

OLD AND NEW DEVELOPMENT ECONOMICS: A REASSESSMENT OF OBJECTIVES

VICTOR I. ESPINOSA AND ÓSCAR R. CARREIRO*

JEL CLASSIFICATION: B41, B53, O11, O12, L26, P14

ABSTRACT: The “new development economics” (also called behavioral development economics) consists of microeconomic experimentation based on behavioral economics and randomized controlled trials. This approach would illuminate the close relationships between preferences, culture, and institutions and point to new political opportunities. This paper describes and analyzes the new development economics’s main components and argues that the new development economics is just like the old development economics in terms of its central assumptions, objectives, and recommendations. Despite the growing recognition that social, cultural, and institutional factors profoundly affect decision-making, old and new development economists generally lean toward the extreme reductionism of the neoclassical paradigm. It is observed that research on the essence of economic development has been neglected or treated inadequately in the school’s literature. It is suggested that the findings of the Austrian theory of dynamic efficiency, based on human action’s creative and entrepreneurial feature, may allow the development economics to overcome its analytical challenges.

* Victor I. Espinosa (victor.espinosa@uautonoma.cl) is Professor of Economics at the Department of Business Administration, Universidad Autónoma de Chile, Providencia 7500912, Chile. Óscar R. Carreiro (oscarcarreiro@ufm.es) is Professor of Economics at the Department of Entrepreneurship, Universidad Francisco Marroquín, Madrid 28033, Spain. Acknowledgement: The author would like to thank Jesús Huerta de Soto and Philipp Bagus, and the two anonymous reviewers for their constructive comments and suggestions.



The progress of underdeveloped countries depends on the supply of capital available to build the necessary infrastructure for industrialization and the rapid modernization of the economy. The emerging countries themselves cannot generate the required capital because of the poverty trap, which inexorably condemns them to low incomes. The less developed world inhibits entrepreneurial prospects, restricting local markets and strengthening the poverty trap. International trade is inefficient and often detrimental to emerging countries' advancement, as it fosters a widening income gap with rich countries. Foreign aid is crucial to escape from extreme material deprivation and ascend the ladder of economic growth. Government interventions play a crucial role in carrying out the needed changes and achieving the pathway to higher levels of equality and prosperity.

These ideas are the core theoretical framework of old development economics, which has become the dominant political and public discourse (Arndt 1987; Meier 1984, 2005; Boettke and Horwitz 2005; Boianovsky 2018; and Alacevich 2018). However, the scientific validity of old development economics has been widely questioned by some heterodox development economists (see, for instance, Bauer and Yamey 1957; Bauer 1976, 2000; Easterly 2014; and Espinosa 2020):

- If the poverty trap is valid, how does humanity not continue to live in caves?
- Given that all the currently rich countries were once poor, how was capital accumulation able to develop?
- If trade increases income inequality between countries, how can the rapid development of emerging economies such as Ireland, Poland, Estonia, Israel, Hong Kong, and Singapore be explained?
- If international trade is harmful, why are the wealthiest countries the most open to international trade?
- If foreign aid is vital for economic development, how did the currently rich countries develop without such aid?
- If global economic planning plays a crucial role in the path to higher equality and prosperity levels, why are the wealthiest countries in the world precisely those with the most significant economic freedom?

Although there is a consensus that development supposedly means moving from one type of economy to a more advanced one, the inconclusiveness of the leading old development theories has shown the field's "inability to adjust the demands of the main tasks of the day, that is, the elaboration of policies that favor the development in the least developed countries" (Alacevich and Boianovsky 2018, 2). As Romer (2009, 126) discerns, development economics must review its fundamentals on "how to contribute to better policy in developing countries ... at a time when many economists are skeptical."

In the eyes of a new generation of development economists, old development economics's efforts, albeit necessary, showed that its macroeconomic approach does not come to any relevant conclusions about the poor's economic lives (Coyne and Boettke 2006; Banerjee and Duflo 2011; Coyne 2013). Thus, it was concluded that the central focus of research and teaching in development economics should be at the microeconomic level of social, cultural, and institutional factors that help explain real-life human behavior. The new development economics (NDE), also called behavioral development economics (BDE), analyzes underdevelopment problems using psychological models of quasi-rational decision-making and preference formation, rather than the *homo oeconomicus* models (Thaler 2000; Demeritt and Hoff 2018). These economists consider randomized controlled trials (RCTs) in experimentation as the best way to advise governments on policy design in all its details to reduce poverty.

This paper argues that the old and new development economics share the same main assumptions, objectives, and recommendations. Despite the growing recognition that social, cultural, and institutional factors profoundly affect decision-making, old and new development economists generally prefer the neoclassical approach of extreme reductionism. The research on the essence of economic development has been neglected or treated inadequately in the development economic literature. This approach does not recognize economic development as the by-product of achieving social cooperation and coordination driven by human action under the division of labor. Consequently, the old and new development economics analysis is narrowed to testing the superficial problems of economic underdevelopment. The paper proposes that the Austrian theory of dynamic efficiency, based on the creative and

entrepreneurial potential of human action, would be adopted as a way for the new development economics to overcome the analytical challenges of its macroeconomic approach. More specifically, it is recommended that dynamic flesh-and-blood entrepreneurship be placed at the core of development theory, which would redesign its objectives of policy analysis and institutional change in underdeveloped economies.

The paper proceeds as follows. The first two sections explain the objectives and tenets of the "old" development economics and the "new" development economics's theoretical core, respectively. Then, the "Austrian" theory of dynamic efficiency is presented as a solution to the analytical challenges of development economics. The final section discusses the future of the discipline.

THE CRISIS OF DEVELOPMENT ECONOMICS

In the 1940s, 1950s, and 1960s, economic thinking about economic development was confined mainly to the United Nations's (UN) international organizations. At the same time, some pioneering work began to emerge in this field, including Rosenstein-Rodan (1943, 1944, 1961a, and 1961b), Nurkse (1952, 1953), Prebisch (1950), Myrdal (1956, 1957, and 1968), Singer (1949, 1950), Lewis (1954, 1966), and Hirschman (1958). These books and papers "crystallized what, over the next two decades, became the conventional wisdom about economic development" (Arndt 1987, 49).

The "old" development economics relied on dual models, in which a traditional sector, mainly agricultural, was contrasted with a modern industrial sector. According to development pioneers, poverty was the result of vicious circles caused by the interaction of various economic phenomena on the supply side (low per capita income, low propensity to save, insufficient capital, and low productivity) and on the demand side (low purchasing power, insufficient market size in the modern sector, lack of investment, and low average productivity). They concluded that the free market did not lead to the desired pattern of economic development. For this reason, the state ought to direct the modernization process by diverting resources from traditional and "backward" activities to selected modern activities. To break the vicious circles, they proposed increasing the size of the

market (to take advantage of economies of scale), channel existing resources into the modern sector, and generate more incentives for saving, such as controls on demand for consumer goods.

The old development economics's backbone was the Harrod-Domar model, strongly influenced by John Maynard Keynes (Boianovsky 2018). According to the Harrod-Domar model, GDP depends directly on the investment ratio and inversely on the capital-output ratio. Two groups of theories that emphasized the state's role in initiating and coordinating a massive investment effort in the industry (big push) were developed from the Harrod-Domar model: the theories of balanced growth and unbalanced growth.

