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An Integral Approach to an Economic Perspective: The Case of Measuring Impact*

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Sustainable development is an outcome of more than economic processes. It is an outcome of economic, social, and political processes that interact with and reinforce each other in ways that hinder or facilitate its achievement. To reach sustainable development, opportunities need to be generated, good initiatives at all levels facilitated, and stability ensured. This requires actions at local, national, and international levels. How can priorities be decided in practice? What framework is needed to ensure economic growth and an effective distribution of wealth that generates equality of opportunities? This article suggests that to accomplish sustainable development, it is not enough to evaluate the way economic development has been researched and conducted thus far. Rather, a new approach to understanding its process is needed. This new approach is an integral approach to economic development, that is, an approach that seeks to respect the dignity of the human person, strengthen the family, and foster civic and social responsibility. This, in turn, necessitates an integrated view of the person in society and, consequently, a focus on the economic agent's decision process by acknowledging him or her in a holistic manner and in his or her social dimension.

Introduction

Today, development economists know that good economic policies alone will not ensure economic development; effective civil and social institutions are required—indeed, they provide the most fruitful context for sustainable development.[1] Sustainable development is an outcome of more than economic processes alone. It is an outcome of economic, social, and political processes that interact with and reinforce each other in ways that either hinder or facilitate the achievement of economic development. To reach it, opportunities need to be generated, effective initiatives at all levels facilitated, and stability ensured. This requires a better understanding of the socioeconomic dynamics underpinning economic development as well as actions at local, national, and international levels.

At the center of these dynamics is the human person, the economic agent, who generates and is served by economic activity. It is a fact of experience that the human person *is body* and does not just *have a body*. The body of the person is not an accident, but it is, rather, as essential a component of his or her personhood as is his or her rationality.[2] An individual lives and develops his personhood in his body. A consequence of this reality is that the person needs material things to develop, and furthermore, what he does and how he lives in his bodily dimension makes a difference in his personal development. It is important to take this fact of experience into consideration, as one of the functions of the economy is to meet the material needs of the economic agent. This latter function is especially relevant in the context of economic development. This function is even more relevant, however, because it indicates that how the economic agent seeks to meet these needs is not value neutral. In his pursuit of material needs, the economic agent can further develop as a person and help others do the same, or it can undermine his development and those of others.

A simple example can perhaps be of assistance in clarifying this point. Within an economy, individuals make decisions about the distribution of food to other persons. These decisions typically take into consideration more aspects than the delivery itself, such as need, age, health, location, costs, and so on. Yet, if the individual making the decision is to help develop himself and those persons he intends to feed, the decision-maker cannot ignore the fact that those involved cannot be either fed or treated in the same way as other living creatures such as dogs or horses. The corporality and dignity of the human person requires feeding these persons in a way that is proper to them.

It is also a fact of experience that this same economic agent exists, lives, and acts together with others, that is, human beings have a social nature. This suggests that, in cooperating freely with others, a person also shares in the responsibility and the outcomes of those actions while, at the same time, he shapes his own way of living and direction. In this manner, he determines himself in such a way that through his interpersonal interactions, he either contributes toward or jeopardizes his personal development and that of others.[3] This additional fact of experience is also very relevant to understanding the economic process. Once again, to illustrate this point with an example, one can think of the role that overconsumption and corruption played in the subprime crisis. Both the corporality of the economic agent and his interpersonal interactions influence the economic process and other economic agents in society. The influence exercised by these two components of being and of human behavior underlines their importance for economic activity. This is so because it suggests a connection between these realities in the life of the economic agent and the production or destruction of human, social, and moral capital. These, in turn, also suggest a connection to the efficiency and the productivity of the economic activity. Yet, often they are absent from economic analysis, which instead assumes an economic agent who is a self-interested, utility-maximizing individual.[4]

What framework is needed to ensure economic growth and an effective distribution of wealth that would generate equality of opportunities for individuals and societies? This article suggests that, in order to accomplish sustainable development, the way in which economic development has been researched and conducted thus far is not sufficient. An integral approach to economic development is also needed. An integral approach is one that seeks to respect the dignity of the human person, strengthens the family, and fosters civic and social responsibility. In other words, this approach provides an integrated and holistic view of the person in society—that locates the economic agent's decision process within his social dimension.

