

Business, Knowledge, and Global Growth

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A university, by definition, knows no limits. Of course, having such a broad portfolio necessarily means conflicts over academic boundaries—each department believes it is closer to grasping the entire universe than all the others.

Some see the origins of all business, as well as all politics, in law. These people, not surprisingly, tend to be in the law school.

Cardinal Newman saw theology as the centerpiece of the academy. You often find likeminded people in the Union and Jewish Theological Seminaries.

Some believe their department actually has a theory of everything. You can find them in the physics department (or, as some of you might be thinking, the economics department).

But only in the business school will you find people who are so confident they believe they can actually manage everything.

Hubris, as you might have guessed, is a not-unnatural condition of academics. At the very least, I can humbly say I was deeply honored to be asked to serve as dean of one of the nation's top business schools, one with an MBA program that ranks among the best in the world.

Many leaders in finance, industry, and the non-profit sector—in short, some of you present here—are MBAs—including Columbia MBAs. The MBA is even showing up in the bios of our national leaders, from Columbia's own U.S. Senator Frank Lautenberg, to a certain Harvard MBA in the White House for whom I recently worked.

As an academic economist studying financial markets and the organization of industry, I was excited to be given the opportunity to serve as a business school dean. It came, then, somewhat as a surprise to me that the first challenge of my new job would be to defend the value of the university-based business school, the MBA, and, at times, the role of business itself in society.

Who would have thought that the 'business school press corps' was as tough as the Washington Press corps?

And yet the criticisms are there. A recent *Business Week* piece asked: "Is the MBA Overrated?" Now in business circles, that is shocking—somewhat akin to *L'Osservatore Romano* asking: Do we still need a pope?

Business Week found that only 146 of the 500 highest-paid executives at very large companies had MBAs. A 2002 Stanford study reported that: "What data there are suggest that business schools are not very effective: Neither possessing an MBA degree nor grades earned in courses correlate with career success . . ." And the quote continues: "And, there is little evidence that business school research is influential on management practice, calling into question the professional relevance of management scholarship."

An even tougher take on business schools came from a *Harvard Business Review* article by Warren Bennis and James O'Toole saying that "MBA programs face intense criticism for failing to impart useful skills, failing to prepare leaders, failing to instill norms of ethical behavior—and even failing to lead graduates to good corporate jobs." The reason? The authors say it is because too many of their professors, afflicted with what they puckishly call "physics envy," waste too much on time on abstract research lacking real-world value.

In part, the authors suggest, the business school may be overreacting to its checkered past in the academy, pushing pure research as the antidote to an early image—codified in the mid-century Carnegie and Ford reports—as "trade schools" in which "most professors were good ole boys dispensing war stories, cracker-barrel wisdom, and the occasional practical pointer."

I take all these criticisms very seriously. I also acknowledge some truth to them all. Straddling the university and the world of affairs, a great business school should be neither a trade school nor an ivory tower. In a graduate business school, research that leads to changes in practice is useful. Research that merely piles theory on theory can run the

risk of losing its punch and pulling the academy apart from the worlds of commerce, industry, and finance that affect all of our lives.

Unfortunately, a deeper critique extends to the value of business itself. The late Robert Heilbroner, in his classic *Business Civilization in Decline*, said outright that capitalism is fatally flawed and must be gradually transformed into a bureaucratic state. That view has since adopted a fresher, more market-friendly vocabulary. But this anti-business take is still very much among us.

I disagree with the rising anti-business rhetoric. And I disagree with those who say that business schools are out of touch.

So I am here tonight to plant the flag, if you will, to defend business as a social agent, the academic study of business as way to help it better perform that role, and the MBA as the best vehicle to do that on a large-scale basis.

I want to offer a twenty-five-year reflection. In the twenty-five years that passed between my starting graduate school and becoming dean, business assumed a larger role on the world's stage and business schools have played a larger role in the university.

THE BUSINESS OF THE WORLD IS BUSINESS

But first, let me address the value of business in society. At the risk of sounding as if I actually do believe my department encompasses the universe, I would like to ground my case on a global basis, across centuries as well as continents.