On the one hand, balanced growth results from an equitable distribution of investment among the different consumer-goods sectors, which can then take advantage of the interdependencies between them to accelerate growth. On the other hand, unbalanced growth results from the concentration of investment in those industries believed to be more apt to promote growth in other sectors. These sectors are the ones with the greatest forward-chaining (in consumer goods industries) and backward-chaining (in capital goods industries) effects.

Thus, two of the key characteristics of the "old" development economics can be highlighted: 1) the recourse to central planning in the selection of the most productive "modern" activities; 2) the resort to intervention in the economy to coordinate the diversion of resources toward these activities, either by trying to promote most of them in a balanced way or by focusing on those sectors believed to have tremendous growth potential.

Prominently, Rosenstein-Rodan (1943) defined the theoretical and political issues that became the core of the new discipline of development economics in the postwar years.¹ First, he emphasized

¹ Paul Rosenstein-Rodan (1902–85) attended Ludwig von Mises's private seminar at the Vienna Chamber of Commerce, which was also attended by Fritz Machlup, Oskar Morgenstern, Gottfried von Haberler, Alfred Schutz, Richard von Strigl, Eric Voegelin, and many other intellectuals from all over Europe. However, Jörg Guido Hülsmann (2007, 161) explains that Rosenstein-Rodan was "shaped by the Wieserian mold before setting off on [his] intellectual paths. Largely ignorant of [Carl] Menger's *Principles* (out of print since the 1880s), [he was] trained in the spirit of the neoclassical synthesis."

the impact of overpopulation on the low productivity levels of developing countries. Second, he discussed the institutional and cultural elements that make it difficult for a developing country to industrialize. Third, he argued that capital accumulation and industrialization are essential to eliminating poverty but that it is difficult for entrepreneurs to establish new factories due to capital shortage in developing countries. Fourth, he highlighted the need for global planning to overcome coordination problems and promote economic development. Without the government's increase in "effective demand," investment opportunities would stall, and poverty would be perpetuated indefinitely. In sum, Rosenstein-Rodan laid the foundations of the poverty trap theory: the idea that poverty is an insurmountable obstacle that can only be overcome with political intervention and a big push.

Rosenstein-Rodan's influence was manifold and important. First, Nurkse (1952) formalized the poverty trap theory due to supply and demand events. On the demand side, if incomes are low, the market's size is too small to stimulate private investment. Shortage of investment means low productivity and continued low income. On the supply side, if incomes are low, consumption cannot be diverted toward capital formation and accumulation—shortage of capital results in low productivity, which perpetuates low incomes. Thus, the vicious circle is complete: a country is poor because it was too poor to boost entrepreneurial investment.

Second, Rosenstein-Rodan's poverty trap thesis suggested a widening inequality gap between developed (rich) and underdeveloped (poor) countries, based on enormous differences in these two distinct groups' per capita incomes (Prebisch 1950). Therefore, emerging countries should somehow increase national investment.

Third, if tax revenues are insignificant, developing countries' governments will not perform economic planning accurately. How to get the necessary capital in developing countries? Lewis (1954), based on the Harrod-Domar model, proposed an unlimited supply model, where policies aimed at increasing aggregate rates of saving and investment help overcome the poverty trap. If domestic saving is very low, it should be complemented by external savings in

foreign aid.² Thus, international organizations should quantify the aid for each country, and with this money, the governments of less developed countries will promote industrialization and self-sustaining development (Hirschman 1958). Finally, global planning is a “heroic” attempt to overcome “cultural stagnation or regression” of the poverty trap (Myrdal 1956, 65).

Economists of the early development theory shared a commitment to planning and the conviction that economic problems would yield to the actions of benevolent states endowed with sufficient supplies of capital and armed with good economic analysis (Leys 1996). They designed development plans for newly independent countries and the not yet independent African colonies based on raising rural productivity and transferring underutilized labor out of agriculture into industry. However, the hope of achieving economic growth through policies based on development theory soon began to unravel: “By the end of the 1950s, ... the original optimism that this approach would yield rapid results had begun to evaporate, and the limitations of development economics as a theory of development were beginning to be exposed” (Leys 1996, 8). Dissatisfaction with the development policies’ results led to the rise of new theories based on the Prebisch-Singer thesis, advanced independently by Raúl Prebisch and Hans Singer in the late 1940s.

The Prebisch-Singer thesis is that over time poor countries will have to export more of their primary commodities to maintain their levels of imports from the rich countries. This is because prices in advanced economies rise more quickly than those in more backward ones. Differences in income elasticities of demand strengthen this effect: demand for finished goods rises with income, but demand for primary goods varies less with income. Therefore, underdevelopment results from the prevalent economic structure and the international division of labor.

The Prebisch-Singer thesis is the backbone of two different development theories: structuralism and dependency (see, for instance,

² Foreign aid (official development assistance, ODA) refers to “intergovernmental grants and subsidized loans in cash or kind.... It does not refer to external loans raised by governments abroad on commercial terms, nor to private foreign investment, nor to the activities of voluntary organizations” (Bauer 1976, 95).

Toye and Toye 2003). Structuralists argue that the only way poor countries can develop is through state intervention in economic performance. Because trade is reduced by the erection of all kinds of political barriers and an overvaluation of the domestic exchange rate, the production of domestic substitutes of formerly imported industrial products is encouraged. Poor countries have to push industrialization and have to reduce their dependency on trade with advanced economies. The logic of the strategy rests on the “infant industry argument,” which states that young industries initially do not have the economies of scale and experience to compete with foreign competitors and thus need to be protected until they can compete in the free market.

Dependency theory is a more radical follow-up of structuralism. Dependency theorists also think that underdevelopment is mainly caused by the peripheral position of the affected countries in the world economy. However, they believe that the only way out of dependency is to search for autarky and create a socialist economy.

This belief explains why economists such as Singer warn that poverty is a consequence of colonialism and imperialist capitalism. While international trade is pernicious to developing countries, “the establishment of a socialist planned economy is an essential condition for attaining economic and social progress in underdeveloped countries” (Baran 1957, 416).

Unfortunately, as John Rapley mentions, the implementation of economic measures based on structuralism and dependency also led to disappointing results:

[T]he difficult truth was that in many places, economic growth barely kept pace with population growth and inflation, and progress was much slower than had been hoped. In real per capita terms, a significant portion of humanity ended the twentieth century poorer than when it welcomed political independence. (Rapley 2007, 57)

Despite its poor results and intense debates about its scientific validity, the public policy recommendations of the “old” development economics are at the heart of current United Nations development programs (Edwards 2015; and Toye 2018). Consider, for instance, the case of Jeffrey Sachs, director of the UN Millennium Project and renowned economist at Columbia University, who

conceives breaking the poverty trap as experts' fundamental objective. As Sachs (2015, 105) states,

[T]he underlying condition [of underdevelopment] could be what I call a poverty trap: when the country is too poor to make the basic investments it needs to escape extreme material deprivation and climb the ladder of economic growth.

The poverty trap involves a distinction between countries, groups, or individuals, rich and poor, not only in terms of their "country's average level of income but its distribution of income" (Sachs 2015, 55). Accordingly, the government should plan the distribution of income to propel countries toward higher economic equality and success levels.

