Innovations Case Narrative:
The Legatum Center for Development and
Entrepreneurship, MIT

The world is awash with ideas for helping the poor. Generally these involve some combination of aid, charity, and volunteer work. This makes intuitive sense but ignores an important part of reality. The needs—seen as business opportunities—of those without wealth can spur spectacular innovation. Johannes Gutenberg's printing press slashed the cost of book production by a factor of close to 100. To reach the masses, Benjamin Day sold newspapers at one-sixth the price his predecessors had charged. Henry Ford cut the price of the automobile by a factor of ten. Ray Kroc had low-income people in mind when he developed McDonald's.

These entrepreneurs did not invent books, newspapers, cars, or hamburgers. These entrepreneurs were driven to reach a much wider population; they conceptualized and executed business models that have revolutionized how we live, while at the same time generating great profits. Generally speaking, entrepreneurs do not necessarily invent things; the entrepreneurial function itself lies in providing "only the will and the action," in order to assemble the ingredients, possibly from others, to implement a vision for reaching a market.

Perhaps unwittingly, the entrepreneurs and countless innovators like them were demonstrating a universal pattern: innovations move toward those with lower incomes. Every innovation spurs a complex chain of reactions, but entrepreneurs push consistently toward lower costs and larger markets. This saves known resources or creates new ones, puts price pressures on existing products, and

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The ideas and opinions expressed here are those of the author. They have been gathered through his experience in founding the Legatum Center and establishing its programs, which has involved learning from others in the MIT community. They are not necessarily those of MIT, the Sloan School of Management, or the sponsors of the Legatum Center, or of professors who supported the Center.

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engages more people in the economy. Moreover, if the new products are tools that increase productivity—bicycles, sewing machines, cell phones—they give people greater purchasing power for new goods and services. As the innovation process cycles forward, more and more low-income people gain access to goods and jobs.

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At the same time, higher productivity, more choices, and a more rational economy emerge.

Today's innovations may show up in unexpected ways and places, but they follow the same pattern and are no less spectacular than they were in Henry Ford's day. Organizations such as Bridge International (children's educa-Kenya), bKash Limited (money transfer, Bangladesh), M-Kopa (equipment leasing, Kenya), and Narayana Hospitals (cardiac surgery, India) are prime examples. A 2009 Wall Street Journal article called Narayana's founder, Dr. Devi Shetty, "the Henry Ford of Heart Surgery" for offering cutting-edge medical care in India at a fraction of its cost elsewhere.2

The Legatum Center at MIT was founded on the belief that low-income people have enormous potential to offer the world and can stimulate serious innovation. The Center thus supports and trains entrepreneurial students who head out from MIT to launch businesses in low-income countries. In so doing, the Center also brings the realities of low-income countries, where a majority of the world's population lives, to MIT's doorstep, thus adding to MIT's innovation ecology.

THE CENTER'S INCLUSIVE PHILOSOPHY AND THE FOUNDERS OF MODERN ECONOMICS

About 125 years ago, Alfred Marshall, in his *Principles of Economics*, wrote about "the steady progress of the working classes during the nineteenth century," a time of great innovation in England. He then "question[ed] whether it is really impossible that all should start in the world with a fair chance of . . . life, free from the pains of poverty." "The answer," he continued, "depends in a great measure upon the facts and inferences, which are with the province of economics; and this it is which gives to economic studies their chief and their highest interest."

Marshall was fully aware of the work of Adam Smith, who sat down to write The Wealth of Nations 125 years earlier, in the 1760s, when England was just

approaching the Industrial Revolution. Having observed the improving economic conditions in eighteenth-century England and Scotland, Smith advanced a profound thesis about political economies, a model for creating "universal opulence which extends itself to the lowest ranks of the people." For this purpose, Smith championed the division of labor, which he found to be most effective in increasing the "wealth" of nations—that is, the capacity of the average person to purchase goods and services.

Smith envisioned a "commercial society" in which individuals specialize in the niches most suited to them, maximizing their income and allowing them to satisfy all of their other needs (for goods and services) through purchases in the marketplace. At the heart of Smith's thinking is "competition," which compels market participants to push toward ever-greater specialization and increased participation. Smith believed that individuals, as they increase their specialization, are compelled to relinquish other activities to

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their fellow citizens, creating an ever-expanding economic mesh of exchanges. By focusing on individuals' areas of strength, this inclusive process helps both rich and poor make gains.

David Ricardo later demonstrated that this point is valid even when the rich are more adept at tasks done by the poor. This competition-driven inclusion process can give rise to inclusive prosperity. For this reason, the term "competitive commerce" better represents Smith's process of expanding specialization and exchange than do "capitalism" or "capitalist system," terms that have come to be loosely used and may not represent competitive commerce.⁵

For Smith, each tiny step toward greater specialization is an innovation (although he used the term "improvement"). Each step is a "new" advancement of the economy as a whole. Smith also believed that these progressive specializations led to a complex piece of work being broken into smaller bits, making each bit potentially easier to mechanize or automate, leading to further innovations. When the watermill was invented, for instance, it allowed an improved method of milling; the inventor's neighbors brought him more milling jobs; and he was able to do each job better, or at a lower cost, or both. Further specialization was encouraged by another set of innovations, accumulated over a long period of time, that made physical exchanges easier (e.g., money facilitating exchanges; clocks facilitating coordination and appointments; canals and steamboats facilitating movement of goods and people).

Therefore, the drive to specialize and enjoy an increase in wealth is intricately interwoven with the drive to innovate and enjoy the corresponding increase in wealth.