This article is organized as follows. In the next section, the link among economic development, institutions, and measurements is presented. The section that follows reviews recent developments in the literature in view of the integral approach proposed. The penultimate section proposes an integral approach to economic development and measurement of impact. The article concludes by offering some conclusions and a proposal for future research.

Economic Development, Institutions, and Measurements

Development economics studies the causes and effects of poverty and low income in countries around the world. It also studies the causes and effects of the slowdown of progress in some countries. Based on its findings, it seeks to improve policy design in such a way that individuals, regions, and countries can achieve greater economic prosperity.

Functioning social institutions such as the family, the local community, the rule of law, domestic security, infrastructure, and public institutions, are absolutely essential in order for development programs and policies to achieve their objectives. In practice, however, these institutions are often inadequate to meet the demands of development. Many problems of development result from barriers to the introduction of new technology, violation of property rights, and the distortion of prices due to protectionist policies. Furthermore, these institutions and disruptive policies are in place, more often than not, not due to ignorance on the part of policy makers but rather purposefully so they can remain in power to enrich themselves or to protect interest groups. Successful development initiatives, then, must identify the institutions that are relevant to the development effort, determine the improvements needed within those institutions, and then strengthen those institutions so that they are able to perform the tasks required for development. It is important to underline, however, that behind these institutions it is the economic agent, that is, a person who, when engaged in economic activity, seeks to make his decisions by maximizing the outcome of his choice given certain preferences and a limited amount of resources.

International organizations and nongovernmental organizations (NGOs) now realize the importance of implementing systems that not only ensure more effective management of development but also measure the impact of their development efforts in the broader macroeconomic context as well as on the immediate recipients.[5] Such is the goal of the Human Development Report, which ranks the well-being of countries not only based on their Gross Domestic Product (GDP), but it also includes health, education, and civic participation among others. This is also the case with the Millennium Development Goals (MDGs) that seek to encourage the improvement of developing countries in several aspects in addition to mere economic ones and thus also sets goals on health, environmental conditions, and education, among others.

As a consequence of this broader understanding of economic development, concerns have been raised with regard to traditional measures of development.[6] One of the reasons for such concerns has been the metrics typically used to measure and analyze the progress made in advancing the development agenda. For example, an organization that implements a job-training program will typically measure the participants' improvement in specific skills or in income. This is good and even important, but I would suggest that it is not good enough. I would like to propose that in addition, the organization should also measure the resulting impact on the participants' families and communities. This is so because, as previously explained, the social dimensions of a person play an important role in his decisions, conditions, and improvements. Consequently, the success of a program can only be measured fully when it includes all aspects involved in a decision-making process and in the results of such a decision. It should also include a more complete definition of quality of life—one that acknowledges and respects the dignity of each economic agent. Furthermore, in measuring the impact of development interventions, it is not only its impact on actual income but also the impact on its use as well as on the building of human, moral, and social capital needed to achieve sustainable development that matters in terms of fundamental human development. An integral approach to development can contribute toward the improvement of these measurements.

Recent Developments in Development Economic Research and Policy

Significant portions of the population in developing countries live in poverty or close to it. The economic choices of the population, and more specifically of the poor, are constrained by their market environment and by the lack of shared infrastructure. As a consequence, they often lack income and assets to attain basic needs: food, shelter, clothing, and acceptable levels of education and health. They also lack access to human assets, natural assets, infrastructure or physical assets, as well as access to financial structures such as savings or credit.[7] In addition, they often lack aging security, as they have no access to sound social-security systems. In fact, in most developing countries, the social-security system is provided by the extended family. The extended family is becoming smaller, however, and this shrinking process is taking place at a faster pace than the aging of populations experienced by developed countries. In developing countries, the speed of aging in the population has significantly declined in the past three decades.[8] These conditions make the poor in developing countries highly vulnerable to adverse shocks, as they are less able to cope with them.