Foreign aid plays an essential role in Sachs's proposal "to help a poor country make the crucial early investments needed so that the economy can soon stand on its own and begin climbing the development ladder" (Sachs 2015, 172). Foreign aid would push the capital stock elements (i.e., infrastructure, human capital, public administration) toward self-sustaining economic growth. As Sachs (2015, 175) argues, it should make a substantial difference when applied on a "professional basis grounded in an accurate differential diagnosis of the needs of a low-income country." The practical steps to reach the UN millennium development goals (MDG) in each country can and should be diagnosed, planned, and implemented with the proper focus and actions, combined with proper support from the international community. That is why the United Nations calls for adequately generous increases in foreign aid. It is the raise of a minimum of 0.7 percent of GDP would have to bring the level of UN support to at least 10 percent of therecipient developing countries' GDP. With this aid, experts could design policies in all their details to escape the poverty trap and the widening gap (United Nations 2005).

Nevertheless, the United Nations (2015, 8) shows that although "significant achievements" have been made on many of the MDG targets worldwide, "progress has been uneven" across regions and countries, leaving significant gaps. Millions of people "are being left behind," especially the poorest and those disadvantaged because of their sex, age, disability, ethnicity, or geographic location. Accordingly,

authors like William Easterly (2009) and Christopher Coyne (2013) suggest that “old” development economics is in crisis because global planning even worsened developing countries’ economies, notably in Latin America and sub-Saharan Africa. Easterly (2002, 88) believes that the record of the “old” development economics is one of failure: “The efforts that we as development economists, aid donors, and policymakers have made have not worked.”

THE NEW DEVELOPMENT ECONOMICS

In the 1990s and 2000s, a new way of conceiving development interventions appeared as a response to the failure of what Easterly (2014) calls “big push reasoning,” the legend that the poorest countries are stuck in a poverty trap from which they cannot emerge without an aid-financed big push. This reaction included academic economists with a distrust for big plans to eradicate poverty, and its focus, instead, was on the use of experiments to determine smaller interventions for the solution of specific problems. As an example of this new practical scientific approach, Easterly mentions the work of Bouguen et al. (2019) about the effects on school absenteeism of programs that administered deworming drugs to school kids.

The main tool employed in Bouguen et al. (2019) was the randomized control trial (RCT), which may be seen as one of the characteristic features of this new development economics, also called behavioral development economics (Rodrik 2009). An RCT is a trial in which subjects are randomly assigned to one of two groups: one receiving the intervention that is being tested (the experimental group), and the other receiving an alternative conventional treatment (the comparison group or control).³ The two groups are then followed up with to see if there are any differences in their outcomes. The trial results and subsequent analysis are used to assess the effectiveness of the intervention, which is the extent to which treatment, procedure, or service does patients more

³ RCTs come from the natural sciences, particularly “evidence-based medicine,” where they are used to evaluate the statistical effects of different types of drugs and treatments (Sackett et al. 1996). During the 1990s, this “gold standard technique” was imported into development economics as an “evidence-based policy approach” to investigate cases of everyday life (Pawson 2006; and Banerjee et al. 2017).

good than harm. RCTs are believed to be the most stringent way of determining whether a cause-effect relation exists between the intervention and the outcome (Kendall 2003).

The employment of RCTs in development economics is advocating mainly by the efforts of the Poverty Action Lab (J-PAL), a global research center founded in 2003 by Abhijit Banerjee, Esther Duflo, and Sendhil Mullainathan to reduce poverty by ensuring that policy is informed by scientific evidence. The J-PAL was established to support randomized evaluations measuring interventions against poverty in areas such as health, agriculture, education, or governance. Advocates of RCTs argue that they serve to identify both the causes of poverty and the incentives needed to escape the poverty trap. They believe that this method will encourage more efficient government interventions to foster economic development.

For economists like Banerjee, the use of RCTs represents a departure from the old way of thinking in development economics, since the analysis of underdeveloped economies concerns “an enormously complex set of different strategies, and not a single button on the machine to be pushed or not” (Banerjee 2007, 142). Mathematical economics neglects the ultimate foundations of what happens in poor countries’ economies and institutions, so that “development experts are still thinking in machine mode: they are looking for the right button to push” (160). Thus, Banerjee and other economists, chiefly from the J-PAL, propose RCTs to verify foreign aid programs’ effectiveness. RCTs improve the impact evaluation of social programs, because they “[force] us to venture inside the machine” (162).

One curious result of the RCTs’ rise is that the new development economics is moving away from pure economic theory and the big questions about the essence of economic phenomena. RCT experts often reject praxeological theory because it would not help with deciding the details of government policies. They conceive the economist as a kind of plumber focused on designing and predicting the results of several market interventions (Banerjee 2005; and Duflo 2017). As Banerjee (2007, 115) writes, “[T]he beauty of randomized evaluation is that the results are what they are: we compare the outcomes in the treatment with the outcome in the control group, see whether they are different, and if so by how much.”

Banerjee (2007) suggests that RCTs are the best and most direct way of knowing which foreign aid program works and which does not. Although a single experiment does not provide a final answer on any intervention's universal validity, a series of hundreds or thousands of experiments could reinforce more government interventions at the margin. As Stephan Dercon (2018) comments,

[E]verything has to be inductive and experimental for the New Development Economics. Lots of little solutions will move us forward. They have no big theory of what causes low growth, no big questions, just "a technocratic agenda of fixing small market failures". Getting institutions right is not crucial.

Experts will recommend the cheapest policy strategies among thousands of prescriptions, like a doctor prescribing aspirin for a headache. Thus, Behavioral development economics's lack of interest in theoretical thinking and its focus on experimentation for the assessment and evaluation of policies has been criticized because theory is needed to understand the causal relations that may lead to economic growth and development. For example, Deaton says that "we are unlikely to banish poverty in the modern world by trials alone unless those trials are guided by and contribute to theoretical understanding" (2010, 452). Rodrik (2009, 42) adds that "pragmatism does not imply the absence of theory. The only meaningful way in which one can sift through the evidence—or indeed know what kind of evidence to look for—is through the prism provided by clearly articulated theoretical frames." And Kumar (2016, 84) thinks that "understanding the causal processes underlying responses to a tested intervention could help extrapolate to a different but related policy, and a structurally distinct context."

The detachment from grand theory and the big economic questions is relevant because it may lead, inadvertently, to the preservation of old theoretical assumptions and the repetition of previous failed recommendations and policies. We could argue that the new development economics does not represent a radical departure from the old development economics but is its continuation.

One element of the new development economics that reflects continuity with the old is the faith put in government intervention. Generally speaking, in the work of the "randomists" (the new

development economists), there is little questioning of the need for government intervention or justification. For example, when Banerjee and Duflo consider the case of government intervention in education, they state one (questionable) ethical argument: “A civilized society cannot allow a child’s right to a normal childhood and a decent education to be held hostage to a parent’s whims or greed.” From this, they directly proceed to justify conditional cash transfers: in states with limited capacity for enforcing compulsory education, the government “must make it financially worthwhile for parents to send their children to school” (Banerjee and Duflo 2011, 77).

Banerjee and Duflo (2011, 216) state that “governments are necessary, to provide basic common goods and enforce the rules and norms that the market requires to function.” It is not clear how such a statement could be demonstrated with hard scientific evidence by conducting RCTs, but they do not try to do this. They just accept this theoretical assumption and justify it with a brief illustration of a free market in driver’s licenses. Consider, for instance, Hoppe (1989), Frey and Eichenberg (1999), Block (2003), Bastos (2005), Risse (2011), Kode (2013), and Risse and Stollenwerk (2018), who suggest that the need for governments to provide public goods is not such an obvious and indisputable principle. Indeed, Kode (2013, 5) states that “while a strong state is often seen as necessary, a close look at the empirical reality on the ground calls into question the state’s role as a necessary precondition for security, peace, development, and more broadly, the provision of public goods.”

