

# The Global Management Education Landscape

Shaping the future of business schools



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# Foreword

This report offers insight into a number of trends, case studies, and statistics that describe the changing landscape of management education worldwide. It pinpoints key challenges for the future of management education and offers a number of recommendations designed to stimulate coordination and collaboration within the global education community. The report also seeks to engage business and government leaders as active participants in shaping the future development of business schools. Indeed, many groups have a stake in the success of global management education, which impacts not only the success of individual businesses, but also national competitiveness and economic growth on a global scale.

## **Engaging the Global Management Education Community**

The global management education community has grown substantially and now represents a diverse set of perspectives. Deans, directors of business schools, students, business advisory councils, administrative staff, and recruiters of graduates are all involved in shaping the future of management education. Each group will find areas of interest in this report. Business school leaders will learn from its analysis and find suggestions for individual school action. Some will see immediate opportunities to leverage the report into bold strategic plans. Others will have different perspectives on the same issues and offer alternative recommendations as part of an ongoing dialogue.

Our emphasis in writing about the management education community is purposefully global. Most of what has already been written views management education from a local or regional perspective. Consequently, it has been difficult to understand how issues and challenges relate to form a world view. Although global in its perspective, this report does not ignore country or regional differences. It is based on analyses and interpretations of the literature, analyses of publicly available data, interviews with more than 50 leaders in management education worldwide, and comprehensive debate and discussion among the GFME directors, a group of 15 leading management educators representing six continents.

Associations and business school networks, whether they have a global, regional, or country-specific mission, are important players in the global management education community. In this report, volunteer and staff leaders of these associations will find information to shape plans for many years to come. For example, global accrediting organizations such as the Association to Advance Collegiate Schools of Business (AACSB) and the European Foundation for Management Development (EFMD), the founders of the GFME, will discover ample evidence that their efforts to advance and assure quality will become more meaningful to students and employers alike. However, they must be more proactive in their efforts to include schools from developing countries; to provide transparent, valid, reliable information about quality; and to calibrate against the future needs of global business.

More regionally-focused organizations such as the Association of African Business Schools

(AABS), Association of Asia Pacific Business Schools (AAPBS), Association of Indian Management Schools (AIMS), Association of Management Development Institutions in South Asia (AMDISA), Australian Business Deans Council (ABDC), Canadian Federation of Business School Deans (CFBSD), Central and East European Management Development Association (CEEMAN), Latin American Council of Management Schools (CLADEA), and Russian Association of Business Education (RABE) can use this report to better understand how global issues and challenges are differentially experienced by schools in their region.

Other organizations also play important roles in the global management education community. For example, according to its Web site, the mission of the Graduate Management Admission Council (GMAC) is “to be the premier provider of assessments and information that create and promote access to graduate and professional management education around the world.” The GMAC offers the Graduate Management Admission Test (GMAT), which is taken by more than 200,000 aspiring business graduate students globally each year. Today, there are roughly 1,500 GMAT-using institutions and 1,800 GMAT-using programs (GMAC, 2005). The Association of MBAs, a UK-based network, accredits graduate programs in business and is a professional association of MBA students and graduates. The Global Business School Network (GBSN), which was formed by the World Bank’s International Finance Corporation, offers “a public-private partnership to strengthen the skills of managers in emerging markets by expanding and enhancing opportunities for management education and training in these countries” (GBSN Web site).

It is not possible to list all of the organizations involved with the global management education community. However, we note that there is considerable fragmentation and overlap, as well as a fair amount of competition among them. From this view, we conclude that there are many opportunities for international coordination and collaboration — a point that is an underlying theme in this report and is explicitly addressed in our recommendations.

## **Investing in the Future of Business and Society**

This report is also offered to business and government leaders who seek to understand the issues and challenges facing business schools, because quality management practices, business education, and research have become critical factors in determining a nation’s competitiveness. We do not conceal that one purpose of this report is to engage business and government leaders in a deeper dialogue with the global management education community and to strengthen their involvement and investment in shaping the future of business and society through management education.

To most readers, it should be obvious that business is a key driver of the success of almost every economy today. However, the mechanisms by which management education and research impact business organizations and societies are complex, sometimes subtle, and are often difficult to measure. A detailed analysis is beyond the scope of this report. Nonetheless, it is helpful to provide a brief overview of the role of management education in the global economy.

Effective business processes support successful companies in all major industries and influence the growth of companies and economies at the local, regional, and global levels. As companies expand, so does their need for individuals with specialized skills in business fields

such as marketing, operations management, human resources, and accounting. The prosperity of nations and regions depends heavily on the sustainability of the companies located within them, as well as the credibility of the financial markets that support them. Furthermore, the innovation of products, processes, and technology, which enables companies and nations to become more competitive, requires management teams that are capable of effectively prioritizing investments, allocating resources, and aligning human capital to achieve strategic objectives.