About 100 years ago, Joseph Schumpeter went further and championed entrepreneurs, those who implemented innovations—often radical—in their search for greater profits. He clarified the mindsets and motivations that might set innovation in motion and concluded, as Smith had earlier with his "universal opulence," that affluence would spread and include everyone:

Queen Elizabeth [I] owned silk stockings. The capitalist achievement does not typically consist in providing more silk stockings for queens but in bringing them within the reach of factory girls in return for steadily decreasing amounts of effort. . . . The capitalist process, not by coincidence but by virtue of its mechanism, progressively raises the standard of life of the masses.⁶

Schumpeter used the term "capitalist process"; however, "competitive commerce" probably better describes what he meant. Schumpeter observed that "capitalism" is moved forward not necessarily by capitalists but by entrepreneurs, another reason why the term "capitalism" can be misleading. That is, the entrepreneurial function is distinct from the provision of capital.

Schumpeter's conception of entrepreneurial action is inherent in competitive commerce as discussed here. According to Smith, profit-seeking entrepreneurs, unprotected by the public sector, are forced to provide the best possible products at the lowest possible prices. To do so, they either fight (i.e., compete)—by seeking further divisions of labor and achieving gains in productivity in order to offset declining profits—or they take flight—by adopting radical innovations and taking off in entirely new directions. Either way, in competitive commerce, the innovation process moves forward, eating into the profits of existing businesses, compelling entrepreneurs to set new innovations in motion, and engaging more and more participants.

As participants become increasingly dispersed, the economy gets an additional boost because, as F. A. Hayek wrote some 70 years ago, "knowledge of the circumstances of which we must make use never exists in concentrated or integrated form, but solely as the dispersed bits of incomplete and frequently contradictory knowledge which all the separate individuals possess. The economic problem of society . . . is a problem of the utilization of knowledge not given to anyone in its totality." Each participant brings into play information about his or her particular location and needs. The more inclusive the economy, the more information flows into it.

Therefore, if competitive commerce is allowed to advance, it will expand productivity, purchasing power, inclusiveness, the flow of information, and the innovation process—all at the same time. Competitive commerce unleashes an innovation process that generally extends ever outward to those with lower and lower incomes. While the competitive commerce model is rarely realized in its pure

form—indeed, the deviations from it are far more pervasive, especially in low-income countries—the model helps us understand those deviations and their severity, pointing to potential remedies. In recent decades in China, hundreds of millions of people have risen out of poverty as a process with meaningful semblance to competitive commerce got going, even with the limitations imposed by the Communist state.

ACHIEVEMENTS SO FAR: SMALL BUT SIGNIFICANT

The Legatum Center takes seriously the notion that competitive commerce is a viable model for low-income countries—even if the ideal of competitive commerce is unlikely ever to be fully realized. The Center's position is that every new entrepreneurial venture disperses power, however small the amount, and contributes to the cause of advancing competitive commerce.

Elements of the idea behind the Center had been gathering in the author's mind since the early 1990s when he struggled to put together Grameenphone in Bangladesh. He realized that a radical drop in costs (not unlike the impact of Gutenberg's printing machines) was taking place in digital technologies, including mobile phones. In addition, these mobiles could be tremendous productivity tools, boosting the users' incomes almost immediately and enabling them to pay for services and improve their economic lives. This led him to work on innovative distribution schemes. Through his experience, he realized that young men and women attending Western universities could introduce new innovations from the West to low-income countries. Armed with the knowledge and training gained at these universities, potential entrepreneurs could custom-tailor products and services in low-income countries, devise new distribution schemes, and establish commercial enterprises that allowed them to make serious economic gains in tandem with the citizenry of these countries. The Legatum Group, with a similar philosophy, decided in 2007 to make generous and significant donations to MIT in order to back the idea, and the Center came into being with the support and guidance of MIT leadership and many senior faculty members.⁸ The Center was inaugurated in October 2008 through a conference that, among other prominent speakers, included five Nobel laureates in economics,9 endorsing the vision of the Center. Four years later, observing the early performance of the Center and its students, The MasterCard Foundation committed to another significant donation. A few smaller donors also came forward. Since then, the Center has benefited from a number of prominent individuals worldwide who have served on its advisory board.10

The Center started with only 12 Fellows in its inaugural, fall 2008 class. By the fall of 2014, more than 200 Fellowships had been offered, and 160 Fellows had completed the program. Admission is competitive; approximately 150 MIT graduate students apply each year, from which about 30 are selected.

Fellows usually enter with their ideas only "half-baked" the program helps them complete the "baking process." The program itself is geared toward prepar-

The Legatum Center's Contribution to MIT's Innovation Ecology

MIT is known worldwide for its unmatched innovation ecology. However, good innovations require meaningful engagement with realities on the ground—a point completely consistent with MIT's founding motto, *Mens et manus*. To this end, the Legatum Center strives to bring low-income countries to MIT's doorstep: to connect the campus with the realities of developing countries and enable a deep understanding of these countries' needs, particularly their entrepreneurship needs. The Center's connections to the developing world can also serve to stimulate the innovative minds of MIT students and faculty members. These connections are the Center's greatest strength and potentially its most significant contribution to MIT. Recent developments at the Center, strengthening its connection to ground realities, are:

- Case Studies. Since 2012, the Center has produced case studies of entrepreneurial trajectories in low-income countries. By telling the stories of successful entrepreneurs and the challenges each faced and overcame, the cases seek to provide students with new ideas and a sense of the efforts made by more experienced practitioners. Each of the Center's cases includes a story of about 15 pages, a teaching note, and, where possible, a video interview. As the Center builds up its library of cases, it is compiling both a roster of the problems entrepreneurs may encounter in low-income countries and an extensive, in-depth collection of possible ways to overcome these problems. Some of the Center's cases are already being used at Harvard and Tufts.
- Catalysts. The Center has recruited a set of volunteers to act as its eyes and ears in low-income countries. This program's initial focus has been on sub-Saharan Africa, but it could expand to other parts of the world, subject to resource availability. The Catalysts are generally entrepreneurs or otherwise accomplished individuals. They identify potential Fellows, spread the word about the Center's programs, act as on-the-ground mentors for the Center's Fellows and alumni, and identify entrepreneurs from their regions who might

ing students for entrepreneurial careers and includes an individual needs assessment, individualized coaching on venture preparation, mentorship guidance from successful business practitioners in the Boston area, a course titled Entrepreneurship in Large Markets with Low Income, and networking opportunities with successful entrepreneurs and potential funders.