Sachs advocated large increases in aid to finance a package he considered would end the precarious condition of the population in developing countries.[9] His recommendations were remarkably similar to those put forward in the 1950s and 1960s by those researching and designing economic development policies.[10] Today, as then, this reliance on large aid overlooks the unsolvable information and incentive problems faced by large-scale planning exercises. A more promising approach—as proposed, among others, by Easterly and by Banerjee—seems to be the design of incentives for aid recipients that can then be implemented through piecemeal interventions.[11] These, in turn, deliver effective and large benefits for the poor relative to costs. After years of relying strictly on theory and some general, empirical, aggregated evidence for policy, today many development economists have abandoned these approaches. They have realized that economic development is a complicated interplay of imperfect markets, politics, social norms, institutions, as well as government policies, social services, and microeconomic interventions. Development economists realize that new research approaches need to be devised if sustainable development is to be achieved. Nevertheless, as Easterly writes, “the idea of an aid-financed takeoff into growth has maintained its appeal in the development policy community," most noticeably in United Nations and European Union development-related efforts.[12]

In spite of many advances in the technical aspects of economic research and financial aid, the problem of poverty and underdevelopment remains very much present around the world. Some economists blame this failure on theories of economic development suggested by advisors and implemented by policy makers without taking into consideration the particularities of different countries at specifics points in time.[13] Another possible explanation, as it has been earlier suggested and that has not been as extensively explored, is that the understanding of the economic decision-making process in mainstream economic theory is incomplete because it fails to capture the social nature of the economic agent.[14] Perhaps the problem is really a combination of these two things.

Today, consensus seems to have been reached on the merit of drawing from all branches of economics as well as from other sciences such as sociology, psychology, political science, and medicine, among others, when studying the processes of development. Several alternatives have been put forward in the past decade to fill the gaps encountered in the field, especially in the area of understanding microeconomic mechanisms and in the role that institutions play in the economic process. Alternatives have also been sought for more accurate and comprehensive measurement techniques to measure the efficacy and impact of development interventions.

Hasumann et al., in an attempt to overcome the problems caused by the use of preconceived models for specific approaches to development, as with the ones experienced by Latin America in the 1980s and 1990s, developed a new *framework for diagnosis*.[15] This framework aims at helping policymakers identify binding constraints and prioritize policy reforms in multilateral agencies and bilateral donors in order to assist decision-makers in choosing the right economic model and remedy in specific circumstances. This approach is experimental in nature, emphasizing experimentation as a strategy for discovering "what works along with monitoring and evaluation to learn which experiments work and which fail. It tends to look for selective, relatively narrowly targeted reforms.… [It looks] for policy innovations that provide a shortcut around local second-best or political complications."[16] Such has been the approach taken by the Chinese government.[17]

Similarly, Deaton suggests that in the efforts to advance the field of economic development, specific mechanisms need to be studied. He notes that it is not enough to know *whether* a given approach works. *Why* it works is more relevant. He thus proposes an approach to research that investigates, tests, and modifies *mechanisms* that can be potentially widely applied, allowing in this manner the "integration of disparate findings … [comprising] progressive empirical research strategy."[18] The inspiration for this positivist approach is the hypothetico-deductive method of Cartwright.[19] It is an approach where "mechanisms are proposed; key predictions derived and tested [through randomized mechanisms]; and if falsified, the mechanisms are rejected or modified. If predictions of the mechanisms are confirmed, if they are sufficiently specific, and if they are hard to explain in other ways," the mechanisms are accepted until it is undermined by new evidence.[20] In this framework, there is no possibility of confirmation; falsification is the only way to learn. "Sometimes the falsification can be repaired by changing supplementary assumptions and sometimes they involved long steps backwards where the model is abandoned; and often there is disagreement about which is the correct response. But the end result is an accumulation of useful knowledge and understanding."[21] To be useful, this approach requires cross-fertilization between theory and empirical work as well as taking into account historical evidence, institutions, and measurements. Under this approach, studies in important aspects of economic growth such as the behavior of savings and its relation to growth have been undertaken. The dynamics of commodity prices and food distribution have been undertaken and new insights have also been found to help explain aspects of the behavior of these variables in developing countries at the microeconomic level.[22] However, this approach assumes a self-interested utility maximizing economic agent, and thus, the cross-fertilization intended falls short and/or is misused.

