieving economies is not reassuring on this score. Fast growth has a large price tag: knowledge matters, but in the earlier stages, capital matters more. The *WDRs* are silent on what it takes to reach 35 percent rates of capital investment. For 7 and 8 percent rates of growth, nothing less is sufficient, and at this point, the slower-growing low-income countries of South Asia and Sub-Saharan Africa are falling far short of this level (see table 3.2). Most worrying is that the lower-middle-income countries that have far to climb up the greasy pole are also experiencing a decline in investment.

Consonant with the market-based philosophy espoused by the Bank, starting in the mid 1980s, the *WDRs* have called for a smaller state, a shrunken public sector, and the growing of a forest of market institutions. A scaling back of the state was in the cards. How far it should go,

Table 3.2: Average Investment of Slow-Growing South Asian and Sub-Saharan Africa Countries and India, 1990–2006

<i>Indicator</i>	<i>1990–99</i>	<i>2000–06</i>
South Asia		
Investment rate	20.2	21.7
GDP growth	4.6	4.9
GDP per capita growth	2.1	2.7
Sub-Saharan Africa		
Investment rate	16.4	18.4
GDP growth	2.4	4.1
GDP per capita growth	–0.3	1.3
India		
Investment rate	23.6	28.6
GDP growth	5.6	6.9
GDP per capita growth	3.7	5.3

Source: World Development Indicators database.

which services and utilities should be privatized, and how actively the state needs to engage in erecting regulatory institutions is contested terrain.⁴⁴ The financial debacles and concern regarding the quality of services in high-income countries are warning signals whose import has yet to be sufficiently internalized.

In conformity with current academic thinking, the *WDRs* have gone looking for illustrative stories and policy gold in the burgeoning empirical literature on microeconomic issues. This practice is sensible, but perhaps we need to be more keenly aware of the limitations of the research being conducted in coming to grips with empirical realities, teasing out causal relationships, and identifying policies that can produce results under varying conditions. For example, on global inequality—a matter of burning interest—the most painstaking review of the studies to date concludes sadly that

it is not possible to reach a definitive conclusion regarding the direction of change in global inequality over the last three decades of the twentieth century. The different studies arrive at widely varying estimates [because] of varying data sources and methodologies.... [A]ll studies suffer from a variety of sources of uncertainty that include inter alia: measurement error in national accounts, in household surveys, and in within country price data used for PPP [purchasing power parity] estimation; standard index number and multilateral comparison problem with PPP estimates; and non-comparability of household surveys.... Given these uncertainties and the range of estimates of change in global inequality ... there is insufficient evidence to reject the null hypothesis of no change in global interpersonal inequality over 1970–2000. (Anand and Segal 2008: 90–91)

For more discussion on global inequality, see Ferreira and Ravallion (2008: 10–15).

In some cases, the narrow focus of the research and the desire to minimize econometric bias are “motivating the discipline to study randomized experiments either natural or controlled,” modeled on agricultural crop experiments or clinical trials to test the potency of drugs (Mookherjee 2005: 11). The randomized approach avoids the risk of “arbitrariness with respect to theoretical formulation or structural relationships.... The purpose (of the randomized exercises) is not to understand the underlying

44. Following the partial government takeover of some banks in Europe and the United States in response to the banking crisis of 2007–08, the terms of the debate on the role of the state have clearly changed.

structure of the system of relationships generating the outcomes, only the statistical outcome impact of certain policy treatments” (Mookherjee 2005: 11).⁴⁵ As a consequence, the work at the frontiers of development economics may be adding relatively little to the fund of fresh and insightful theories. Without new and well-articulated theories to thread together empirical findings into a compelling story, the progress toward better policy has been slow (Kanbur 2005).

Thirty volumes of the *WDR* encapsulate a vast body of knowledge on development, track the changes in circumstances and in (Western) mainstream thinking, and bring the reader face to face with thousands of interesting experiments and stories. They constitute an imposing array of books offering a panoramic view of development. Two questions are uppermost as I come to the final chapter of this book. First, what are the frontiers toward which the *WDR* should be steering? Should the Bank take more of a lead, as it once did, given its proximity to the activity of development and its awareness of which way the winds are beginning to blow? Should the *WDR* continue to offer an increasingly compendious review of the literature? Or should it retrieve the ambition, the spirit, and the heft of the original *WDR* and issue a report, not necessarily every year, that directs the attention of policy and opinion makers to key emerging development issues and proposes a strategy for achieving results?

45. Ravallion (2008) observes that the policies and settings that can serve as the grist for randomized experiments are themselves nonrandom. From these, only a subset of the relatively simple programs can be selected that permit a clear separation of participants and nonparticipants. And the experiments illuminate only a tiny number of parameters in specific settings, which is of limited assistance to policy makers.