Business school graduates have been filling these roles since the early 19th century, when the first school of business, the Ecole Supérieure de Commerce of Paris, was established as a response to the need for more formal management training brought about by the Industrial Revolution. In 1884, the world's first Bachelor of Finance degrees were granted by the newly formed Wharton School of Business at the University of Pennsylvania. By 1900, the Tuck School of Business at Dartmouth College had formed to grant the world's first graduate business degrees. Over the course of the past century, business schools have successfully established a strong presence within collegiate institutions in all countries of the world. Today, the tradition begun by these schools is carried on by thousands of business schools around the world that continue to produce graduates who play critical roles in the day-to-day operations and long-term sustainability of successful businesses.

We should note, however, that the practice of management is not reserved exclusively for business school graduates, contrary to the practice of medicine or law, where certification is often required, or the hard sciences such as engineering or chemistry, where formal training is widely understood to be necessary preparation. Indeed, management practice is pervasive. It is something that almost every employee must do, whether he or she works in large global corporations or is self-employed. It is the pervasiveness of management practice, rather than its exclusivity, that makes quality business schools so vital to individuals, organizations, and societies around the world.

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Quality management education contributes to society in other ways beyond education. The research conducted by faculty on business practices, organizations, markets, and environments contributes to an ever-expanding base of knowledge, ensures that pedagogy remains current and relevant, and helps companies to acquire a better understanding of the strategies that will ensure their success in a rapidly evolving world. Faculty expertise, and often that of their students, is sought by members of the business community ranging from small family firms, to technology start-ups, to multinational corporations. In fact, many schools include outreach as part of their mission, and devote significant resources to address a particular need within their local business environment. Thus, high quality business schools provide nations with a competitive advantage, not only in the form of a skilled workforce, but also through intellectual contributions to general business knowledge. These contributions lead to rising income levels and economic growth.

The importance of quality management education does not go unrecognized. For example, the Global Competitiveness Index, created annually by the World Economic Forum, includes as a variable the quality of a nation's management schools. The World Bank also uses nations' scores on this variable as a part of its Knowledge Assessment Methodology (KAM), which helps nations identify means to transition to a knowledge-based economy. Leading international bodies have introduced efforts to improve management education. For example, the Global Business School Network, which operates through an arm of the World Bank, encourages leading business schools from around the world to work in emerging markets to improve "future leaders' access to high-quality management education... helping [to] build the foundation for economic growth and poverty reduction in developing countries" (GBSN Web site). There are many examples of countries or regions that have recently invested in high-quality business schools, including Qatar, Russia, India, China, and North Korea. In 2003, to reinvigorate its competitiveness in the context of deregulation, Japan initiated the creation of 29 new business schools in just four years (Sanchanta, 2007, p. 11).

As a result of this report, we hope that business and government leaders will be better prepared to know how and where to invest in management education to achieve the greatest return. Therefore, we will identify areas for involvement and action, such as helping to align management education with future work force needs; investing in faculties and infrastructure to expand access to quality management education; and reforming governance structures to provide greater autonomy to react quickly to emerging imperatives.

# Introduction

Management education has entered a period of profound transition driven by globalization, technology, demographics, and pressing social imperatives. Because management education is an investment in the future of business, it's important to understand the challenges, opportunities, potential risks and rewards associated with this transition. Therefore, this report was created as a resource for leaders in the global management education community as well as business and government leaders, policy makers, and others who want or need to understand the global issues and challenges facing the complex, dynamic world of management education. For these leaders, we seek to provide a foundation for constructive dialogue, mutually beneficial collaboration, and investments in the future of management education.

## Reflection of the GFME Mission

The Global Foundation for Management Education (GFME) was formed to view the world from a global perspective — to transcend borders. Our mission is, “To identify and address challenges and opportunities in, and advance the quality, content, and development of, management education and practice worldwide.” This report is a proper reflection of our mission. The following pages isolate important global economic and business trends, explore the possible implications for management education, and provide five recommendations that can help shape the future of management education in positive ways. We present these recommendations in the spirit of stimulating discussion that leads to action, rather than to prescribe change.

## The Future of Management Education

In light of recent developments in management education, we conclude that the future not only holds exciting opportunities, but also poses serious challenges for business schools. This report leaves little doubt that the demand for management education will continue to grow. It also shows that, in some ways, the industry has been evolving to cope with the changing environment. For example, the number of business schools and programs worldwide has expanded quickly in response to increased demand. It would be natural to be optimistic about the future of management education based on these observations. But, there are several issues of major concern. How will we accommodate future growth in light of resource constraints and quality concerns? How do we balance global aspirations against pressing local needs? How will we assure quality, given tremendous pressures to cut costs? How will we sustain scholarship in business schools when doctoral education has not kept pace with growth in undergraduate and master's enrollments? How will we continue to align programs and curricula with the ever-changing needs of organizations? Although there are no easy answers to these questions, the challenges embedded within them are not insurmountable.

### *Our mission*

*To identify and address challenges and opportunities in, and advance the quality, content, and development of, management education and practice worldwide.*

# Global Trends Impacting Management Education

It is impossible to examine management education without knowing about the environment in which it is embedded. It is a big world, though, and any attempts to select and defend the most important trends are pre-destined for criticism. Surely, we will exclude trends that others view as crucial. Or we will do injustice by only scratching the surface of complicated trends or knotty issues. Some may question our approach to organizing these trends, which cover a broad range of subjects that are inextricably linked. Nonetheless, but not without humility, we attack this task with enthusiasm, for it is central to our mission and the purpose of this report.