The first theoretical principle underlying the faith in government intervention is the idea of poverty traps, which also shows the continuity between the “old” and the “new” development economics. When Banerjee and Duflo (2011, 21–24) discuss the idea of poverty traps, it seems that they think that “the existence of a specific poverty trap” is a possibility that has to be empirically assessed on a case-by-case basis. But later they talk about many poverty traps for whose existence they do not have definitive or impressive empirical evidence but which they accept on the ground of theoretical assumptions. Thus, they believe in the existence of a nutrition-based poverty trap in terms of the quality of food or a shortage of micronutrients (43–44); they believe that health can be a source of several different traps (46–52); they believe in the existence of a savings trap created by behavioral and technological

conditions (177–79); and they believe in a vicious circle where small size firms are stuck at a small size (190–201).

Consider, for instance, the latest poverty trap. According to Banerjee and Duflo, there is a level of investment that must be reached to make serious money. If an entrepreneur invests little, he makes little money and remains too poor to invest much more. If an entrepreneur invests enough to reach the critical point, he becomes rich, invests more, and becomes even richer. The problem is that in a poor country most people do not have that option. No one will lend these small entrepreneurs enough money. Moreover, getting there might also require management and other skills that they do not have and cannot afford to buy. They are stuck at a small size. The entirety of this argument accords with the old development theory.

The only difference is that economists like Rosenstein-Rodan, Lewis, and Rostow had a macroeconomic approach while the randomists have a microeconomic approach. The rest is the same. Moreover, the solution proposed by Banerjee and Duflo is an old one also: to establish a virtuous circle, stable and higher wages are needed. This would give workers the financial resources, the mental space, and the necessary optimism to invest in their children and save more. With those savings and the increased access to credit that a steady job brings, the most talented among them would eventually be able to start businesses large enough to, in turn, hire other people. Besides the creation of government jobs, Banerjee and Duflo (2011, 208) think that

there may be a case for using some governmental resources to help create enough large businesses by providing loan guarantees to medium size ventures.... The way out of poverty is not one more shed with some cows in it, but a son with a secure job in the army.

The second principle that shows the continuity between the “old” and the “new” development economics is the NDE’s top-down planning approach. Even though the randomists talk about decentralization and increasing people’s involvement and participation in development strategies, Banerjee and Duflo (2011, 222–23) believe in giving power to the people but not all the power:

If the rules make such a difference, then it becomes very important who gets to make them. If the village is left to its own devices, it seems likely

that rulemaking would be captured by the elite. It might therefore be better for the decentralization to be designed by a centralized authority, with the interest of the less advantaged or less powerful in mind.

This kind of enlightened despotism comes from the behavioral economics of the randomists. Poor people make all kinds of bad choices, but they can be led to make better choices with the enlightened help of technocratic experts. For example, according to Banerjee and Duflo, poor people behave as if they thought that any change significant enough to be worth sacrificing for will take too long. Instead of spending enough money on healthy food, “they spend their money on unhealthy but tastier food or cheap luxuries like television sets” (Banerjee and Duflo 2011, 39–42). Poor people do “not save, in part, because they lack self-control” (174–79). Although poor people choose to have large families, , what leads them “to make these choices are factors outside their immediate control like social pressures” and even the lack of availability of contraception does not seem to be a big constraint (112). In establishing the right set of incentives, the expert’s role is to threaten people’s bad choices so that they can make good choices. This involves “giving away goods and services” for free or even rewarding people for doing things that are good for them (239).

This attitude represents an example of what James C. Scott (1998) calls “high modernism,” an ideology instrumental in the modernization period of the old development economics that was grounded in the belief that a scientific, technically trained elite could take responsibility for social planning. According to Scott, the twentieth century’s major development disasters derived from a toxic combination of epistemic arrogance and authoritarian power, including excessive confidence in the ability of “scientific management” to order and organize human activity. The new development economics would represent a softer version of the high modernism with a smaller-scale focus.

The last source of continuity between the “old” and “new” development economics is their shared view of costs and benefits. From an Austrian perspective, costs and benefits are not objective, since they are the result of individual choices. Costs and benefits are subjective, because they are the result of *ex ante* anticipation of foregone opportunities. If an agent thinks that the value of the achieved end is higher than the value of the foregone opportunities (costs), then the agent

has obtained a subjective profit (benefits). Profits and losses show whether there has been a correct use of scarce resources, and guide people to the achievement of everhigher valued ends.

In contrast, the randomists analyze costs and benefits as something objective and measurable. They try to evaluate public policies based on their effects over a specific set of objective and measurable characteristics. Despite all their good intentions, they have not abandoned the analysis of underdeveloped economies as machines with buttons to be pushed. These machines have more than one button and they believe that RCTs are the only way to know which one to push.

In summary, losing sight of the big-picture questions means that, in the end, the practitioners of the new development economics ultimately make the same recommendations as the old development economics. Development economists often assume the existence of a poverty trap but fail to explain its ultimate foundations. It may be a relevant reason why theoretical thought is still important: to avoid repeating old mistakes. For this reason, it is argued that Austrian theory—its perspectives on the entrepreneurial essence of the dynamic market process, the role of the structure of production, and the importance of evolving institutions in economic performance—can overcome the new development economics's theoretical insufficiencies.

The Austrians' uniqueness lies in their "analytical contributions to our understanding of the epistemic-cognitive properties of alternative institutional arrangements" (Boettke 2002, 265). These contributions lead to the recognition of the uncertainty inherent in all economic decisions and of the entrepreneurial nature of the market process as the essence of economic phenomena. The Austrian theoretical framework would help "new" development economists identify the essence of underdevelopment, in addition to bringing their empirical constructions closer to real-life dynamics.

ENTREPRENEURSHIP, DYNAMIC EFFICIENCY, AND DEVELOPMENT

This section explains how Austrian economics improves the old and new development economics approach to understanding the

essence of economic phenomena. Austrian theory explains that market phenomena are governed by defined chains of cause and effect, which constitute and generate a defined process that reflects entrepreneurial decisions. It argues that economic development objectives are best achieved by strengthening entrepreneurship through an institutional environment conducive to private property. This statement requires clarifying how this perspective challenges the wisdom of old and new development economics and leads to better historical analysis and qualitative predictions (pattern prediction). By encouraging a broader perspective, the application of Austrian economics would be a step forward in recognizing the dynamics of underdeveloped economies.

Although poverty has been the “natural” condition of human beings, entrepreneurship’s dynamic efficiency has contributed to overcoming it. Entrepreneurship entails the ability of individuals to perceive hitherto unsuspected opportunities for profit and the willingness to take advantage of them.⁴ What economic theory finds in the entrepreneur is valid for all human beings, regardless of people’s role in society. As Ludwig von Mises argues, “in any real and living economy, every actor is always an entrepreneur” (1966, 253). The flesh-and-blood entrepreneur is the driving force behind the entire market process, which is often neglected in the “old” and “new” development economics literature. In other words, the analysis of entrepreneurship as the engine of economic phenomena contributes novel findings on how the dynamic process of development works:

⁴ Human action is linked to entrepreneurial behavior. Entrepreneurship etymologically comes from the Latin verb *in prehendendo-endi-ensum*, which means “discover, perceive, identify, carry out.” This meaning is indicative of systematic steps in perceiving profit opportunities, which sheer ignorance could tend to dissipate. Indeed, the Real Academia Española (Royal Spanish Academy) (2020) defines *enterprise* as an “*action* that involves difficulties and whose execution requires decision and effort.” It is also the “*intent or design to do something*,” that is, to perform an *action*. An entrepreneur is one who “*commits to resolution actions*” as something “*proper to people*.” Italics are mine. In the tradition of Carl Menger, Ludwig von Mises, Friedrich Hayek, Israel Kirzner, and Murray N. Rothbard, entrepreneurship is also connected to private property. Without private property, entrepreneurs cannot take advantage of perceived profitable opportunities. For more on this, see Salerno (2008); Huerta de Soto (2010); and Klein and Bylund (2014). The translation is own.