Legatum Center Fellows have explored ideas as varied as fog harvesting (using a nanotechnology-based mesh to extract water from the air); drone-based imaging of agricultural lands in order to create maps of fertilizer needs; the production of nutritious food from moringa leaves, which are widely available in Africa and Asia; enabling entrepreneurs to transform non-recyclable waste streams into

- be potential speakers at the Center or subjects for case studies. The Catalysts visit the Center once a year and share opportunities emerging in their regions.
- Recruitment. The Center now has a recruitment manager to run a "mini admissions office" within the Center. Although the Center's Fellows must meet the prerequisite of admission to an MIT graduate program, the Center has strived to go beyond simply recruiting from MIT's current students. In order to become and sustain itself as the premier center in the West for entrepreneurship in low-income countries, the Center searches globally for students who are both strong candidates for MIT and dedicated to entrepreneurship in low-income countries. Because the fundamental entrepreneurial drive generally comes from within, the selection of Fellows is an enormously important component of the Center's programs. An active recruitment process can expand the pool of applicants and afford greater selectivity to the Center.
- Competition: The Center has just launched a competition, the Zambezi Prize, for entrepreneurs in sub-Saharan Africa who have launched ventures promoting financial inclusion (e.g., microfinance, leasing, mobile payment systems, saving schemes, micro-insurance). Competition semifinalists will be able to tap into the Center's and MIT's innovation ecologies and refine their offerings. At the same time, the competition is expected to bring a wealth of knowledge to the Center concerning the kinds of innovations that are actually taking hold in sub-Saharan Africa.

Over the last 153 years, MIT has contributed countless innovations to the American and global economies. But the various entrepreneurial drives in these economies have also contributed to MIT's innovation ecology. MIT could not have become the giant that it is in isolation. The biotechnology companies in MIT's neighborhood contribute to its ecology, just as MIT contributes to their successes. By the same logic, low-income countries, where more than three billion people live, can contribute to MIT's innovation ecology. The Legatum Center plays a distinct role in helping connect MIT to a global network of entrepreneurs in these countries.

high-quality building materials and durable goods; and employing environmentally sustainable production techniques to grow agricultural products used in high-end cosmetics and foods.

Implementing these ideas in low-income countries is difficult, and it is too early to tell how many of the 160 Fellows will eventually create successful ventures. Among other things, young men and women have many other life priorities in the immediate years after they graduate. Various bureaucratic hurdles in low-income countries also create serious impediments. However, about 30 of the Fellows have already started companies. Most of these are in the earliest stages, but a few,

including the following examples, have advanced to the point where they are serving customers:

- In Nigeria, Bilikiss Adebiyi cofounded WeCyclers to recycle urban scrap metal. The project is designed to solve the urban waste challenge for households and recyclers in densely populated low-income neighborhoods by motivating families to recycle through an SMS-based incentive program. Families are rewarded with points for recycling, and they can redeem those points for items of value, like cell phone minutes and basic household items.
- In Kenya, David Auerbach and Ani Vallabhaneni founded Sanergy. Encompassing the full life cycle of waste, Sanergy designs its own toilets, sells them to consumers, and then collects the waste, which is converted into electricity for sale to the national grid or into organic fertilizer for sale to commercial farms.
- In Tanzania, Norikazu Ogawa founded SeedAfrica to provide agricultural machinery leasing and logistics services. SeedAfrica's target customers are the poorest farmers in Tanzania, those for whom increased productivity can maximize earning potential, thus lifting them out of poverty. SeedAfrica currently serves 30–40 farmers per month.
- In India, Akash Bhatia cofounded Infinite Analytics, which serves clients in India and the United States. His company uses neuro-linguistic programming, machine learning, and other techniques to analyze "big data" to help predict user behavior for a variety of businesses, including enterprise business, e-commerce, and travel.
- In Pakistan, Adnan Shahid founded Ideogeny, which helps startups as well as small and medium-size companies turn ideas into business opportunities.
- In India, Sidhant Pai and Katie Spies cofounded Protoprint. Based in Pune, the
 company empowers urban waste pickers with the technology to ethically produce fair-trade 3D printer filament from the waste plastics they collect.
 Protoprint markets the filament globally, providing consumers with a pricecompetitive, recycled alternative to virgin plastic.
- In Mexico, Javier Lozano founded Clinicas del Azucar, which provides affordable diabetes care. Using cutting-edge technology and a comprehensive redesign of how patients are cared for and interacted with, the company has reduced the annual cost of care by 70 percent. By lowering costs, it makes effective care more accessible to more people in Mexico and helps to prevent many of the complications that arise from diabetes.
- Also in Mexico, Enrique Bay founded Kiwi, an online platform that helps users
 make big-ticket purchases of products in advance through affordable payment
 plans, while allowing merchants to widen their customer base and increase sales.