Banerjee and Duflo complement this mechanistic approach with a proposal for *field experimentation* as the basis for the understanding of economic issues relevant to poor people and countries. This manner of conducting research "by enabling the researcher to precisely control the variation in the data, allows the estimation of parameters and testing of hypothesis that would be very difficult to implement with observational data."[23] By fostering interaction between empirical findings in the literature and theoretical models and predictions, a deeper understanding of economic realities as occurring in the developing world is reached. Work in this area has provided significant advances in the understanding of imperfections and inefficiencies in developing and underdeveloped countries' credit markets.[24] It has also been helpful in the area of education.[25]

The diagnostic approach and the randomized approach to understanding mechanisms are very similar. In both cases, the process has three components: (1) the identification of variables that hamper economic development, (2) the generation of solutions to solve these problems, and (3) finding ways to test the effects of the proposed solution.[26] Both approaches have their limitations, but they can complement each other. The diagnostic approach can provide important information to microeconomic, randomized efforts regarding what to test and on what to focus. It can also provide insights as to the implementation and development of follow-up tools to monitor the impact of policy. Furthermore, both can be fruitful by feeding into and being fed by the findings of field experimentation work.

The aspirations of a person are typically generated and influenced by the experiences of others in the individual's social milieu. A research agenda in economic development should not ignore these components of human behavior because they affect a plethora of relevant economic outcomes. Among these are the decision to migrate, the rate of savings, the patterns of consumption, the fertility rate, the approach to marriage and children, technology adoption, the respect for the rule of law, the work ethic, the choice of ethnic and religious identity, and so on. Thus, the understanding of how this interpersonal aspect influences the economic agent's decision process and of how it leads a person to cooperate or not with others is very relevant to the understanding of institutions and economic activity as well as to their interplay in the economic development process.[27] In most cases, the previously mentioned approaches have failed to address some relevant aspects of human behavior, more specifically the interpersonal reality of human decisions.[28]

Contribution of an Integral Approach to the Recent Developments in Development Economic Research and Policy

How could this interpersonal dimension of economic activity be identified and incorporated into economic theory and impact measures? One way to do so is through the inclusion of this interpersonal dimension of any economic activity in the economic decision process of the economic agent. Another way to do so is to acknowledge its relevance when measuring impact. Both of these require the modification of the most basic assumption present in mainstream economic theory and analysis, that is, the conceptualization of the economic agent as a self-interested utility-maximizer.

In order to capture a fuller understanding of human behavior, the conceptualization of the economic agent can be enriched by substituting the assumption that he is a self-interested utility-maximizer with the reality of his social nature. Along these lines, Aguirre provides a possible alternative.[29] Specifically, Aguirre proposes an expansion of Becker's original model to capture altruistic behavior. In the former, altruism is incorporated in the budget constraint and not in the utility function. In addition, an economy of scale feature is also incorporated in the budget constraint, which captures the efficiency gains/losses derived from the economic agent acting together with/against others. Efficiency in the allocation of goods, under this framework, calls for the consideration of others' needs in the maximization decision process of the economic agent.

Using the family as an experiment of the most basic institutional level we have in society, the proposed, modified model of economic maximization is able to replicate the empirical evidence available regarding the economic benefits of marriage and the negative effects of divorce.[30] The modification is also able to provide a theoretical framework to explain why empirical evidence is found across countries, indicating that family structure is a significant factor in determining wealth, savings, human and social capital across countries, some observed patterns in the allocation of remittances, and the poverty alleviation effect of marriage in very low-income households.[31]

An integral understanding of the economic agent also has consequences for the way we understand and measure the impact of any intervention for development. As the person is social by nature and as this sociability is required for sustainable development, it is important that any intervention that seeks development may also seek to build human, moral, and social capital. Therefore, any measure of impact should also include these aspects. With this in mind, the integral approach to measuring impact brings together three bodies of research: neuroeconomics, market research, and econometrics so as to be able to measure the interpersonal dimension of any intervention for development. In doing so, it analyzes not only the immediate impact of an intervention; for example, whether a student can read or not. In addition, it analyzes how this educational effort helps those reached by the program live according to their dignity, how it helps their families, and how it helps their communities by fostering social and civic responsibilities in their beneficiaries.