1. Entrepreneurship is the essence of economic development.
2. The poverty trap is only valid in an institutional environment adverse to entrepreneurship.
3. The replacement of entrepreneurship by top-down economic planning inhibits economic development.
4. Costs and benefits are subjective, therefore, it is impossible to coordinate individual action plans through top-down economic planning.

The role of development policy is to reduce the political barriers to entrepreneurship.

Israel Kirzner identifies the entrepreneur's alertness as the core of economic development. The scope of entrepreneurial alertness "refers not to the ability to see what exists, but to the necessarily speculative ability to see into the future. In particular, such metaphorical alertness may consist in the vision to create something in the future" (Kirzner 1985, 7). Alertness implies human action that reshapes the entire map of individuals' ends and means as they act in their contexts. Alertness allows the entrepreneur to notice new profit opportunities to improve his condition, that is, creativity does not need prior means. Alertness creates an idea in the entrepreneur's mind, but his human action guided by that idea requires assets to achieve ends. He can speculate *ex ante* about his action's effectiveness, but the outcome of his alertness can only be verified *ex post*. Alertness also involves serendipity, the ability to realize opportunities that arise by surprise, without being deliberately sought, and act accordingly.

Entrepreneurial knowledge is subjective, because it cannot be represented formally; the individual acquires it through practice (Huerta de Soto 2009). Knowledge is scattered in the minds of all individuals, who create it as they seek their ends in unique historical conditions. Entrepreneurs learn how to perform specific actions (know-how) and acquire practical behavior patterns. These actions allow entrepreneurs to articulate their knowledge and improve alertness through a dynamic process of "learning by seeing" and "learning by doing." It is the eureka flash in terms of subjective interpretation through daily experiences and expectations. However, the power of individuals' minds is limited, since they are

not omniscient, omnipotent, or omnipresent, and this causes the dynamic process of social cooperation, well known as the market. As Mises (1966, 259) writes, “the market process is the adjustment of the individual actions of the various members of the market society to the requirements of cooperation.”

The price system is the method of communicating entrepreneurial information through the market process, i.e., all the exchange ratios built on the relative scarcity of the goods and services subjectively valued by each actor as a seller or consumer, participating in the market or abstaining from doing so. The rise of market prices requires the presence of private property, which enables subjective assessments of voluntary exchanges. Market prices are indeed historical relationships of exchange that help human minds perform a rational economic calculation: the estimation in monetary units of the possible outcomes of different courses of action. Economic calculations are reflected in profit-and-loss accounting and expectations, which guide entrepreneurs on what to produce, how to produce, and in what quantity (Salerno 1990). Although the control of production is the task of entrepreneurs, consumers are the sovereigns who can enrich the poor and impoverish the rich. Entrepreneurs propose goods and services in the market, but consumers have the freedom to choose the best or the cheapest ones for themselves.

Knowledge of market prices and the ability and willingness to use this knowledge is indispensable in finding the most economical uses of available resources. This dynamic process develops the productivity of resources and tends to increase incomes, enabling the accumulation of additional resources. Thus, the market process fosters social coordination. Entrepreneurs tend to discipline their behavior in line with consumers’ needs. A final state of equilibrium (when all profit opportunities are given) is never reached; these coordination trends generate new discoordination to be perceived and adjusted by entrepreneurs. The insight of entrepreneurs in serving consumers is what steadily tests their reputation in the market. Because entrepreneurs may only prosper if they continually adjust their intellect to satisfy others’ needs, the entrepreneurial coordination process is dynamically efficient (Kirzner 1997, 2017). Given that the economic calculation is subjective, it is impossible to coordinate individual action plans through top-down economic planning (Huerta de Soto 2010).

The material development of a society is greatly assisted when the qualities of entrepreneurs, such as a long-term vision in adopting ideas and taking risks, are present to a high degree. Entrepreneurs seek to reduce as much as possible those time barriers that separate them from achieving their goals (Kirzner 2009). The entrepreneur tends to pursue potential profit opportunities in the long term when he considers that the goals to achieve are higher than those he could reach in the short term. If the entrepreneur perceives a more worthwhile goal in the future, he will transfer part of his present consumption toward a higher expected level of future consumption. In other words, saving is an essential requirement to accumulate capital and produce capital goods, all the goods or services that the actor believes subjectively necessary to produce other goods or services.

The structure of production consists of a series of stages that require time, from entrepreneurial alertness to a profit opportunity, the acquisition of capital goods (i.e., land, labor, capital, and technology), and the combination of them through successive stages until the final consumer goods are obtained. Moreover, capital goods are heterogeneous and have multispecific uses, both because of their physical dimensions and the different plans they can satisfy (Foss et al. 2007). The general outcome of an increasing level of capital is a more capital-intensive method of production. Prior savings allow the creation of more and better goods offered at a lower price for people, increasing consumption per capita.

The dynamic process of intertemporal coordination is influenced by the price of time, better known as the interest rate, mainly composed of society's time preference, the default risk premium, and the expected change in money's purchasing power.⁵ The interest rate guides entrepreneurs toward the stages of the production process that are relatively more profitable. When people increase their level of savings, the supply of loanable funds rises and the interest rate falls. This event makes entrepreneurial projects

⁵ Hülsmann (2002) argues that the originary interest rate depends on the subjective assessment between individuals' ends and means, which determines how market participants choose between production alternatives with different time frames and expected profit and productivity. When the originary interest rates are manifested, the production structure and the interest rate are determined.

relatively more profitable in the formative stages, farther from final consumption: investment in capital goods grows (Manish and Powell 2014). Saving fosters economic development, because the incentives of entrepreneurs (investing in projects of greater complexity and maturation time) tend to coordinate with the goals of consumers (consume more in the future).⁶

International trade also improves dynamic efficiency, because it contributes to the technological and cultural exchange between countries, which tend to move from subsistence to exchange in new markets. Free trade and population growth strengthen the division of knowledge and labor. If everyone dedicates their efforts to what they consider subjectively more efficient and exchanges with others in domestic free trade, the same rule applies in the international market (Manish and Powell 2015). The most prosperous regions and sectors are those that have established business contacts with the most advanced countries. In contrast, the most impoverished and backward populations are generally those with little or no foreign trade.

Accordingly, economic development is better understood as the widening range of entrepreneurial alternatives open to individuals, which implies “the accumulation of available solutions to human problems” (Beinhocker and Hanauer 2014, 4). Increasing well-being in underdeveloped economies depends on the freedom to exercise entrepreneurship in a virtuous process of technological change to meet the increasingly complex demands of individuals. There are no frontiers for economic development, because there are no limits to creating new alternatives for people.⁷ Hence, development is

⁶ If the interest rate is altered artificially, an intertemporal discoordination is generated between entrepreneurs and consumers, which drives recurring boom-and-bust cycles (Garrison 2001; Huerta de Soto 2006).