IN TRAINING ENTREPRENEURS, THE CENTER STANDS APART FROM THE "NEO-LEGACY"

For several centuries, commerce has been the central force in economic, social, and political progress in the West. That is the real Western "legacy," as reflected by such Western thinkers as Smith, Schumpeter, and Hayek. In contrast, the approach taken toward the advancement of low-income countries has been dis-

tinctly noncommercial. Since World War II, the West has generally encouraged high-income countries to help low-income ones by providing aid to their governments and charity to nongovernmental organizations (NGOs). Given the power, influence, and resources of the Western countries, this approach has had a great impact on thinking worldwide, including on the thinking of business leaders and other professionals in the West. In fact, most people in the West, if asked, cannot immediately explain why nontaxable charitable organizations are called "nonprofits" in the West but "nongovernmental organizations" in low-income countries. The distinction is instructive: it highlights the fact that in the West first attempts to solve society's prob-

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lems involve commerce, with the fallback being nonprofit organizations; in contrast, in low-income countries the first attempts to solve problems involve governments, with the fallback being NGOs. This pattern is etched so deeply that people generally take it for granted as part of the natural landscape of how the world works. The Western approach to help low-income countries through aid to governments and charity to NGOs has become the new legacy—which this paper calls "neo-legacy"—and it contrasts with the Western commercial legacy that predates it by several centuries. The Legatum Center's theory of change stands in stark contrast to this neo-legacy.

Neo-legacy represents an entrenched, pervasive mode of thought that is both self-fulfilling and self-perpetuating. Aristotle, who emphasized the need to incorporate data and observations into thinking, observed that slavery existed everywhere during his time and concluded from this that slavery was a natural fact of life. In the last seven decades, widespread aid to governments in low-income countries has led even business professionals and academics to accept another

"fact of life": that the road to progress for poor countries is paved with charity and aid.

This automatically leads to a clear distinction in how training programs in entrepreneurship are structured in high- and low-income countries. In the West, the question of whether leadership or entrepreneurship can be taught is commonly debated. An implicit (and rarely acknowledged) assumption of such debates is that entrepreneurship is both necessary and feasible. In low-income countries, these are not assumptions but actively debated issues in and of themselves. Such questions arise in people's minds because (so the thinking goes) state-based efforts must be dominant for some good reason.

Another effect of the neo-legacy on innovation cannot be ignored in the context of the training of entrepreneurs: The neo-legacy has contributed to the creation of overbearing bureaucracies that stifle innovation and initiative. If innovations provide a tailwind to economic and social progress, then the neo-legacy counters with a headwind. From this, additional questions emerge. For instance, how can entrepreneurship be made feasible given the forces that oppose it?

The neo-legacy has given rise to many complex problems in low-income countries. While those problems are beyond the scope of this article, those in the West who support entrepreneurship in low-income countries generally follow one of three strategies to avoid them:

- 1. They simply ignore the problems and instead train entrepreneurs for low-income countries in much the same way they train entrepreneurs for ventures in the United States and other high-income countries. Perceptive students, such as those at MIT, are not content with this solution. They want to understand how their work fits into the larger political economies. And because they want to contribute to progress in low-income countries, they need to understand how entrepreneurship, more so than nonprofit efforts or aid, contributes to this goal.
- 2. Many Western academics recognize the value of entrepreneurship and commercial progress in low-income countries but place responsibility for it on the governments of those countries. Entrepreneurship, the argument goes, requires an appropriate environment that should be created by prudent governments. But this approach fails to recognize the interactive nature of the different sectors of a political economy and how governance improves through the blossoming of entrepreneurship in the private sector. Further, it ignores the limiting consequences of entrenched and overwhelming state power in low-income countries—and how those interests themselves may fundamentally oppose entrepreneurship.
- 3. Finally, some proponents of entrepreneurship in low-income countries choose to focus on countries that are relatively developed, such as Malaysia, Turkey, and Costa Rica. These countries have already experienced sufficient growth to enable ideas from high-income countries to be applied. The choice to focus on

relatively more-developed countries thus leaves out more difficult places where effective entrepreneurial interventions may have a more fundamental impact.

The Legatum Center takes a more direct approach, attempting to deal with the neo-legacy head on. The Center aims not only to adequately prepare entrepreneurs for the unique conditions in the most challenging low-income countries but also to promote (including in publications such as the *Wall Street Journal*, *Harvard Business Review*, *Nature*, and *Science*) the idea that entrepreneurship is a more effective means of progress than aid.

Concurrently, the Center has developed a curriculum that taps into (1) the mainstream Western intellectual tradition that is generally consistent with entrepreneurial and bottom-up progress; (2) lessons from Western entrepreneurs—such as Josiah Wedgwood, Isaac Singer, and Henry Ford—who operated in low-income environments; (3) case studies of successful entrepreneurs working in contemporary low-income countries; (4) current technological phenomena that are unleashing new possibilities; and (5) the knowledge of contemporary practitioners, both entrepreneurs and their funders.

PROFITS, COMPETITION, AND INCLUSIVENESS

The question of profits not surprisingly arises in the minds of the Center's Fellows; it is counterintuitive to think that an entrepreneur trying to make profits can be helpful to low-income people, especially in countries with widespread poverty. This partly explains the wave of rising interest in "social entrepreneurship," a term that, although it generally encompasses both nonprofit and for-profit enterprises, manages to imply that entrepreneurship, on its own, is not necessarily social. Social entrepreneurship is thus conceived as using the strengths of entrepreneurship to address social issues.

Because the Center is associated with low-income countries, and those countries are generally perceived to have social problems, the Center is often assumed to be promoting social entrepreneurship and to be focused on ventures that focus only on these problems. In fact, the Center simply promotes for-profit ventures that provide goods and services to "the average person" in a low-income country. The Center has nothing against nonprofit organizations or non-governmental organizations. Rather, it tries to emphasize that the powerful roles played by forprofit ventures should not be sidestepped. Young men and women who are inspired to create effective business ventures can have a profound impact on the process of development. The belief that regular entrepreneurship does not generate social progress may, as a result, prejudice potential entrepreneurs against forprofit ventures. That is an unfortunate outcome, because so long as such ventures do not enjoy a monopoly or other kinds of unfair protection from governments (i.e., so long as they participate in competitive commerce), they are likely to promote a great deal of social progress by promoting greater inclusivity, as explained before.