It is convenient that leading organizations and authors share common views about how the world — of business, in particular — is evolving in the five areas we will address: economic integration; demographics; information and communication technology; global sourcing of services; and social responsibility, governance, and sustainability. In each of these areas, we bring together relevant information and data to focus attention on their potential impact on management education, which can be viewed along four dimensions: strategy, curricula content and perspectives; demand for and access to business education; and policy, regulation, and accreditation.

## Integration of Economies

About globalization, Mahatma Gandhi once said:

“I do not want my house to be walled in on all sides and my windows to be closed. Instead, I want the cultures of all lands to be blown about my house as freely as possible. But I refuse to be blown off my feet by any.”

The winds have strengthened. Economies of the world have become increasingly integrated. Barriers to the flow of goods, services, capital, and labor have never been fewer. The ties that bind our economies together have never been mightier.

This trend captures, in one broad sweep, a number of subtler dynamics that will be described more carefully below. For example, advances in information and communication technology, in part enabled by trade integration, will continue to fracture industries and business processes. And economic integration, which is often blamed for driving wealth divergence within and across countries and contributing to environmental degradation, has led to new ways of thinking about responsibility and sustainability. In this section, we are particularly concerned with economic integration, which deserves special attention at the outset because of its broad impact on business and business education.

To illustrate the rising importance of integration, we need only point out that the share of exports relative to global output more than doubled from 1970 to 2004 and currently runs greater than 25 percent. The export share was less than 20 percent in the 1980s and was below 15 percent as late as 1970 (World Bank, 2007, p. 30). A driving force behind this integration has been the expansion of market capitalism. Citing World Bank figures, author Thomas Friedman (1999) points out that by 1997, the percentage of countries with free market regimes had risen to 28 percent from only eight percent in 1975. Although we don't have comparable current figures, using the Heritage Foundation Index of Economic Freedom data, the percentage of countries rated as at least moderately free rose from 44 percent of the 150 countries graded in 1997 to 50 percent of the 157 countries graded in 2007 (Heritage Foundation, 2007).

Export growth also can be attributed to the collapse of the Soviet Union and the opening up of China and India, as well as to multilateral agreements, such as the General Agreement on Tariffs and Trade (GATT), and regional arrangements, such as NAFTA and the European Union. More recently, technological breakthroughs — particularly in transportation and communication — new business practices, and the growth of skilled workforces have increased the pace of services integration and export growth. Major steps were taken to liberalize trade in “Mode 1” type services via the General Agreement on Trade in Services (GATS) as part of the Uruguay Round Agreements, but there is still much unexploited potential to unlock services trade. These developments and more have been factored into the World Bank projections that global trade in goods and services will rise more than three fold to US \$27 trillion by 2030, and the export-to-GDP share will increase to nearly 35 percent (World Bank, 2007, p. xiv).

### Benefits of Liberalization and Integration

The opening of economies has, without question, contributed to recent global economic growth and greater efficiency in resource allocations. It also is critical to future economic growth, which the Economist Intelligence Unit (EIU, 2006) predicts will increase 66 percent by 2020 and which the World Bank (2007) predicts will increase by more than 100 percent by 2030. Both organizations carefully convey the sensitivity of their projections to trends in economic liberalization and integration. In the case of the EIU, the range is from 1.3 percent annual growth in GDP, if globalization is “sunk,” to 4.5 percent annual growth if globalization is “unbound” (EIU, 2006, p. 17).

Greater openness to trade has not been achieved at the same rate across countries, nor have the benefits from integrating economies and associated growth been shared equally around the world. Economic growth in East and South Asia has outpaced Central Asia, Latin America, Middle East, and Sub-Saharan Africa. The developing country share of global GDP is expected to rise to 31 percent in 2030 from 23 percent in 2005 (World Bank, 2007, p. xiii), but the relative gains among these countries will vary considerably.

Although expanding participation in the global economy has lifted millions out of poverty and improved the living standards of low-wage earners and their families, we should not ignore the criticisms of this integration. It is frequently blamed for a range of ills, including widening income inequality among and within countries, political turmoil, environmental deterioration, and cultural destruction.

The authors will not enter the ongoing debate about the benefits and costs of integrating economies, because such a debate is beyond the scope of this report. Still, the risk of “sunk” globalization remains, and whether this is good or bad, the movement toward open and integrated economies will continue. Thus, it is useful to explore the potential implications for management education.

### Demands on Management Education

Increasing economic integration will have several important implications for management education. We delay comments on some of these implications until later in the report, when

related trends — such as advances in technology, implications for supply chains, growth in the services sector, and student mobility — are discussed. For now, we devote attention to just two important implications: the increased demand for management education and the need for greater emphasis on global perspectives in education and skills development.