⁷ Beinhocker and Hanauer (2014, 4) suggest that “these solutions run from the prosaic (crunchier potato chips) to the profound (cures for deadly diseases). Ultimately, the measure of the wealth of a society is the range of human problems it has solved and how available it has made those solutions to its people. Every item in a modern retail store can be thought of as a solution to a different kind of problem—how to eat, dress, entertain, make homes more comfortable, and so on. The more and better the solutions available to us, the more prosperity we have.” For more details on the link between entrepreneurship and technological improvement, see Holcombe (1998, 2009).

not a unique and absolute value for all people. It is a subjective appreciation that depends on individuals' ends and means in the context of their action plans.

The essential difference between prosperous and poor societies lies in the former having a more robust network of entrepreneurial capital invested than the latter. A more capital-intensive production gives rise to better and more accessible technologies to solve the people's needs (e.g., industry, transportation, education, health, social security, or environment). Technological progress boosts the efficiency of workers and thus their level of income. As entrepreneurship drives the extension and deepening of the division of knowledge (or division of labor), the progressive division and subdivision of the production stages proceeds horizontally and vertically. In short, entrepreneurial alertness plus investment in capital goods are the key elements in improving people's well-being.

The poverty trap is only valid in an institutional environment adverse to entrepreneurship. Indeed, the rise of evolutionary social institutions, such as language, morality, private property rights, law, money, and culture, explains the creative and coordinating feature of entrepreneurship to produce more and better solutions to human problems and reduce transaction costs and uncertainty.⁸ As Acemoglu et al. (2019) put it, development requires "inclusive institutions" based on the enforcement of private property rights and competitive markets that create broad-based incentives and opportunities in society. By contrast, "extractive institutions" lack these properties and impoverish society.

Notably, "extractive institutions" explain economic and technological underdevelopment through significant political barriers to the free exercise of entrepreneurship. Coerced people perceive that they may have a better chance of achieving their goals if they use their creativity to influence political decision-making: this is

⁸ There is a widespread myth that attributes the rapid economic growth of Asian tigers (i.e., Japan, Taiwan, South Korea, Hong Kong, and Singapore) to government development planning. In those cases, governments used their power, authority, and fiscal incentives to strengthen private property and stimulate increasingly capital-intensive production. The prosperity of these countries is best explained by their economic freedom backed by a probusiness state and not a predatory state. For more details on this, see Yu (2000); and Powell (2005).

the “corruption effect,” that is, unproductive or destructive entrepreneurial behavior.⁹ Indeed, political and cultural institutions significantly shape the source of these barriers, which include low maintenance of law and order, instability in political and economic institutions, unstable monetary conditions, and confiscatory policies through high levels of taxes and regulation (Boettke and Coyne 2003; Leeson and Boettke 2009; March, Martin, and Redford 2016; Espinosa, Wang, and Zhu 2020; Espinosa 2021). Thus, the replacement of entrepreneurship by top-down economic planning inhibits economic development. These situations affect people’s ability and willingness to look beyond the immediate present and take a long-term view.

Some regulations, such as labor legislation, price controls, tax levels, banking laws, and licensing requests, among others, restrict potential competition. If the regulation policy becomes more widespread, the government will tend to favor entrepreneurs who are already installed in the market to the detriment of society (Ikeda 2015). Thus, entrepreneurship’s political barriers promote economic power concentration, leading to corruption, distortion of price signals, and waste of resources. To have a monopoly, entry barriers are needed so that most people do not have opportunities or incentives to innovate or create companies. The most effective monopolies are those created by government regulations: entry barriers make it difficult or unfeasible for new competitors to emerge, and corruption is strengthened through rent seeking (Cachanosky 2020). Therefore, the diffusion of decision-making is reduced and the range of alternatives open to people is narrowed. This is the exact opposite of the broad-based incentives and opportunities required to create prosperity.

Competition without barriers to entry fosters creative and coordinating behaviors in both incumbent entrepreneurs and potential

⁹ Entrepreneurship takes place independently of the institutional environment, which can only influence the available types of profit opportunities. In an intervened market, private property institutions and the profit and loss system are damaged or substituted by political power decisions. See Boettke and Subrick (2003); and Boettke, Coyne, and Leeson (2008). Nonproductive entrepreneurship occurs when actors perceive that it is more profitable to seek government privileges than to serve consumers. Concerning nonproductive entrepreneurship, see Acemoglu and Robinson (2019).

players. Hence the role of development policy is to reduce the political barriers to entrepreneurship. Economic development, that is, the widening range of alternatives open to the people, is only possible when the right to private property is respected in an organized society with contractual ties and when assault on private property and breach of contracts are penalized. In sum, the government can support the expansion of access to new alternatives by eliminating privileges and political barriers to entrepreneurial entry.

CONCLUDING REMARKS

Despite appearances, the old and new development economics share the same main assumptions, objectives, and recommendations. More specifically, the core of old and new development literature includes: 1) the poverty trap theory, 2) the indispensability of top-down planning of the economic life of the poor to overcome the poverty trap, and 3) the objective conception of costs and benefits to support political interventionism in underdeveloped countries.

This paper argues that neoclassical reductionism causes the old and new development economics to fail to recognize the essence of poverty, corruption, and underdevelopment: political barriers to human beings' innate creative and entrepreneurial ability to solve human problems. It reveals how the Austrian theory of entrepreneurship provides the essential theoretical framework to overcome the new development economics's challenges. It is interesting to note that placing the entrepreneur at the heart of economic analysis allows development to be understood as the widening range of alternatives open to people. This objective serves as a pattern in the analysis of policies and institutional change. Thus, economic development objectives are best achieved by strengthening entrepreneurship through an institutional environment conducive to private property. Higher confiscation risks in the market process tend to inhibit the creative and coordinating feature of entrepreneurship. As long as there are political barriers, there will be poverty.

These arguments add more theoretical substance to the recently renewed concern in development economics circles about the impact of weak property rights on economic development. A theory built on dynamic flesh-and-blood entrepreneurship provides quantitative

tools with more powerful meaning for further research on economic history and public policy in underdeveloped economies.

REFERENCES

- Acemoglu, Daron, Suresh Naidu, Pascual Restrepo, and James A. Robinson. 2019. "Democracy Does Cause Growth." *Journal of Political Economy* 127, no. 1: 47–100.
- Acemoglu, Daron, and James A. Robinson. 2019. "Rents and Economic Development: The Perspective of *Why Nations Fail*." *Public Choice* 181, no. 1–2: 13–28.
- Alacevich, Michele. 2018. "The Birth of Development Economics: Theories and Institutions." In *The Political Economy of Development Economics: A Historical Perspective*, edited by Alacevich and Boianovsky (114–132). Durham, N.C.: Duke University Press.
- Alacevich, Michele and Mauro Boianovsky. 2018. "Writing the History of Development Economics." In *The Political Economy of Development Economics: A Historical Perspective*, edited by Alacevich and Boianovsky (1–14). Durham, N.C.: Duke University Press.
- Arndt, Heinz W. 1987. *Economic Development: The History of an Idea*. Chicago: University of Chicago Press.
- Banerjee, Abhijit V. 2005. "'New Development Economics' and the Challenge to Theory." *Economic and Political Weekly* 40, no. 40: 4340–44.
- . 2007. *Making Aid Work*. Cambridge, Mass.: MIT Press.
- Banerjee, Abhijit, Rukmini Banerji, James Berry, Esther Duflo, Harini Kannan, Shobhini Mukerji, Marc Shotland, and Michael Walton. 2017. "From Proof of Concept to Scalable Policies: Challenges and Solutions, with an Application." *Journal of Economic Perspectives* 31, no. 4: 73–102.
- Banerjee, Abhijit, and Esther Duflo. 2011. *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty*. New York: PublicAffairs.
- Baran, Paul A. 1957. *The Political Economy of Growth*. New York: Monthly Review Press.
- Bastos, Miguel A. 2005. "¿Puede la intervención estatal ser justificada científicamente? Una crítica." *Procesos de mercado* 2, no. 1: 11–51.