Most people expect that the poor and the weak will, almost by definition, fare poorly in competition and commerce. On the surface, then, competitive commerce does not sound like something that will benefit them. However, the word "competitive" here describes what can exist among businesses as they compete for customers and other resources, including workers. Competitive commerce puts a check on powerful business owners and empowers the weak: that is customers and employees. Furthermore, those who are concerned about the weak usually worry

The lure of profits encourages entrepreneurs to offer themselves as stepping-stones, allowing society to march forward.

that private-sector activities will leave them behind. However, private-sector activities are not necessarily coequal with competitive commerce. The latter involves competition that pushes the inclusive process forward. Private-sector activities that manage to avoid competition may not be compelled to seek efficiency and may not be an inclusive force.

Since profits accrue to the owners of a successful business, an easy (if intellectually dubious) jump is to conclude that others do not benefit from those profits. Far from it. Potential profits lure investors into new ventures. Actual profits help businesses scale up and attract imitators, leading to competition.

Once competition sets in—and the state does not step in to protect businesses from this competition—a great many social benefits ensue, with inclusiveness prominent among them.

Under competitive commerce, the need to produce profits requires that companies pay attention to consumers and address their genuine needs. This creates price pressures on the competing companies, and consumers save money that, in turn, creates demand for other goods and services. Pressure on price (1) helps to contain inflation; (2) enlarges markets—more people can afford the goods at a lower price; and (3) forces business owners and managers to find more efficient ways to produce goods, thus generating innovation, advancing technologies, and freeing resources to be used for other purposes.

Within a company, competition provides at least three benefits for workers. First, it forces a company to treat its workers better and pay them well so they do not leave to work for competing companies. As recent experience in China demonstrates, wages will rise even when the labor supply is large if the force of competitive commerce is powerful enough. According to an *Economist* article in 2012, "[labor] costs in China have recently been growing by around 20% a year." Second, profit pressure leads to an upgraded labor force as companies try to make the most of their employees and so provide them with training. Third, under profit pressure, a company cannot discriminate among workers, other than according to their job performance, contributing to a culture of meritocracy.

Competitive commerce also pushes businesses to spend money on advertising. This, in turn, helps sustain media and promote transparency. Commercial progress is also an antidote to the demagoguery that plagues low-income countries. James Madison, "father" of the U.S. Constitution and thus no stranger to the idea of checks and balances, saw that commercial progress gave rise to various interest groups—"[a] landed interest, a manufacturing interest, a mercantile interest, a moneyed interest, with many lesser interests"—whose very existence complicates the demagogue's interest in coalescing people into a common mass. The Founding Fathers saw commerce as not just an end but also a means toward good governance. In many low-income countries, whose governments do not have the checks and balances established by the U.S. Constitution, commerce is even more crucial to preventing demagoguery.

If entrepreneurs pursue profits through competitive commerce, social progress ensues as an unintended and less visible consequence. In other words, with competitive commerce, entrepreneurs make economic gains in tandem with consumers, some of whom may be poor. The entrepreneurial gains, are potentially only temporary; another entrepreneur comes along and offers something better, leading to the decline of the first entrepreneur while consumers move forward with the second. The lure of profits encourages entrepreneurs to offer themselves as stepping-stones, allowing society to march forward.

THE IMPACT OF THE NEO-LEGACY ON LOW-INCOME COUNTRIES

Although the complex and vexing issues associated with the neo-legacy are beyond the scope of this article and lie outside the Center's purview, one of its adverse consequences directly impacts the work of the Center's Fellows: a key limiting factor on starting or sustaining ventures in low-income countries, as anyone traveling through or working in these countries will experience, is overbearing bureaucracy. Western intellectuals have been aware of this for a long time. In the context of theorizing about rent-seeking societies, economist Anne Krueger, for instance, noted 40 years ago that in these countries, "government interventions are frequently all-embracing." People tend to think of this bureaucratic dominance as part of "Third World culture." However, these problems have tangible and systemic reasons, and the culture is the effect, not the cause. Colonization, largely dedicated to administration, hardened precolonial structures. Aid to governments, part of the neo-legacy, was initiated to manage the Cold War between the Soviet Union and the West, then expanded the colonial-era bureaucracies.

Many economists who study the effectiveness of "aid" have difficulty finding any positive effect. For example, a recent study that looked at data on middle- and low-income countries for the period 1970–1999 found that "aid represents an important determinant of government expansion." The author, Karen Remmer, further found that "aid promotes not only increased spending but also reduced revenue generation." A couple of hundred years ago, similar conclusions were reached by the Founding Fathers of the United States, who possessed extensive

Possible Future Pathways for the Legatum Center

Entrepreneurship in low-income countries can rejuvenate the innovation process there, a point completely consistent with the missions of the Sloan School of Management and MIT at large, and with the cause of creating prosperity in low-income countries. Here are five reasons why the future of the Center can be bright.

First, articulating and advancing a purely business-oriented theory and practice of development can distinguish the Center and the Sloan School in which it is housed from other business schools or universities that may be mired in the neo-legacy. This is why an appreciation of the consequences of the neo-legacy is so important. Academic institutions in the West have backed—both intellectually and financially—the theory of state-based progress in low-income countries since its emergence 70 years ago, even though the theory is inconsistent with the history of economic progress in the West and the Western mainstream intellectual tradition. Sloan can potentially assert itself on the more solid idea that commercial innovation, energized by competition, is an inclusive process that can lift up billions of people. Given the magnitude of the developing world, the global importance of which is being increasingly recognized, the Center can help differentiate Sloan from other business schools in America.