Integration and job growth in market economies will increase the demand for management education, as previous experience has shown that skilled, better educated workers have the most to gain from globalization. Indirectly, we believe that employment volatility due to market dynamics in open economies will drive demand for continuing management education.

It is also appropriate to think about these demand increases as driven by market imperatives and purposeful investments, rather than just as a consequence of globalization. Education and training are key drivers of economic competitiveness. Countries must invest in developing human capital, creating new knowledge, and spurring innovation — all crucial roles for higher education in general. Management education, in particular, is viewed as essential because in market economies, management and entrepreneurial talent create, finance, and grow the demand for knowledge and innovation.

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Economic integration will also necessitate greater emphasis on global perspectives in education and skills development. Although business schools in some regions have long been involved with international education, the changes engendered by the current wave of integration are more profound, wide-reaching, and deeper than ever before. The new environment calls for a richer set of educational experiences, with learning that transcends borders. The new global emphasis calls for programmatic innovation and expanding cross-border alliances in education and research.

An interesting example to illustrate both of these implications has been developing in China, where the globalization of accounting standards is having a significant impact. As of the beginning of 2007, the Chinese Ministry of Finance requires companies listed on the Shenzhen and Shanghai stock markets to adopt norms similar to the International Financial Reporting Standards (IFRS). Among many other challenges created by this requirement will be a remarkable increase in the demand for accountants. In its Jan. 13, 2007 issue, the *Economist* stated that:

In no other place in the world, and probably no other time in history, have accountants been so sought after as they are in China. By even the most generous reckoning, the country has fewer than 70,000 practicing accountants, trying to do the work of anything from 300,000 to a million bean counters. (2007c, p. 64)

The management talent demands of China extend beyond accounting. The McKinsey Global Institute projected in 2005 that, “given the global aspirations of many Chinese companies, over the next 10 to 15 years they will need 75,000 leaders who can work effectively in global environments; today they have only 3,000 to 5,000” (McKinsey Global

Institute, 2005, p. 9). According to the report, the issue is not so much the number of graduates, but their lack of knowledge and skills appropriate for the global environment of Chinese business. According to a 2006 *Business Week* and Universum Communications study, fewer than 20 percent of corporate recruiters from Chinese and multinational companies with operations in mainland China described Chinese MBA graduates as good or excellent (BusinessWeek.com, 2006a). Chinese students were often seen as having a lack of confidence to make decisions and an aversion to risk. The study also noted the low quality of many Chinese educational programs and graduates, notwithstanding a small number of highly-regarded programs.

This China example illustrates that the importance of management education relative to training in transitioning economies cannot be overstated. Just as the new accounting standards require a deeper understanding of intellectually demanding principles rather than prescriptive rules, the transition from planned economies requires entrepreneurial talent and managerial judgment rather than adherence to quotas in production. That is, the new economy requires management education based on scholarship, rather than training based on experience. This point — an underlying theme of this report — indicates the fundamental importance of investments in business and management research and doctoral education.

### “Culture Full” Management Education

The need for global perspectives does not, however, imply that from economic integration will evolve a singular model or perspective for business and management. Calling a borderless world an “illusion,” Harvard Business School professor Pankaj Ghemawat stresses that “most types of economic activity that can be conducted either within or across borders are still quite localized by country.” (2007, p. 11). Globalization means that business and management must be understood in the context of local history, politics, and culture. Therefore, management education should not be “culture *free*,” but “culture *full*.” Global education isn’t only about transcending borders; it is also about crossing them. Indeed, although the borders of today may be thinner than those of yesterday, today there are 21 percent more independent countries than in 1980 and, thus, there are more borders to cross in a global environment (UN, 2006).

In GFME interviews, management educators from Africa and Asia called attention to the need for more locally-relevant educational resources, such as cases, textbooks, and data. Samuel Chinyoka, dean of the Faculty of Business at the University of Botswana, emphasized the need for textbooks and cases that address the African context. Absent these resources, both students and employers will continue to believe that the education provided by African business schools is not serving them well (Chinyoka, 2006). We should note here that this problem is in the early stages of being addressed by the new Association of African Business Schools. Its chairman, Nick Binedell, points out that by the middle of 2006, the association had already “established a database of more than 160 case studies about African stories, successes, and challenges” (BusinessWeek.com, 2006b). This positive example illustrates the importance of strong, vibrant networks of business schools to advance management education.

In East Asia, Ian Fenwick, professor at the Sasin Graduate Institute of Business

Administration of Chulalongkorn University, points to a groundswell of support for a more Asian-oriented curriculum, which he claims will require the development of more quality Asian case studies and more systematic insights into the nature of business in Asia (2006). There is also strong interest in China in undertaking management research in a distinctively Chinese way, rather than trying to imitate established Western research methods that may not be as relevant in the Chinese setting.