- Bauer, Peter T. 1976. *Dissent on Development*. Cambridge, Mass.: Harvard University Press.
- . 2000. *From Subsistence to Exchange and Other Essays*. Princeton, N.J.: Princeton University Press.
- Bauer, Peter T., and Basil S. Yamey. 1957. *The Economics of Under-developed Countries*. Chicago: University of Chicago Press.
- Beinhocker, Eric, and Nick Hanauer. 2014. "Redefining Capitalism." *McKinsey Quarterly* 3, no. 3: 160–69.
- Block, Walter. 2003. "National Defense and the Theory of Externalities, Public Goods, and Clubs." In *The Myth of National Defense: Essays on the Theory and History of Security Production*, edited by Hans-Hermann Hoppe (301–334). Auburn, Ala.: Ludwig von Mises Institute.
- Boettke, Peter J. 2002. "Information and Knowledge: Austrian Economics in Search of Its Uniqueness." *Review of Austrian Economics* 15, no. 4: 263–74.
- Boettke, Peter J., and Christopher J. Coyne. 2003. "Entrepreneurship and Development: Cause or Consequence?" *Advances in Austrian Economics* 6, no. 1: 67–87.
- Boettke, Peter J., Christopher J. Coyne, and Peter T. Leeson. 2008. "Institutional Stickiness and the New Development Economics." *American Journal of Economics and Sociology* 67, no. 2: 331–58.
- Boettke, Peter, and Steven Horwitz. 2005. "The Limits of Economic Expertise: Prophets, Engineers, and the State in the History of Development Economics." *History of Political Economy* 37, no. 5: 10–39.
- Boettke, Peter, and J. Robert Subrick. 2003. "Rule of Law, Development, and Human Capabilities." *Supreme Court Economic Review* 10: 109–26.
- Boianovsky, Mauro. 2018. "Beyond Capital Fundamentalism: Harrod, Domar and the History of Development Economics." *Cambridge Journal of Economics* 42, no. 2: 477–504.
- Bouguen, Adrien, Yue Huang, Michael Kremer, and Edward Miguel. 2019. "Using Randomized Controlled Trials to Estimate Long-Run Impacts in Development Economics." *Annual Review of Economics* 11: 523–61.
- Cachanosky, Iván. 2020. "En defensa del monopolio competitivo." *Procesos de mercado* 17, no. 1: 233–64.

- Coyne, Christopher J. 2013. *Doing Bad by Doing Good: Why Humanitarian Action Fails*. Stanford, Calif.: Stanford University Press.
- Coyne, Christopher, and Peter Boettke. 2006. "The Role of the Economist in Economic Development." *Quarterly Journal of Austrian Economics* 9, no. 2: 47–68.
- Deaton, Angus. 2010. "Instruments, Randomization, and Learning about Development." *Journal of Economic Literature* 48, no. 2: 424–55.
- Demeritt, Allison, and Karla Hoff. 2018. "The Making of Behavioral Development Economics." In *The Political Economy of Development Economics: A Historical Perspective*, edited by Alacevich and Boianovsky (303–322). Durham, N.C.: Duke University Press.
- Duflo, Esther. 2017. "Richard T. Ely Lecture: The Economist as Plumber." *American Economic Review* 107, no. 5: 1–26.
- Easterly, William. 2002. "The Failure of Economic Development." *Challenge* 45, no. 1: 88–103.
- . 2009. "Can the West Save Africa?" *Journal of Economic Literature* 47, no. 2: 373–447.
- . 2014. *The Tyranny of Experts: Economists, Dictators, and the Forgotten Rights of the Poor*. New York: Basic Books.
- Edwards, Sebastián. 2015. "Economic Development and the Effectiveness of Foreign Aid: A Historical Perspective." *Kyklos* 68, no. 3: 277–316.
- Espinosa, Victor I. 2020. "Epistemological Problems of Development Economics." *Procesos de Mercado* 17, no. 1: 55–93.
- . 2021. Salvador Allende's Development Policy: Lessons After 50 Years. *Economic Affairs* 41, no 1: 96–110.
- Espinosa, Victor I., William H. Wang, and Hai-Jiu Zhu. 2020. "Israel Kirzner on Dynamic Efficiency and Economic Development." *Procesos de mercado* 17, no. 2: 271–98.
- Foss, Kirsten, Nicolai J. Foss, Peter G. Klein, and Sandra K. Klein. 2007. "The Entrepreneurial Organization of Heterogeneous Capital." *Journal of Management Studies* 44, no. 7: 1165–86.

- Frey, Bruno, and Reiner Eichenberger. 1999. *The New Democratic Federalism for Europe: Functional, Overlapping, and Competing Jurisdictions*. Cheltenham, U.K.: Edward Elgar.
- Garrison, Roger. 2001. *Time and Money: The Macroeconomics of Capital Structure*. London: Routledge.
- Green, Duncan. 2018. "10 Top Thinkers on Development, Summarized in 700 Words by Stefan Dercon." *From Poverty to Power* (blog), Jan. 10, 2018. <https://oxfamblogs.org/fp2p/10-top-thinkers-on-development-summarized-in-700-words-by-stefan-dercon/>.
- Hirschman, Albert O. 1958. *The Strategy of Economic Development*. New Haven, Conn.: Yale University Press.
- Holcombe, Randall G. 1998. "Entrepreneurship and Economic Growth." *Quarterly Journal of Austrian Economics* 1, no. 2: 45–62.
- . 2009. "Product Differentiation and Economic Progress." *Quarterly Journal of Austrian Economics* 12, no. 1: 17–35.
- Hoppe, Hans-Hermann. 1989. "Fallacies of the Public Goods Theory and the Production of Security." *Journal of Libertarian Studies* 9, no. 1: 27–46.
- Huerta de Soto, Jesús. 2006. *Money, Bank Credit, and Economic Cycles*. Auburn, Ala.: Ludwig von Mises Institute.
- . 2009. *The Theory of Dynamic Efficiency*. London: Routledge.
- . 2010. *Socialism, Economic Calculation and Entrepreneurship*. Cheltenham, U.K.: Edward Elgar.
- Hülsmann, Jörg Guido. 2002. "A Theory of Interest." *Quarterly Journal of Austrian Economics* 5, no. 4: 77–110.
- . 2007. *Mises: The Last Knight of Liberalism*. Auburn, Ala.: Ludwig von Mises Institute.
- Ikeda, Sanford. 2015. "Dynamics of Interventionism." In *The Oxford Handbook of Austrian Economics*, edited by Peter Boettke and Christopher Coyne (393–416). New York: Oxford University Press.
- Kendall, John. M. 2003. "Designing a Research Project: Randomised Controlled Trials and Their Principles." *Emergency Medicine Journal* 20, no. 2: 164–68.