Second, progress has been made in the last decade toward an appreciation of individual initiatives and away from state-based efforts, and toward for-profit ventures and away from nonprofit projects. Many "impact" investment funds have emerged in recent years that are funding entrepreneurs in low-income countries. The Legatum Group, supporting the Center's vision, and subsequently The MasterCard Foundation and other donors and partners coming forward, represent an emerging wave. The Gates Foundation, originally started as a charity in the fields of health and medicine, has now begun to make equity investments in inclusive and innovative businesses. At least two reasons account for this shift. One is the continued poverty of at least three billion people. Another is the actual innovations that are blossoming in low-income countries. Bridge International, bKash Limited, Narayana Hospitals, and M-Kopa were all mentioned earlier in this article, and all but Narayana were founded within the short lifetime of the Center. In other words, a momentum is building that the Center can capitalize on.

historical knowledge about how a political economy hangs together. In "Federalist #30," Alexander Hamilton emphasized that "the necessities of a nation, in every stage of its existence, will be found at least equal to its resources." Hamilton did not say that resources needed to be found according to the necessities. He emphatically meant the reverse as a fact of life. On the other hand, a nation may have necessities that require more than its existing resources, but in that case the government would have the right incentives to make people more productive and col-

Third, the Center potentially could create revenue-generating programs to supplement funds raised through grants and donations. American corporations are already interested in learning from and possibly partnering with Fellows who have successfully created new ventures. For instance, one alumnus Fellow is creating a chain of low-cost diabetes clinics in Mexico that is ripe with lessons of interest to large health-related American companies. What succeeds on the ground can educate not just researchers and students at MIT but also corporations, which might well pay annual fees in order to engage with the Center and its Fellows. In addition, the Center could organize two- or three-week training programs for entrepreneurs in low-income countries during the summers. The Center has received indications that the demand for such programs is already large and continuing to grow.

Fourth, given adequate funds and faculty endorsement, the Center has the potential to significantly expand its program at MIT. The academic program, currently consisting of one course, could be expanded to include four to six courses on innovative venture creation in low-income countries, possibly leading to a concentration within the MBA program. For instance, one course could explore contemporary cases in low-income countries, while another could examine new technologies from MIT labs or elsewhere that have the potential to solve pressing problems in low-income countries. A course could be offered on the ways in which entrepreneurship alters political economies—albeit gradually—and leads to better governance. Another could provide an economic history of the West with a special focus on the roles entrepreneurs have played. Exposure to Western entrepreneurial history opens the eyes of students from low-income countries and boosts their confidence that they, too, can bring positive change. In addition to new course offerings, a research unit could be launched to explore what advances and what impedes the innovation process in specific counties in the low-income world.

Finally, because low-income countries comprise 80 percent of the world's population and MIT is, and aspires to remain, the premier innovation-intensive global university, the Legatum Center can be an important part of Sloan and MIT at large. The fact that low-income countries and other universities are mired in the neo-legacy only enlarges the possibilities for Sloan and MIT.

lect more revenues, something that gives rise to an interlocking relationship between people and governments and greater accountability.

The Founding Fathers offer other lessons that help explain the predicament of low-income countries. The Framers, deeply motivated to "oblige [the government] to control itself" (Federalist #51), expected that "one department may commit encroachment on the chartered authorities of others" (Federalist #49). In the Federalist Papers, Madison and Hamilton repeatedly expressed fears of "encroachments from the federal government" (Federalist #26 and #46), "enterprises of ambitious rulers in national councils" (Federalist #28), and "aggrandize-

ment of the legislative at the expense of other departments" (Federalist #49), and they used words such as "invasion" and "usurpation" to describe behaviors they expected from government departments; for example, "invasion of public liberty by the national government" (Federalist #28), "to invade the rights of the individual States" (Federalist #46), "invaded the rights of the less numerous parts" (Federalist #46), and "schemes of usurpation" (Federalist #46).

Madison and Hamilton were worried about interdepartmental behavior in the U.S. government, but the logic of their argument is as cogent when applied to governments in low-income countries, where the lack of restraining mechanisms only eases government's outward expansion. That low-income countries experience excessive government should thus come as no surprise; it is in the nature of governments to encroach, invade, and usurp, and those behaviors have been further enabled by inherited colonial machinery expanded with outside aid. No matter what good rationale may have given rise to the neo-legacy, aid to governments had this unfortunate effect.

STATE ACCOUNTABILITY AND THE ROLE OF COMPETITIVE COMMERCE

The arguments made prior to this point should not be misconstrued as implying blind faith in commerce, in the path of which governments in low-income countries stand as an impediment. Rather, the purpose of the article and the Center is to show that entrepreneurship constitutes a path of progress for these countries that potentially leads to a healthy balance between the state and commerce. At the moment, a great imbalance exists between the two because of the neo-legacy.

The state *does* perform critical functions, including those related to defense, the police force, public health, environmental protection, and, yes, the protection of property rights (without which commerce in the long term is not feasible in any meaningful way). Many problems in human societies need to be addressed collectively. A society in which the state fails to perform its critical functions may somehow survive but is unlikely to prosper. Thus, although the importance of commerce and its possible role in improving governance should not be understated, neither should one conclude that commerce alone is a viable alternative to government or a panacea for other social ills.