The integral approach proposed requires an innovative way of utilizing market research techniques. It resorts to them in a way that meets the standards required for rigorous econometric analysis while exploiting its capacity to capture interpersonal interactions. The use of these techniques can be very effective in capturing the interpersonal dimension of the economic agent. This is of relevance when considering that perceptions, opinions, attitudes, and decisions are formed and changed through social interaction. It also resorts to neuroeconomics to run experiments with a framework that does not require assuming a self-interested, utility-maximizing economic agent. The measures are developed and the experiments conducted with an integral approach that normally seeks to capture proactive behavior instead of the monetary incentive-response model typically used in experimental economics. These techniques help recreate a more natural setting than a one-to-one interview, thus allowing access to measurements of interpersonal dynamics that often are unknown to researchers using mechanistic or experimental techniques. As is the case for experimental economics, the integral approach to measuring impact can be applied to any intervention for development where there is a possibility of obtaining a control group as well as to natural experiments. Thus far this approach has proved to be enriching and promising in the quest to improve the way we understand and therefore carry out economic development. It is also a good fit for a bottom-up piecemeal approach to economic development interventions.

Conclusion

Economic development research and implementation has experienced, especially in the past two decades, a significant transformation. New research avenues have been opened and these, in turn, have been shaped by development theory. In fact, the diagnostic approach combined with field experimentation and efforts to understand the mechanisms of economic development have set a very fruitful agenda for both the understanding of the development reality and for ground efforts directed to achieving sustainable development.

It has also inspired thinking outside the box when engaging in foreign financial aid. Specifically, it has made clear that rather than a top-down approach to reducing poverty, a bottom-up piecemeal approach is more effective. Furthermore, through the exercise of field experimentation specific initiatives have been identified as being effective in achieving economic development.[32]

One aspect regarding human behavior has been missing in these efforts. In this article, it is suggested that the inclusion of this piece in a systematic manner, both at the theoretical and the empirical levels, can significantly enrich the understanding and achievement of sustainable development by bringing an integral dimension. Specifically, the paper proposes the incorporation of two facts of experience in the life of the economic agent: (1) a person *is body*, and (2) exists, lives, and acts together with others. The way in which the economic agent lives his embodiment and in which he interacts with others makes a difference in the economic process. It either builds human, moral, and social capital or it diminishes it. Similarly, the way he interacts with others in the economy and the way he utilizes the available resources, either contributes to efficiency and productivity or it does not. Therefore, it is very important to understand these processes and to include them in economic analysis.

Understanding the impact of this interpersonal dimension on the economic agents' decisions and in society, can provide important insights on some of the puzzles we find today in economic development. It can also help us in the understanding of the connections that exist between the most basic manifestation of this interpersonal reality, the family, and the production or destruction of human, social, and moral capital. Likewise, it can assist in achieving a fuller understanding of the role of institutions in the economic process, as well as a better comprehension of the connection between the social dimension of the human person and efficiency and productivity in economic activity.

With regard to economic development and foreign aid, the inclusion of an integral approach could improve the efficiency and efficacy in the use of aid. Furthermore, it can help economic development professionals who carry out field work. Institutions are essential components of the economic growth process. Despite the importance of these institutions, development professionals working "on the ground" often fail to understand the critical role that institutional effectiveness plays in economic development. Finally, an integral approach to development can help identify the skills required to design, implement, and evaluate, more accurately, programs that can effectively contribute to integral economic development.

Notes

* I am grateful for the helpful comments received from Dr. Andrew Abela and Dr. Martha Cruz Zuniga as well as the comments received from the participants of the Colloquium on Christian Humanism that took place at the Catholic University of America from October 22–23, 2012.