Let me turn to Columbia's own Bruce Greenwald, who wrote a provocative piece for our alumni magazine *Hermes*, noting that "from roughly the period of the Roman Empire until the end of the Eighteenth Century, the average standard of living of human beings failed to increase significantly."

In short, a peasant toiling on a farm in East Anglia in 1300 was not much better off than his Druid ancestors. Conditions did not change for the human race until an Industrial Revolution was sparked in England in 1750.

Why did the Industrial Revolution begin there and then, and not 1650 or even around the year 50, about the time Hero of Alexandria had developed a steam engine? And why England and not in China, or the Roman Empire, states brimming with technical genius? Why did Hero's contemporaries not use steam engines to power instruments of production, instead of using them to wow Roman tourists with magical toys?

Research by economists proffers an intriguing answer: These things finally happened in England, in 1750, because of business institutions.

As a consequence of the Glorious Revolution of 1688, the British government was able to credibly commit to upholding private property rights, protecting wealth, and eliminating arbitrary increases in taxes. These institutional changes gave entrepreneurs the incentives to make investments necessary to make the most out of technological inventions—the spinning jenny and the waterframe. Though a sophisticated economy at the same time, China, by contrast, lacked the business institutions to allow entrepreneurship to flourish.

What accounts for this extraordinary change? he asks. Economists observe that sources of technological change include increases in human capital, to be sure, but also better means of organizing and managing production. Greenwald puts it more crisply: "It appears to have arisen largely from the application of sustained management attention to everyday enterprise." In a word, business.

Business has certainly transformed society.

At the end of the Twentieth Century, management thinker Peter Drucker looked back and wrote that underneath all the wars and horrors of that century were important social transformations linked to business. Business not only spurred these transformations through innovation, it also created the material basis for social change. It created wealth that allowed society to adjust to the civil rights revolution of the 1960s, as it had during the 1760s and the 1860s.

SO WHY ISN'T THE WHOLE WORLD RICH?

Okay, so far, so good—business has made possible immense improvements. But what about developing countries? What about Bolivia, with a per capita income about one-fifteenth of that of the United States? What about other countries, like Argentina and Russia, that are not as rich as we think they could be. Why the disparity?

What was true of the rest of the world outside of England in 1750 is still true, to varying degrees, for much of the world today. Over the past twenty-five years, many developing countries have abandoned centrally planned economies in favor of more market-oriented economies. But, for entrepreneurs in a market economy to succeed, the government must guarantee private property rights and enforce contracts. Unless entrepreneurs feel secure in their property, they will not risk starting a business. It is also very difficult for businesses to operate successfully in a market economy unless they can use an independent court system to enforce contracts. Globalization has made the adequate provision of property rights even more important, as foreign investment—crucial for the transmission of new technology to developing countries—is obviously discouraged by the fear of expropriation.

Recent economic research confirms the intuitive prediction that well-functioning financial systems lead directly to economic growth. One influential paper found that countries with advanced financial systems are particularly good places for industries that need a lot of external financing. My own research has illustrated relationships among corporate governance, the cost of capital, and economic growth. If capital markets around the world matched the effectiveness of those in the United States, one would expect capital to flow on balance from the United States to developing countries. But my own work finds that weak institutions in developing economies can lead to very high costs of capital for productive investment at home—and a severe marking down for prospects for growth in living standards.

My colleague Jeffrey Sachs wrote a thoughtful and provocative bestseller calling for an end to poverty. Among his many suggestions, Jeff would double the amount of foreign aid to low-income countries. I wonder, however, if we could do better by sending vast amounts of foreign aid in the form of business institutions and knowledge.

Consider Bolivia, a country Jeff advised, helping them to control inflation, and setting the basis for significant growth in real income. As in Argentina and Russia, however, Bolivia's gains of the 1990s proved ephemeral in the face of political forces opposed to basic business principles.

A lack of transparency, openness, and fair dealing has ravaged the potential of these countries.

In India, however, you see a country prospering as it eagerly embraces business knowledge. In China, growth is increasingly driven more by entrepreneurs than from the commanding heights, though financial markets lack transparency and openness.