Specific economic circumstances in some countries also send strong signals for management educators to develop more relevant, meaningful programs that support local development efforts. That is, business schools should think globally and act locally. For example, authors Vipin Gupta and Kamala Gollakota write about the globally recognized and respected Indian Institutes of Management (IIMs):

[C]onsiderable economic activity takes place at much smaller micro-enterprise levels in much of the developing world. Individuals, families and cooperatives are involved in various economic activity from selling fish to handicrafts. While there is no need for a formal MBA for micro-enterprises, certainly there is considerable need for knowledge of sound business practices ... the IIMs could form strategic collaborations with the business schools in the rural areas, in the small cities, and those focused on women and other such groups; and offer various forms of support to these local institutions. (Gupta and Gollakota, 2005, p. 52 to 53)

A similar point can be made about the critical needs for entrepreneurs to support job creation in transition economies such as those found in Russia, Poland, and Vietnam (McMillan and Woodruff, 2002). Entrepreneurship requires policy-oriented business research, as well as education, because many countries need to develop more effective institutions to support business creation.

As we shall see throughout this report, emerging trends in business and education suggest that business schools in developing and transitioning regions must be more engaged in the global community to share best practices and to facilitate collaboration. Similarly, business schools must meet the challenge to deliver management education and knowledge that is relevant in both global and local settings.

## Demographics

The late Peter Drucker wrote in 1999,

Above all, any strategy, that is, any commitment of present resources to future expectations — and this, to repeat, is what strategy means — has to start out with demographics ... (1999, p. 50)

The world population will swell from 6.5 billion people in 2005 to 8 billion by 2030. Although this growth of 1.5 billion people may seem large, we should note that in the comparable period between 1980 and 2005, the population expanded by 2 billion. But, by itself, global population growth is meaningless. It is more interesting when geography is incorporated into the analysis. For example, more than 90 percent of the future population growth will occur in developing countries (World Bank, 2007, p. 38). Still, more informative

are the trends when age is combined with geography. Drucker completes the quote above by stating “... and, above all, with the collapsing birthrate in the developed world” (1999, p. 50).

As Drucker notes, demographic trends are an important determinant of strategy. Conveniently, as a function of fertility, life span, and immigration, demographic trends are also fairly predictable. We tapped into the International Database created by the U.S. Census Bureau’s International Programs Center to conduct a detailed analysis of current (as of 2005) and projected future populations. We found that Asian and African countries already account for 73.4 percent of the world’s total population, and that percentage is expected to grow. In contrast, the United States, Canada, and all of Western Europe currently combine for only 11.2 percent, and that percentage is expected to decrease (U.S. Census, 2007).

### Shifting Age Demographics

This population trend is important, but of greater concern is how population changes will be distributed by age. Table 1 (right) compares current and future distribution of populations by age and region. It shows that the proportion of people 40 and older will increase across all regions. In other words, the global population is getting older. It is also clear that current distributions vary widely. In Sub-Saharan Africa, 82.8 percent of the current population is 39 or younger, compared to only 49.6 percent in Western Europe. The table also demonstrates that some distributions will change more dramatically than others. By 2020, the Sub-Saharan Africa figure will remain roughly the same, but the figure for Western Europe will decrease to 43.5 percent.

A more detailed analysis reveals shifts in age demographics that are more directly meaningful to higher education. Table 2 (right) shows expected population changes by specific age group and region. It is clear that Western Europe, Eastern Europe, and the Baltic States will experience significant decreases in the age populations normally associated with higher and management education.

We should caution that these broad trends should not be applied automatically to reflect the experience of every country in a region. For example, despite overall growth in the Asia region, in 2005, Japan became the first developed country since World War II to register a decline in population. Furthermore, there are signs of a demographic reversal in France, Denmark, and Ireland. Each has recently achieved fertility rates above 2.1, the replacement level.

As we shall discuss later in this report, the most significant population growth will occur in those countries most challenged to support it — politically, environmentally, economically, and educationally. Although we know much about management education in developed countries, where it is most mature, it seems essential to learn more about management education in less developed countries, where it has enormous potential. This is an underlying theme in this report. For now, we’ll shift our focus and broadly interpret the implications of demographic changes for management education.

### Implications for Management Education

Shifts in age distribution of the population will significantly impact management education, particularly in the areas of demand management, program development,

**Table 1 – Age Distribution of Current and Future Populations by Region\*\***

Region / Age group	2005		2020	
	0 to 39	40 and over	0 to 39	40 and over
Asia (excluding Near East)	69.7	30.3	61.8	38.2
Baltics	52.2	47.8	45.9	54.1
Commonwealth of Independent States	57.8	42.2	54.7	45.3
Eastern Europe	54.0	46.0	46.3	53.7
Latin America and the Caribbean	71.5	28.5	63.1	36.9
Near East	77.6	22.4	71.2	28.8
North Africa	75.6	24.4	67.0	33.0
Northern America	55.0	45.0	52.2	47.8
Oceania	61.7	38.3	56.6	43.4
Sub-Saharan Africa	82.8	17.2	81.9	18.1
Western Europe	49.6	50.4	43.5	56.5