1. See Douglas North, *Institutions, Institutional Change, and Economic Performance* (Cambridge: Cambridge University Press, 1990); Stephen Knack and Philip Keefer, "Does Social Capital Have Economic Payoff?" *Quarterly Journal of Economics* 112, no. 4 (1997): 1251–88; Alberto Alesina and Dani Rodrick, "Distributive Politics and Economic Growth," *Quarterly Journal of Economics* 109, no. 2 (1994): 465–89; Paulo Mauro, "Corruption and Growth," *Quarterly Journal of Economics* 110, no. 3 (1995): 681–712; Amartya Sen, *Development and Freedom* (New York: Alfred A. Knopf, 1999); Pablo Pinto and Jeffrey Timmons, "The Political Determinants of Economic Performance: Political Competition and the Sources of Growth," *Contemporary Political Studies* 38, no. 1 (2005): 26–50; Ricardo Hausmann, Dani Rodrick, and Andres Velasco, "Growth Diagnostics," in *The Washington Consensus Reconsidered: Towards a New Global Governance*, ed. Narcis Serra and Joseph E. Stiglitz (New York: Oxford University Press, 2008), 324–55; Abhijit Banerjee and Esther Duflo, "The Economic Lives of the Poor," *Journal of Economic Perspectives* 21, no. 1 (2007): 141–67; idem, "What Is Middle Class about the Middle Classes around the World?" *Journal of Economic Perspectives* 22, no. 2 (2008): 3–28; Daron

Acemoglu, "Theory, General Equilibrium, and Political Economy in Development Economies," *Journal of Economic Perspectives* 24, no. 3 (2010): 17–32; John D. Mueller, *Redeeming Economics: Rediscovering the Missing Element* (Wilmington, DE: ISI Books, 2010); and Mark Rosenzweig, "Microeconomic Approaches to Development: Schooling, Learning, and Growth," *Journal of Economic Perspectives* 24, no. 3 (2010): 81–96.

2. For the sake of facilitating the reading of the text, inclusive language is not used in the remainder of the text. The author asks the reader to find in the masculine reference an all-encompassing reference to the person and therefore to women and men.

3. For a more complete analysis of this human interaction or participation in economic development see Karol Woytyła, *The Acting Person: A Contribution to Phenomenological Anthropology* (Dordtrecht: Reidel, 1979); and Alasdair MacIntyre, *Dependent Rational Animals: Why Human Beings Need the Virtues* (Chicago: Open Court, 2001).

4. The literature analyzing this rationality is immense. Some good surveys of the different interpretations are Marc Blaug, *The Methodology of Economics: Or How Economists Explain* (Cambridge: Cambridge University Press, 1980); Lawrence A. Boland, *The Foundations of Economic Method* (London: Allen & Unwin, 1982); and Shaun H. Heap, *Rationality in Economics* (Oxford: Basil Blackwell, 1989). For applications to the context of economic development one can read, among others, Alesina and Rodrick, "Distributive Politics and Economic Growth"; Acemoglu, "Theory, General Equilibrium, and Political Economy in Development Economies"; and Angus Deaton "Understanding the Mechanisms of Economic Development," *Journal of Economic Perspectives* 24, no. 3 (2010): 3–16.

5. The European Commission (EC), has embarked on the "GDP and Beyond" initiative based on a successful series of conferences aimed at improving measures of progress, wealth, and well-being. In 2011, the EC published a roadmap and in May 2012 reported on the implementation and outcomes of the key actions, High Representative of the European Union for Foreign Affairs and Security Policy, *Partnership for Democracy and Shared Prosperity: Report on Activities in 2011 and Roadmap for Future Action*, Brussels, May 15, 2012, SWD (2012): 121 final. The initiative's intention is to complement GDP with environmental and social indicators relevant to the challenges of today. The Organization for Economic Cooperation and Development (OECD) is also developing a Global Project that tries to assess society's progress. Its goals were approved in 2007 in the Istanbul Declaration, which urges "statistical offices, public and private organizations, and academic experts to work alongside representatives of their communities to produce high-quality, facts-based information that can be used by all of society to form a shared view of societal well-being and its evolution over time."