Even rich nations must heed the lessons of business institutions to remain rich. In Japan, you have an advanced country that was flat on its back for a full decade until it gathered the political will to apply business principles to its financial markets. The result? Japan, the world's second largest economy, has restarted a powerful engine of growth.

A most dispiriting part of the world is one that should be the most advanced—Europe, frozen by rigid labor markets. The exemplar of this condition, of course, is France, oddly reminding me of William F. Buckley's adage that a conservative is someone who stands athwart history and yells "stop"—or, in this case, "arrête."

What about the United States?

In a cabinet meeting not long after the start of the Bush Administration, the President—addressing me as "Mister Economist" in his Texas accent—asked me what would be the net effect of his economic policies.

I did a quick, back-of-the-envelope calculation—and told the President that his policies might increase growth by about 0.2 percentage points a year for many years. Puzzled looks from colleagues suggested I should get out more often. After all, the President was not going to rally the American people around the cause of increasing growth by 0.2 percent. It just didn't sound presidential. But when I countered that such a sustained increase in growth would raise annual average incomes by \$1,000 after a decade, the room went quiet.

In fact, the United States has been seeing sustained increases in growth of about three-and-a-half percent a year, with little inflation—a full percentage point above what economists thought possible a decade ago—a huge annual increase in well-being.

THE ROLE OF BUSINESS SCHOOLS

What can business do to improve the outlook here and abroad—and how can prominent business schools (How can Columbia Business School?)—be a part of this effort?

I believe there is no task more urgent than for business to apply knowledge to transform financial markets, to convince other countries of the benefits of transparency and openness, and to remind our own opinion leaders here in the United States of the value of basic business principles.

In fact, business schools are already up to this task. The extended one-percentage-point addition to U.S. GDP growth is happening not because the economy is supplying more labor or capital. This growth is happening because it reflects an improvement in productivity, or output per unit of input.

The United States has added to productivity growth at a time when many other major economies saw negative growth in productivity.

Those who say the answer is technology have spent too little time in Tokyo, Seoul, and Berlin. The fact is, technology is better in many other countries. Cellphones and PDAs do things abroad that put us to shame. Broadband, both wireless and fixed, is faster and more ubiquitous in many other countries.

So what is going on? Here's my take: Technology may be at the heart of the success of our greatest companies, but these companies did not become more productive simply by buying faster computers. They became more productive by having managers and entrepreneurs who knew how to integrate these investments with new business models to raise productivity.

More generally, U.S. markets allow entrepreneurs to create the celebrated “resilience” of our economy, in which labor and capital swiftly respond to shocks from financial market downturns, or disasters such as Hurricane Katrina, just as they do in response to opportunities for innovation and expansion.

This entrepreneurship, in turn, supports economic stability. Twenty-five years ago, large firms took weeks to find inventory imbalances—and excessive stockbuilding required a sharper cut in production than would have been needed if inventory knowledge had been current. Entrepreneurial and managerial innovation spurred information technologies to allow real-time responses to inventory imbalances.

Nowhere is this entrepreneurial contribution to economic stability more evident than in financial services, where deregulation, coupled with innovative technologies, has fostered the development of financial products, such as asset-backed securities and credit-default swaps, that make possible much greater spreading of risks.

Theoretical advances in pricing options and an array of other complex financial instruments, along with advances in technology, have reduced the costs of—and created opportunities for—hedging risks that could not be laid off twenty-five years ago. The financial system has become more efficient—better able to support new investments and economic growth—and more flexible and resilient. After the U.S. stock market bubble burst in 2000, no major financial institution failed, and the economy held up far better than conventional skeptics had anticipated.

Let me offer another observation. Entrepreneurs and entrepreneurially minded business leaders are successful not because they set an unchanging goal and then labor to achieve it. Rather, they succeed as seekers looking for many different ways to identify and capture opportunity. Great business institutions enable these seekers. Great business schools focus these seekers. The abilities to think strategically and to value opportunity are teachable, and business schools' connection between research and industry examples offers the right classroom. Is it just a coincidence that the resurgence of entrepreneurial capitalism in the United States is occurring at a time when leading graduate schools of business are integrating more effectively social science research with business?