Likewise, we must acknowledge that commercial forces are potentially capable of corrupting governments. Adam Smith warned of the possible pernicious effects of a private sector that, out of self-interest, colludes with the public sector to block competitive commerce. That is why he advised governments not to intervene in commercial matters. He was worried that government interventions would end up protecting businesses at the expense of competitive commerce and, in effect, consumers. At the same time, he argued, profits set off their own self-correcting forces (i.e., through competition), unleashing a host of social benefits and eventually eliminating unreasonable profits. If governments protect businesses and businesses

es manage to avoid competition, then businesses preserve their profits while sacrificing the social benefits that ensue from competition.

What determines whether a state performs its critically necessary functions without being swayed into potentially abusive roles? Some people argue that political leadership determines whether the state is able to walk the fine line between doing the right things and avoiding the wrong things. But when the issue is considered systematically, one sees that a state's behavior cannot exclusively depend on the specific personalities of those who may be heading it at any given time. The more space competitive commerce has to take hold, the more advanced the innovation process, the greater the dispersion of power, the bigger the spread of inclusive prosperity, and the more likely the state will do the right things and restrain itself from wrong ones. Special interests (i.e., where inclusivity is low) push governments to adopt policies that are damaging to societies as a whole. The problem is mitigated as special interest groups broaden through greater inclusivity.¹⁵

Almost every country in the world today has an economy that is a combination of state-run and privately run enterprises. In addition, privately run enterprises are subject to state regulations, some of which may reflect and benefit vested economic interests. In all cases the state exerts significant influence over its own economy. Nonetheless, the economies of the world can reasonably be divided between those that are "excessively state-influenced" (the "statist world") and those that are "not so excessively state-influenced."

Once we conceive of such a division, we realize two things. First, the statist world is, in reality, likely to be the one with poverty and great inequality. Second, and more important, competitive commerce, which is naturally aligned with the human desire for uplift and continually seeks ways to emerge, will struggle most persistently even where the forces of bureaucratic power and vested economic interest are stacked against it. Understanding this struggle is important for identifying correctly the sources of the headwinds and tailwinds that fledgling competitive commerce may encounter.

But the persistent struggle belies the notion that commerce and entrepreneurship must hold back until governments do the right things. The drive to advance in life is always trying to plant the seeds of competitive commerce. Sometimes competitive commerce advances, and sometimes it does not, depending on which side is gaining greater strength, whether the innovation process is freely bubbling up from below or the bureaucracies and associated vested interests are succeeding in suppressing it.

Commercial forces can get going wherever they find enough economic traction for one reason or another. Archeologists have uncovered evidence of commercial enterprise in ancient Mycenia and Mesopotamia. Godric of Finchale established himself soon after the Norman Conquest in 1066, before property rights were recognized, yet still became one of Britain's most successful merchants. In China in the 1980s, some enterprising entrepreneurs from the mainland went to Hong Kong to use Hong Kong's legal institutions and sources of cap-

ital; they then did business in the mainland as foreign companies. ¹⁸ Once entrepreneurial efforts find traction, they will grow as large as the environment allows.

In the statist world of South Asia, Africa, and Latin America, for instance, innovation from below has gotten a boost in the last two decades from the Internet and other information technologies, including cell phones. The consequent economic expansion in these regions has necessarily shrunk the fraction of the economies under the statist hold. The spread of these technologies and the associated entrepreneurial efforts were by and large not organized, planned, or even

Who is to say that there are no new ideas brewing in the young minds now attending MIT and other universities? There must be new Gutenbergs, Days, Fords, Singers, and Krocs—hailing from low-income countries—who can unleash new possibilities in their home countries. They simply need to be nurtured, inspired, and exposed to the entrepreneurial possibilities that exist.

facilitated by states. The net effects are the expansion of economies, more accountability, and further impetus to the process of bottom-up innovation. The good news lies in the fact that the innovation side generally enjoys far greater growth than the bureaucracy side that is holding it back. Thus the bureaucratic side may eventually switch from a predatory to a supportive role with the innovating and growing side, making the society as a whole more productive.

The growth of entrepreneurship in South Asia, Africa, and Latin America in recent years, the growth that has occurred largely in opposition to state bureaucracies, parallels the way

commerce once grew in medieval Europe in opposition to the state and the church. European history shows that a potential long-term effect of the struggle between innovation and bureaucracy is that governance can improve through commercial progress. Authorities and other powerful individuals in pre-modern Europe put up barriers to commercial progress that kept people poor. But these obstructions were small. European rulers were weak and fragmented, especially outside France. In the struggle between competitive commerce and the restraining means of the rulers, competitive commerce generally won out. Barriers gradually fell as people increased their incomes largely through entrepreneurial initiatives, enticing authorities to align themselves with citizens and thus creating mutually beneficial economic arrangements.¹⁹

Many would say that low-income countries are plagued by apparent cultural impediments to their economic and social progress. From this follows the argument that, for a productive, commercial society to take form, governments must first take steps to produce good governance and alter the mindsets of the citizenry. Among Western societies, however, progress in governance and culture was an effect of commerce, not a precondition for it. Western intellectuals from Adam Smith to Georg Simmel to Max Weber have recognized that commerce has positively transformed governments, cultures, and behavior by making people more rational and mutually accountable.

Unsurprisingly, a process as complex as commerce can give rise to problems. However, commerce has many self-correcting features. The problems engendered by commerce generally can be addressed by competition among businesses and government supervision, with the latter rooted in citizens' empowerment, which itself arises through the jobs, training, products, and services that come about through commercial progress.

CONCLUSION

The Legatum Center can have a huge impact worldwide by contributing to the unleashing of competitive commerce in low-income countries. Even if the ideal is never achieved anywhere, the right forces, embodied in innovations and entrepreneurs, can be released. Mobile phones, for instance, have brought countless benefits to low-income people and added at least a trillion dollars to their annual GDP. Who is to say that there are no new ideas brewing in the young minds now attending MIT and other universities? There must be new Gutenbergs, Days, Fords, Singers, and Krocs—hailing from low-income countries—who can unleash new possibilities in their home countries. They simply need to be nurtured, inspired, and exposed to the entrepreneurial possibilities that exist.