6. See Deaton, "Understanding the Mechanisms of Economic Development," and Dani Rodrick, "Diagnostics before Prescription," *Journal of Economic Perspectives* 24, no. 3 (2010): 33–44.

7. For a review of the institutional and economic situation of the poor and middle class in developing countries, see Banerjee and Duflo, "The Economic Lives of the Poor," and idem, "What Is Middle Class about the Middle Classes around the World?"

8. For example, it took France 115 years for the reverse of the population pyramid to take place while it has only taken Colombia 20 years. See Maria Sophia Aguirre, "The Family and Economic Development: Socioeconomic Relevance and Policy Design," in *The Family in the New Millennium*, vol. 1, ed. Scott A. Loveless and Thomas B. Holman (London: Praeger, 2007), 54–92.

9. Jeffrey Sachs, *The End of Poverty: Economic Possibilities for Our Time* (New York: Penguin, 2005).

10. Some of these initiatives and studies include the substitution polices suggested by Raúl Prebisch, "Commercial Policy in the Underdeveloped Countries," *American Economic Review* 49 (May 1959): 251–73, and Hans Singer, *International Development: Growth and Change* (New York: McGraw-Hill, 1964), as well as Paul Narcyz Rosenstein-Rodan, "Problems of Industrialisation of Eastern and South-Eastern Europe," *Economic Journal* 53, nos. 210/211 (1943): 202–11, which articulated the "Big Push" framework.

11. William Easterly, "The Big Push Déjà Vu: A Review of Jeffrey Sachs's *The End of Poverty: Economic Possibilities for Our Time*," *Journal of Economic Literature* 44, no. 1 (2006): 95–105; and Banerjee and Duflo, "The Economic Lives of the Poor."

12. See Easterly "The Big Push Déjà Vu," 98. For example, in *The End of Poverty*, Sachs states,

    > Each low-income country should have the benefit of a united and effective UN country team, which coordinates in one place the work of the UN specialized agencies, the IMF, and the World Bank. In each country, the UN country team should be led by a single UN resident coordinator, who reports to the United Nations Development Program, who in turn reports to the UN secretary-general. (p. 285)

    The approach is one that suggests that aid agency officials and national government leaders should do planning from the center to make everything happen. Also, see Easterly, "Can Foreign Aid Buy Growth?" *Journal of Economic Perspectives* 17, no. 33 (2003): 23–48, for a summary of the evidence provided by decades of research on aid and growth, which indicates a failure to generate evidence for this prediction.

13. See, for example, Rodrick, "Diagnostics before Prescriptions."

14. See, for example, Maria Sophia Aguirre "Marriage and the Family in Economic Theory and Policy," *Ave Maria Law Review* 4, no. 2 (2006): 435–65; and Mueller, *Redeeming Economics*.

15. See Hausmann, Rodrick, and Velasco, "Growth Diagnostics."

16. Rodrick, "Diagnostics before Prescriptions," 41.

17. For more details on the Chinese approach to development see Sebastian Heilmann, "Policy Experimentation in China's Economic Rise," *Studies in Comparative International Development* 43, no. 1 (2008): 1–26.

18. Deaton, "Understanding the Mechanisms of Economic Development," 3.

19. Nancy Cartwright, "Are RCTs the Gold Standard?" *Biosocieties* 2, no. 1 (March 2007): 133–92.

20. Deaton, "Understanding the Mechanisms of Economic Development," 4.

21. Deaton, "Understanding the Mechanisms of Economic Development," 4.

22. See, for example, Angus Deaton and Christina Paxson, "Economies of Scale, Household Size, and the Demand for Food," *Journal of Political Economy* 106, no. 5 (1998): 897–930; Christopher Carroll and David Weil, "Saving and Growth: A Reinterpretation," *Carnegie-Rochester Conference Series on Public Policy* 40 (1994): 133–92; Christina Paxson, "Saving and Growth: Evidence from Micro Data," *European Economic Review* 40, no. 2 (1996): 255–88, Chang-tai Hseih and Peter Klenow, "Relative Prices and Relative Prosperity," *American Economic Review* 97, no. 3 (2007): 562–85; and Pierre-Oliver Gourinchas and Jonathan Parker, "Consumption over the Life-Cycle," *Econometrica* 70, no. 1 (2002): 47–89.