- Kirzner, Israel M. 1985. *Discovery and the Capitalist Process*. Chicago: University of Chicago Press.
- . 1997. “Entrepreneurial Discovery and the Competitive Market Process: An Austrian Approach.” *Journal of Economic Literature* 35, no. 1: 60–85.
- . 2009. “The Alert and Creative Entrepreneur: A Clarification.” *Small Business Economics* 32, no. 2: 145–52.
- . 2017. “The Entrepreneurial Market Process—an Exposition.” *Southern Economic Journal* 83, no. 4: 855–68.
- Klein, Peter G., and Per L. Bylund. 2014. “The Place of Austrian Economics in Contemporary Entrepreneurship Research.” *Review of Austrian Economics* 27, no. 3: 259–79.
- Kode, Johannes. 2013. “On the Social Conditions of Governance: Social Capital and Governance in Areas of Limited Statehood.” SFB-Governance Working Paper Series 60, DFG Collaborative Research Center (SFB) 700, Berlin, September.
- Kumar, Sunil M. 2016. “RCTs for Better Policy? The Case of Public Systems in Developing Countries.” *Economia Política* 33, no. 1: 83–98.
- Leeson, Peter T., and Peter J. Boettke. 2009. “Two-Tiered Entrepreneurship and Economic Development.” *International Review of Law and Economics* 29, no. 3: 252–59.
- Lewis, W. Arthur. 1954. “Economic Development with Unlimited Supplies of Labour.” *Manchester School* 22, no. 2: 139–91.
- . 1966. *Development Planning*. New York: Harper and Row.
- Leys, Colin. 1996. *The Rise and Fall of Development Theory*. Oxford: James Currey.
- Manish, G. P., and Benjamin Powell. 2014. “Capital Theory and the Process of Inter-temporal Coordination: The Austrian Contribution to the Theory of Economic Growth.” *Atlantic Economic Journal* 42, no. 2: 133–42.
- . 2015. “From Subsistence to Advanced Material Production: Austrian Development Economics.” In *The Oxford Handbook of Austrian Economics*, edited by Peter Boettke and Christopher Coyne (698–712). New York: Oxford University Press.

- March, Raymond, Adam G. Martin, and Audrey Redford. 2016. "The Substance of Entrepreneurship and the Entrepreneurship of Substances." *Journal of Entrepreneurship and Public Policy* 5, no. 2: 201–20.
- Meier, Gerald. 1987. *Pioneers in Development*. New York: Oxford University Press.
- . 2005. *Biography of a Subject: An Evolution of Development Economics*. New York: Oxford University Press.
- Mises, Ludwig von. 1966. *Human Action: A Treatise on Economics*. Chicago: Henry Regnery.
- Myrdal, Gunnar. 1953. *Problems of Capital Formation in Underdeveloped Countries*. New York: Oxford University Press.
- . 1956. *Development and Underdevelopment: A Note on the Mechanism of National and International Inequality*. Cairo: National Bank of Egypt.
- . 1957. *Economic Theory and Underdeveloped Regions*. London: Duckworth.
- . 1968. *Asian Drama: An Inquiry into the Poverty of Nations*. New York: Twentieth Century Fund.
- Nurkse, Ragnar. 1952. "Some International Aspects of the Problem of Economic Development." *American Economic Review* 42, no. 2: 571–83.
- Pawson, Ray. 2006. *Evidence-Based Policy: A Realist Perspective*. London: SAGE Publications.
- Powell, Benjamin. 2005. "State Development Planning: Did It Create an East Asian Miracle?" *Review of Austrian Economics* 18, nos. 3–4: 305–23.
- Prebisch, Raúl. 1950. *The Economic Development of Latin America and Its Principal Problems*. New York: United Nations.
- Rapley, John. 2007. *Understanding Development: Theory and Practice in the Third World*. Boulder, Col.: Lynne Rienner Publishers.
- Risse, Thomas. 2011. *Governance without a State*. New York: Columbia University Press.
- Risse, Thomas, and Eric Stollenwerk. 2018. "Legitimacy in Areas of Limited Statehood." *Annual Review of Political Science* 21, no. 1: 403–18.
- Rodrik, Dani. 2009. "The New Development Economics: We Shall Experiment, but How Shall We Learn?" In *What Works in Development?*

Thinking Big and Thinking Small, edited by Jessica Cohen and William Easterly (24–47). Washington, D.C.: Brookings Institution Press.

Romer, Paul. 2009. “Comment on Pricing and Access: Lesson from Randomized Evaluations in Education and Health.” In *What Works in Development? Thinking Big and Thinking Small*, eds. Jessica Cohen and William Easterly (126–129). Washington, D.C.: Brookings Institution Press.

Rosenstein-Rodan, Paul. N. 1943. “Problems of Industrialization of Eastern and South-Eastern Europe.” *Economic Journal* 53, no. 210: 202–11.

———. 1944. “The International Development of Economically Backward Areas.” *International Affairs* 20, no. 2: 157–65.

———. 1961a. “Notes on the Theory of the ‘Big Push.’” In *Economic Development for Latin America*, edited by H. S. Ellis and H. C. Wallich (57–73). London: Stockton Press.

———. 1961b. “International Aid for Underdeveloped Countries.” *Review of Economics and Statistics* 43, no. 2: 107–38.

Real Academia Española. 2014. *Diccionario de la lengua española* [Dictionary of the Spanish language]. 23d ed. Barcelona: Espasa. Periodically updated at <https://dle.rae.es>.

Sachs, Jeffrey D. 2015. *The Age of Sustainable Development*. New York: Columbia University Press.

Sackett, David L., William M. C. Rosenberg, J. A. Muir Gray, R. Brian Haynes, and W. Scott Richardson. 1996. “Evidence Based Medicine.” *British Medical Journal* 313, no. 7050: 170–71.

Salerno, Joseph T. 1990. “Ludwig von Mises as Social Rationalist.” *Review of Austrian Economics* 4: 26–54.

———. 2008. “The Entrepreneur: Real and Imagined.” *Quarterly Journal of Austrian Economics* 11, no. 3–4: 188–207.

Scott, James C. 1998. *Seeing like a State*. New Haven, Conn.: Yale University Press.

Singer, Hans W. 1949. “Economic Progress in Underdeveloped Countries.” *Social Research* 16, no. 1: 1–11.

———. 1950. “The Distribution of Gains between Investing and Borrowing Countries.” *American Economic Review* 40, no. 2: 473–85.

- Thaler, Richard. 2000. *Misbehaving: The Making of Behavioral Economics*. New York: W. W. Norton.
- Toye, John. 2018. "The Counterrevolution in Development Economics." In *The Political Economy of Development Economics: A Historical Perspective*, edited by Alacevich and Boianovsky (269-285). Durham, N.C.: Duke University Press.
- Toye, J. F., and Richard Toye. 2003. "The Origins and Interpretation of the Prebisch-Singer Thesis." *History of Political Economy* 35, no. 3: 437–67.
- United Nations. 2005. *Investing in Development: A Practical Plan to Achieve the Millennium Development Goals*. New York: United Nations.
- . 2015. *The Millennium Development Goals Report 2015*. New York: United Nations.
- Yu, Tony Fu-Lai. "A New Perspective on the Role of the Government in Economic Development." *International Journal of Social Economics* 27, no. 7/8/9/10: 994–1013.