Source: U.S. Department of Census and GFME Analysis

\*\* See Appendix for a list of countries included in each region

**Table 2 – Projected Changes in Populations by Age Group and Region (2005-2020)\*\***

Region	Age group						
	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49
Asia (exc. Near East)	-7.9	3.1	12.4	14.2	8.1	16.6	43.0
Baltics	-46.8	-40.6	-14.3	4.3	-0.2	-15.0	-9.3
Commonwealth of Independent States	-34.5	-34.2	-11.2	21.5	23.1	-7.5	-15.3
Eastern Europe	-31.5	-32.9	-25.9	-6.4	9.6	21.4	-0.6
Latin America and the Caribbean	-2.2	5.4	11.1	16.5	21.1	28.1	38.8
Near East	15.6	13.0	17.5	31.2	44.1	55.9	62.3
North Africa	-1.2	4.4	16.6	31.2	44.1	52.0	56.8
Northern America	0.8	-0.3	13.1	13.9	5.7	-9.5	-9.9
Oceania	7.1	13.2	13.7	7.9	7.8	12.7	20.1
Sub-Saharan Africa	37.3	40.9	48.6	56.4	56.7	51.5	44.8
Western Europe	-8.7	-8.0	-7.5	-13.2	-19.1	-16.2	1.7

Source: U.S. Department of Census and GFME Analysis

\*\*See Appendix for a list of countries included in each region.

*Shifts in age distribution of the population will significantly impact management education, particularly in the areas of demand management, program development, and business school staffing.*

and business school staffing, which will be discussed below. All else being equal, countries with growing younger populations will experience rising demand for business education. The risk in these countries is that bulging youth populations will overwhelm educational infrastructures. In aging economies, the strategic challenge is to discover ways to import students and retain graduates to accommodate work force needs. Although these implications sound simple and unambiguous, we should point out that demand for business education is also a function of other factors such as secondary level graduation rates, political stability, and economic conditions, and that sometimes the impact of demographics is more subtle. For example, younger populations are associated with faster productivity growth and, as a result, indirectly increase demand for educated workforces.

Business school programs and curricula development will be affected by changing demographics. Economies will experience shifts in consumption patterns, resulting in opportunities for new business school programs. For example, in aging countries, the demand for food will decline, and the demand for health and leisure services will expand. In North America, these trends have already spawned new programs that focus on growth areas such as health care and hotel management. In some countries with rising dependency ratios, we expect more women to enter the workforce and people to delay retirement, creating interesting opportunities for continuing management development programs.

Demographics also impact business schools directly, as their workforces are largely comprised of skilled, highly-educated professionals. In some countries, business schools are concerned about growing proportions of faculty and staff that are eligible to retire, especially in light of slowing doctoral degree production among the most mature doctoral programs located in the United States. We describe the trends in business school faculties in greater detail later in this report.

Two related trends deserve mention before leaving our discussion of demographics. First, the migration of populations embedded in demographic projections can be isolated and evaluated for impact on management education. Especially important for our purposes is the emigration rate among the tertiary-educated population. Between 1990 and 2000, the number of such immigrants in Organisation for Economic Co-operation and Development (OECD) countries from developing nations increased 93 percent, especially from Africa (up 113 percent), and Latin America and the Caribbean (up 97 percent) (Docquier, et al., 2007). Migration patterns among the educated have engendered passionate debate about brain drains, gains, and more recently, *circulation*, which has added a positive connotation in the global creation of knowledge.

Second, we should not leave the discussion of population dynamics without mentioning the acceleration of urbanization. According to the United Nations Population Fund, 50 percent of the world's population will be urban in 2008 (UNFPA, 2007, p.1). Comparatively,

the Center for Strategic and International Studies estimates that nearly 60 percent of the total world population will live in cities by 2025 (CSIS, 2007). Especially in developing nations, the best business schools tend to be concentrated in the largest cities. Thus, we expect that continuing urbanization will create additional strain on educational infrastructures around the globe.

Of course, a model based on demographics alone cannot accurately predict the future demand for management education. Demand depends on a number of other factors, such as economic growth (which affects job creation and opportunity costs) and political climate (e.g., repression) in the local environment. It also depends on social variables (e.g., higher education penetration rates, which vary substantially between countries). Although demographic trends will most certainly affect management education, the implications are impossible to generalize. The impact on overall demand, as well as on programs and staffing, will differ across countries. Policy makers, business leaders, and management educators should study local demographic trends and interpret them in the context of their goals and objectives. For the purposes of this study, however, the overarching lesson is that many of the fastest growing countries, economically and demographically, are also the countries where management education is least developed and understood. These countries are bursting with potential, but often have among the lowest participation rates for higher education. Currently, in most developing countries, the tertiary education rate is less than 10 percent. According to one estimate, increasing the participation rate of developing countries to 35 percent would add 150 million students to the total tertiary enrollment and more than double the current world total (Daniel, et al., 2006).

## Information and Communication Technology

When U.S. Federal Reserve Chairman Ben Bernanke gave a presentation at a symposium in August 2006, he opened with the following remarks:

The physical distance along a great circle from Wausau, Wisconsin to Wuhan, China is fixed at 7,020 miles. But to an economist, the distance from Wausau to Wuhan can also be expressed in other metrics, such as the cost of shipping goods between the two cities, the time it takes for a message to travel those 7,020 miles, and the cost of sending and receiving the message (Bernanke, 2006).