One thoughtful commentator, Sebastian Mallaby of *The Washington Post*, recently drove this point in describing the vibrancy of American business. Mallaby notes that “[London’s] *Financial Times* publishes an annual list of the world’s most respected companies. In 2004 and again in 2005, no fewer than 12 of the top 15 slots were occupied by American firms.”

Mallaby goes on to assert: “America’s business culture is...well suited to contemporary challenges . . .” And he goes on to say: “Moreover, America’s business culture is perfectly matched to globalization. American business suites and MBA courses are full of talented immigrants, so American managers think nothing of working in multicultural firms.”

And how do we know how to do these things? Much of this progress can be traced back to the knowledge contributions of the American business school. Business schools in particular have taken a front-and-center role in the university and business community to shape a growth environment.

I referred to advances in finance earlier as being especially important for economic growth and stability. The revolution in new financial instruments has been driven in large part by research at business schools.

And look at the impact of the MBA on venture capital—a sector that provides the intellectual and financial seed corn for our most innovative industries and technologies. No fewer than 18 of the top 25 venture capitalists in the *Forbes* Midas list have MBAs, most of them now on the boards of the most storied technology companies of our times. And private equity firms facilitate the restructuring of more mature firms—and the resilience of our economy.

Venture capital firms are the nation’s leaders in directing R&D in high-tech, biotech, medical research, and other “breeder” industries. And private equity firms are the unseen masters of business prospects. Could these stars have been as effective without the disciplined business principles of an MBA education?

Beyond finance, many prominent incentive-based compensation and new human-resource-management plans were developed by business school researchers. The popular field of strategy, now occupying the time of consulting firms and businesses alike, was pushed to useful rigor by social scientists in business schools. Many other examples are noteworthy—from research on inventory control to behavioral economics, to the design of accounting systems.

Business schools have played the central role in this regard within the university for a reason. Top business schools have integrated social science and other research very well, and interdisciplinary understanding and collaboration is often more common than across disciplines within the arts and sciences. Many of the business innovations I noted earlier were led by researchers trained in a particular discipline (economics, for example), but with a cross-disciplinary discussion that was more natural and more encouraged within a business school. That cross-disciplinary intellectual conversation has stimulated innovative teaching in consumer behavior, business decision-making and negotiation, and strategy.

The present challenge for the top business school, as I see it, is to inspire our researchers to be in close contact with business leaders, to answer practical questions for the rigorous and vigorous scrutiny of real-world application. By generating cutting-edge ideas that bridge theory and practice, a great business school’s research offers significant economic and social returns.

At Columbia, our location in New York and our strong connections to alumni and the business community offer us the opportunity to generate these returns through centers linking faculty and business leaders.

MASTER OF CHOICES

If the role of the business school is to advance the transformative role of business in society, then what is the role of the MBA?

A case can be made that the criticisms of the MBA I described earlier are falling before fresh evidence. Polls show MBA students are happy with their degrees. Certainly, business is registering its opinion with dollars. Salaries and signing bonuses are high and rising. Big firms, from financial services firms to major consulting companies, are hungry for MBA talent. And the financial rate of return on an MBA education is high.

In fact, I suspect that if one did a longer longitudinal study of the post-graduate success of MBAs—say, the present value of lifetime, post-MBA earnings—one also would find that many of the comparative salary concerns would further disappear.

When you talk to our students, however, you hear something that may surprise you: You hear, “Money isn’t everything.” When the Harvard Business School polled its students, starting salary was not the most important factor.

What is?

One of our graduates, Emily McHugh, in a recent *USA Today* op-ed, put the value of the MBA in clear terms. “The MBA helps to remove some of the uncertainty of the business landscape by providing those who pursue it with the vocabulary and components of business.”

What were the two most valuable things she learned in business school? For Emily, they were the ability to assess valuations and conduct negotiations.

She is not alone. Many alumni and other business leaders speak to me of their MBA education as the key to unlock and capture an opportunity when it arrives—often many years after graduation. Like the value of business-school-generated ideas, this key to success is not easily measured by popular rankings’ attention to “customer satisfaction” or “starting salaries.”