23. Abhijit Banerjee and Esther Duflo, "Giving Credit Where It Is Due?" *Journal of Economic Perspectives* 24, no. 3 (2010): 62.

24. See, for example, Dean Karlan and Jonathan Zinman, "Observing Unobservables: Identifying Information Asymmetries with Consumer Credit Field Experiments," *Econometrica* 77, no. 6 (2009): 1993–2008; Xavier Gine and Dean Karlan, "Groups versus Individual Liability: Long Term Evidence from Philippine Microcredit Lending Groups," *Working Paper 970*, Economic Growth Center, Yale University (2009); and Erica Field, Rohini Pande, and John Papp, "Does Microfinance Repayment Flexibility Affect Entrepreneurial Behavior and Loan Default?" Mimeo, Harvard University (2009).

25. See, for example, Paul Glewwe, Michael Kremmer, and Sylvie Moulin, "Many Children Left Behind? Textbooks and Test Scores in Kenya," *American Economic Journal* 1, no. 1 (2009): 112–35; and Esther Duflo, Michael Kremer, and Jonathan Robinson, "Nudging Farmers to Use Fertilizer: Theory and Experimental Evidence

from Field Experiments in Kenya," *American Economic Review* 101, no. 6 (2011): 2350–90.

26. Rodrick, "Diagnostics before Prescription," 42.

27. For example, Esther Duflo, "Poor but Rational?" in *Understanding Poverty*, ed. Benabou Banerjee and D. Mookherjee (New York: Oxford University Press, 2006), 367–78, and Debraj Ray, "Uneven Growth: A Framework for Research in Development Economics," *Journal of Economic Perspectives* 24, no. 3 (2010): 45–60, suggests that it is unclear whether the constant exposure to economic hardships is conducive to a greater commitment to the betterment of the region and/or country where individuals live or to discouragement.

28. Some exceptions that come to mind include Benjamin Feigenberg, Erica Field, and Rohini Pandi, "Building Social Capital Through Microfinance," *NBER Working Paper No. 16018* (2010); Dean Karlan, "Using Experimental Economics to Measure Social Capital and Predict Real Financial Decisions," *American Economic Review* 95, no. 5 (2005): 1688–99, and idem, "Social Connections and Group Banking," *Economic Journal* 117, no. 1 (2007): 52–84, among others.

29. Aguirre, "Revisiting Altruism in the Family: A New Perspective," Mimeo (2010).

30. See, for example, Francis Fukuyama, *The Great Disruption* (New York: Free Press, 1999); Steven Nock, "The Social Costs of Deinstitutionalizing Marriage," in *Revitalizing the Institution of Marriage for the Twenty-First Century*, ed. Alan J. Hawkins, Lynn D. Wardle, and David Orgon Coolidge (Westport, CT: Praeger, 2002), 1–14; and Maria Sophia Aguirre, *Determinants of Economic Growth: The Case of Guatemala* (Guatemala: FADEP, 2007); idem, *Family Structure and the Process of Economic Growth in Muslim Countries* (Doha, Qatar: Doha International Institute for Family Studies and Development, 2013); and idem, "Revisiting Altruism in the Family: A New Perspective."

31. See George Akerlof, J. Yellen, and M. Katz, "An Analysis of Out-of Wedlock Children in the United States," *Quarterly Journal of Economics* 111, no. 2 (1996): 277–316; Fukuyama, *The Great Disruption*; Nock, "The Social Costs of Deinstitutionalizing Marriage"; Aguirre, "The Family and Economic Development"; idem, *Determinants of Economic Growth*; idem, *Family Structure and the Process of Economic Growth*; idem, "Revisiting Altruism in the Family"; and Maria Sophia Aguirre and Martha Cruz Zuniga, "The Impact of Remittances on Economic Growth: Fixed and Human Capital," Mimeo (2010), among others.

32. These include, among others, subsidies to families for education and health inputs for their children, reducing class size, distribution of drugs and nutritional supplements, vaccination, indoor spraying for malaria, and distribution of bednets.