His main point was that “one of the defining characteristics of the world in which we now live is that, by most economically relevant measures, distances are shrinking rapidly” (Bernanke, 2006). In this section, we highlight the importance of continuing advances in information and communication technologies. Of course, technology will have important implications for management education due to its impact on organizations: fragmenting value chains, global sourcing of services, and knowledge as the source of competitive advantage. But, these are subjects for discussion below. Communication and information technologies deserve special attention here because of their direct impact on the creation, delivery, and management of education.

## Information and Communication Technologies and Education

Education is a voracious user of information and communication technologies. The need for course management systems, online education, administrative functions, research databases

and collaborations, digital libraries, marketing, mobile learning support, and the like is testing the infrastructure, financial, and staffing limits of educational institutions. State-of-the-art information technology is not inexpensive to acquire and maintain.

But, information technology also offers the most promise to address the challenges of meeting growing demand for management education — especially among working professionals in need of continuous education — despite looming faculty shortages and other limits to physical infrastructure. In 2005, nearly 3.2 million students took at least one online course at U.S. institutions in the fall term. That's up from 2.3 million in 2004, 1.9 million in 2003, and 1.6 million in 2002 (Allen and Seaman, 2006, p. 5). In the same study, nearly three-quarters of U.S. institutions agreed that online education reaches students who would not otherwise be served. According to Eduventures, an education research company, the number of U.S. students enrolled exclusively in online programs was 1.2 million in 2005 (7 percent of all students enrolled in degree-granting institutions) (Carnevale, 2005). That's up from 937,000 in 2004 and fewer than 500,000 in 2002. Following their study of institutions in 13 countries, the OECD and the UK-based Observatory on Borderless Higher Education (2005) concluded that student involvement with e-learning is growing. Although at the time, participation in fully-online programs still accounted for less than 5 percent of total enrollments, the number of students enrolled in at least one online course was estimated to be as high as 30 percent to 50 percent of total enrollments. The study also found that almost all of the institutions studied had, or were developing, some form of central strategy for e-learning.

The opportunities provided by information technology are not uniformly available. We should take special notice of the digital divide among and within countries. Though the divide appears to be narrowing in some areas (e.g., mobile telephone penetration relative to fixed lines in Africa), in other areas such as broadband access, which is vitally important for education, it is not. Only 4 percent of Africans have Internet access, and their access is slower and more costly than anywhere else in the world (*Economist*, 2007a, p. 64). Exploring differences in communication infrastructure is especially important in light of the demographic shifts described above and funding issues described below. For example, in our interviews, we learned that one of the consequences of the under-funding of African business schools has been the depletion of the physical infrastructure and a lack of investment in information and communication technologies. These infrastructure problems have an adverse effect on all aspects of the education process, as Jonathan Cook, director of Academic Programmes for the Gordon Institute of Business Science, noted:

Individuals and schools are unnecessarily isolated through poor telecommunications infrastructures ... The consequences range from inability to access research databases, to inability to take advantage of video links to foreign experts for teaching, to simple inability to communicate with individuals because their e-mail is slow and unreliable. Imagine trying to be an academic in the twenty-first century when you cannot rely on e-mail or Internet connectivity, and your physical library hardly exists (Cook, 2006).

Stephen Adei, rector of the Ghana Institute of Management and Public Administration, also identified infrastructure problems as a major constraint on the development of African

business schools (Adei, 2005). In many other parts of the world, the existence of supporting information technology is taken for granted.

In the future, we expect spreading connectivity along with new developments such as open source movements like Sakai (for teaching and research), Kuali (for administrative systems), and JASIG (for infrastructure) to help schools to resolve and overcome these and other challenges (Wheeler, 2007). Combined with improvements in online learning and assessment, greater connectivity and lower costs will enable accelerating growth in online education and offer new hope for addressing growth in management education. However, as we will argue below, these developments also create new challenges in assuring quality worldwide.

### Global Sourcing of Services

Advances in information and communication technologies have fragmented supply chains and enabled work to flow to where it is done best. Different parts of the services value chain can now be performed in different locations around the globe. As a result, effective collaboration will become more important, and the boundaries between different functions, organizations, and industries will continue to blur.

We begin our discussion by describing the fragmentation of value chains, which, as author Thomas Friedman (2005) describes brilliantly, has been enabled by the advances in information and communication technologies described above. It is not by accident that this fragmentation has coincided with a rapid expansion in the services sector. Similarly, it is not a giant leap to argue that knowledge management will continue its migration to center stage in business strategy. We collapse all of these trends into a single dimension — the rise of global sourcing of services.