In short, a great business school offers an education for a lifetime career, not just a toolkit for a first job.

Let’s take a step back: In a free society, every organization, for-profit and non-profit, begins as a hypothesis. Someone has to be able to match and manage the flow of resources to human needs. We provide the metrics and tools to make that happen—finance and operations, of course, but also entrepreneurship, leadership, values, ethics, and social enterprise, all informed by research and practical collaboration.

While a key to unlock and capture opportunity, an MBA isn’t necessarily a license to wealth. It is a Masters of Choices, offering enhanced ways to serve at higher and more refined levels—whether your leadership role is in health care, politics, the arts, or the military.

You can see this reflected in Columbia Business School’s own Board of Overseers. We have among our ranks Erskine Bowles, who served as President Clinton’s chief of staff and as a member of his cabinet, as well as Senator Lautenberg. Various Overseers help lead the Metropolitan Opera and Oxford’s Ashmolean Museum. Some of our graduates manage theaters and are as concerned with Shakespeare as with cash flow.

And, of course, more and more MBAs are applying what they have learned to public agencies and not-for-profit organizations.

As the dean of a school in which our graduates do exceptionally well starting out, I can say without sounding defensive that what matters most is not the change jingling in your pocket after commencement, but the change you make in the world.

We will need these change agents called MBAs if we are to sharpen America’s understanding of the threats to our prosperity from protectionism, entitlement burdens, and declining skills.

We will need MBAs to lead companies in applying technology in ways that result in continuing economic growth, innovation, and leadership.

Above all, we will need our MBAs to extend the power of business to transform the world—that export of business knowledge I referred to earlier.

This is not a new idea. It is certainly not *my* idea. It is, in part, the story of New York City’s continual entrepreneurial re-imagination over centuries. And, long before I got here, Columbia Business School students were already doing this, here in New York City and in the world.

Consider Ben Powell, a Columbia MBA who has started a new kind of NGO—armed with a full appreciation of the power of business as a change agent.

It is called the Agora Fund, which serves the middle-range entrepreneur with the greatest potential to generate strong returns, but who falls outside closed social and business networks.

One of Agora's clients is Jaime Salazar, a young Nicaraguan with a master's degree in marine aquaculture. Jaime wants to cultivate quality oysters in the Nicaraguan Pacific coast and sell them through an existing distribution channel in El Salvador. It's a smart idea. Population growth and a new tourist boom in Central America are fueling demand for oysters, causing the natural oyster banks to be overexploited.

If Jaime succeeds, he will create jobs, a new tax base, all while taking pressure off the environment.

In this way, through ideas and graduates, business schools can be growth's lobbyist. This role is more needed than it may at first seem. The nostrums of economists about the value of business institutions in promoting growth have the flavor of a confident "no brainer." Sadly, it is not. The forces driving growth—innovation and globalization fueled by entrepreneurship—also imply change. Growth opportunities in the poorest countries are not the proverbial \$50 bill on the sidewalk; barriers to good business institutions can come from powerful vested interests that may lose from reform, even though overall living standards would rise smartly.

Universities, and business schools in particular, should offer a neutral environment for discussing how to manage change in the economy and financial markets—from studies of entrepreneurial responses to change, to analyses of policies to ensure access to growth's opportunities. Business schools' ability to gather social scientists and business leaders gives them a special position in this regard. Business schools also can play the role of "teacher," generating a curriculum that fosters an understanding of entrepreneurial capitalism for undergraduates and graduates alike. Such a curriculum, while it touches on the lives of all, is studied by only a few.

If we can help business to continue to drive productivity changes, we will have delivered a strong impetus to world economic growth and progress.

The Nobel laureate in economics Robert Lucas once said that when one contemplates the impact that even slight increases in economic growth can have when cumulated over time, it is hard to think about anything else.

Perhaps . . .

But the power of growth yields fertile conversations about the role of business in the economy and society. The experience of the past quarter-century—with business institutions taking a central role in the economy and business schools taking a central role in the university's contribution to that activity—suggests we have much to think about.

Thank you.

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