Under a narrow lens, the Legatum Center trains entrepreneurial students seeking to launch businesses in low-income countries. A somewhat broader viewpoint reveals that the Center serves to bring the realities of low-income countries to MIT's doorstep, enriching MIT's innovation ecology, through which new and relevant innovations can emerge. At the same time, the Center exists to impart a clear message on the important and distinct role of entrepreneurship in low-income countries as the most effective way to progress and, in turn, contribute to global peace and growth.

MIT now has a good head start in this area of global need and possibility. At the same time, a Center properly grounded in actually solving problems will command attention from the emerging global community, exemplified by The Legatum Group and The MasterCard Foundation, in the old American philosophy: individual initiatives, appropriately harnessed, can achieve great things.

^{1.} Joseph Schumpeter, *The Theory of Economic Development*. New Brunswick: Transaction Publishers, 1997, p. 132. (The original was published in German in 1911.)

- 2. Geeta Anand, "The Henry Ford of Heart Surgery, Wall Street Journal, November 25, 2009.
- 3. Alfred Marshall, Principles of Economics, 8th ed., London: Macmillan, 1920, Bk. 1, pp. 3-4.
- 4. Smith wrote, "It is the great multiplication of the productions of all the different arts, in consequence of the division of labour, which occasions, in a well-governed society, that universal opulence which extends itself to the lowest ranks of the people." Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, ed. Robert M. Hutchins, Chicago: Encyclopedia Britannica, 1952, Bk. 1, p. 6.
- 5. The terms "capitalist system" and "capitalism" were first used by critics such as Werner Sombart and Karl Marx. Over time, Joseph Schumpeter and others who celebrated "capitalism" began to use these terms in a positive tone, bringing them into a more neutral understanding. "Competitive commerce" correctly describes the system envisioned by Smith. Rooted in competition, competitive commerce, unlike "private-sector activities," gives rise to inclusive prosperity.
- 6. Joseph Schumpeter, *Capitalism*, *Socialism*, *and Democracy*. New York: HarperCollins Publishers, 1942, pp. 67–68.
- F. A. Hayek, "The Use of Knowledge in Society," American Economic Review, September 1945, pp. 519–520.
- 8. Notably from MIT president Susan Hockfield and senior MIT professors Philip Clay, Charles Cooney, Michael Cusumano, Merton Flemings, Eric Grimson, Wesley Harris, Bengt Holmstrom, Edward Roberts, Adele Santos, Bishwapryia Sanyal, and Antoinette Schoar.
- 9. Professors Lawrence R. Klein, Eric S. Maskin, Robert C. Merton, Edmund S. Phelps, and Paul A. Samuelson.
- 10. Individuals who have served as members of the Legatum Center Advisory Board: Thomas Barry, Joseph Bartlett, Tim Berners-Lee, Alpheus Bingham, Richard Broyd, Rick Burnes, Michael Chu, John Hennessy, Bernard R. Horn, Hadeel Ibrahim, Mo Ibrahim, Ira Jackson, Karim Khoja, Phillippa Malmgren, Kiran Mazumdar-Shaw, Julie Meyer, Jacqueline Novogratz, Arthur Obermayer, Robert Pattillo, Edmund Phelps, Hanadi al Thani, Joseph Turner, Judi Wakhungu, and Shoshana Zuboff.
- 11. "Comparative Advantage: The Boomerang Effect," *The Economist*, April 21, 2012. Available at http://www.economist.com/node/21552898
- 12. Anne O. Krueger, "The Political Economy of the Rent-Seeking Society," *American Economic Review*, 64, no. 3 (1974): 291.
- 13. Karen L. Remmer, "Does Foreign Aid Promote the Expansion of Government?" *American Journal of Political Science*, 48, no. 1 (2004): 77–92. Productivity data seem to bear this out. According to William Easterly, "the growth of output per worker [in poor countries] was three percent in the 1960s, 2.5 percent in the 1970s, 0.5 percent in the 1980s and 0 percent in the 1990s." William Easterly, *The Elusive Quest for Growth*, Cambridge, MA: MIT Press, 2001, p. 74.
- 14. The author makes this observation through eight years of experience in cofounding and coediting this MIT Press journal, *Innovations*, with Professor Philip Auerswald of George Mason University.
- 15. Mancur Olson explains this issue well. Among Olson's works, see pp. 95-96 in his book *Power and Prosperity: Outgrowing Communist and Capitalist Dictatorships*, New York: Basic Books, Inc., 2000.
- 16. Michael Hudson, "Entrepreneurs: From the Near Eastern Takeoff to the Roman Collapse," in *Invention of Enterprise*, ed. David Landes, Joel Mokyr, and William Baumol, Princeton, NJ: Princeton University Press, 2010, p. 8.
- 17. Ronald Shillingford, *The History of the World's Greatest . . . Entrepreneurs*, London: History of the World's Greatest..., 2010, pp. 2–8.
- 18. Yasheng Huang, Capitalism with Chinese Characteristics: Entrepreneurship and the State, New York: Cambridge University Press, 2008. pp. 5-7.
- 19. For example, members of the British Parliament in the 13th–16th centuries, knowing that the monarch required their approval to levy taxes, succeeded in extracting various liberties in exchange for higher taxes—money that was generated from commercial progress—and the monarch's power consequently declined. Although the contemporary barriers to commerce are strong in low-income countries, their larger possible markets can potentially counter these barriers.