Growth in services exports has been particularly strong in developing countries in recent years. Worldwide, services exports increased from US \$358 billion in 1984 to US \$2 trillion in 2004. However, in developing countries, services exports rose from US \$54 billion (15 percent of the total) to nearly US \$400 billion (20 percent of the total) during the same period (World Bank, 2007). Although India and China are often mentioned as the main source of trade-in-services growth, other contributors to the rise in developing country service exports have been Estonia, Romania, Israel, Brazil, Argentina, and Mauritius (International Bank for Reconstruction and Development, 2007, p. 121). EIU analysts estimate that almost all of the increases in employment in the United States and Europe will be in the services sector, especially its higher value-added segments. In the United States, non-farm employment in services industries is already high at 85 percent, but is expected to increase to well over 90 percent of total employment by 2020 (EIU, 2006). In addition to advances in information and communication technologies, this growth in services exports can be attributed to income-related demand shifts, including the increasing services content of many goods, and human capital development.

Trade in services can take many forms. “Mode 1” trade in services involves an arm’s-length supply of services with the supplier and buyer remaining in their respective locations. For example, independent designers, architects, and consultants might provide their services electronically to manufacturers and consumers around the world. Alternatively, a firm might

manage call centers, back offices, accounting, and software programmers for other companies around the globe. The three other forms are: (Mode 2) a service consumer moves to a supplier's country; (Mode 3) a service provider establishes a physical presence in another country to deliver a service; and (Mode 4) a service provider temporarily relocates to provide services in another country.

## Services Dynamics

We make two fundamental points before describing the implications of the global growth in services for management education. First, although this topic has been particularly controversial, we expect that the global sourcing of services will continue to affect a broader range of services. Author Alan Blinder (2006) points out that the old distinction between jobs according to education has been replaced by a distinction based on whether the service can be delivered through a wire. The second point is that the global sourcing of services is dynamic. Although some services (e.g., travel agent) may disappear completely or morph into something different (e.g., travel services consultant), the fact is that most services must be performed somewhere. In the 1990s, for example, as the cost of outsourcing from Ireland increased, companies increasingly began looking to India and the Philippines. Now, they are moving to Eastern Europe.

Both of these points underscore the need for business schools to think deeply and more frequently about the educational goals of their curricula, the way they teach, and the demands of organizations — not just in their home country, but all over the world. Global sourcing of services has changed the structure of business and the core skills required. It's unlikely that efficiency — on its own — will be able to offer a lasting competitive advantage as the diffusion of technologies and processes accelerate. The new focus of attention will be on innovation, collaboration, and customer service, where communication and interpersonal skills and creative insight matter more than technical prowess.

## Strategies for Business Schools

This does not mean geography matters less. In fact, it matters more. The fragmentation of the global services value chain will continue to foster global specialization by function and region. In his *Flight of the Creative Class*, Richard Florida writes that “The core characteristic of the new global system of cities is that while cities are specialized by industry, task, or function, the production system or value chain is integrated globally across geography.” (2005, p. 163). We believe that business programs, too, will become more specialized and focused, as education and research become as open to global sourcing as other services have become.

*Business programs, too, will become more specialized and focused, as education and research become as open to global sourcing as other services have become.*

Global provision of services can be a source of growth for any country, but success, in many cases, will require investments to upgrade infrastructure and reform in education and regulation. Business schools can play a huge role in promoting success given these

new realities, not only through education, but also through research. In its effort to develop and promote a new services science, IBM points out:

[The] shift to focusing on services has created a skills gap, especially in the area of high value services, which requires people who are knowledgeable about business and information technology, as well as the human factors that go into a successful services operation ... [I]ndustrial and academic research facilities need to apply more scientific rigor to the practices of services, such as finding better ways to use mathematical optimization to increase productivity and efficiency on demand (2007).

Our final point is of more direct importance to educational institutions. Because education is, itself, a service, the structure of education has been directly impacted by the globalization of services trend. Online education, a growing segment, cuts across borders (Mode 1); students study in countries other than their home (Mode 2); foreign educational institutions partner with local institutions or establish campuses in foreign countries (Mode 3); and faculties increasingly take their expertise to other countries (Mode 4). We expect further liberalization of trade, standardization of credit tracking systems (e.g., European Credit Accumulation and Transfer Systems), and advances in technology to increase the global provision of educational services. Perhaps more importantly, rising awareness about the strategic importance of knowledge will continue to influence policies that impact trade in educational services. As with trade in goods, countries have a myriad of tools for restricting or promoting educational imports.

### Social Responsibility, Governance, and Sustainability

The recent rise in corporate social responsibility (CSR), governance, and sustainability has probably not been derived exclusively from benevolence and philanthropy. In the *Harvard Business Review*, Michael Porter, a professor at Harvard Business School, and Mark Kramer, managing director of FSG Social Impact Advisors, offer a more cynical explanation:

Governments, activists, and the media have become adept at holding companies to account for the social consequences of their activities. Myriad organizations rank companies on the performance of their corporate social responsibility (CSR), and despite sometimes questionable methodologies, these rankings attract considerable publicity. As a result, CSR has emerged as an inescapable priority for business leaders in every country (2006, p. 78).

We have little doubt that the recent spotlight on unethical practices has been most effective in motivating business leaders to think beyond the bottom line. But, a shift has been occurring; many companies have begun to discover that social responsibility, good governance, and sustainable practices not only ward off or repair negative press, but they are integral to the long-term profitability and health of the organization. Increasingly, business leaders believe that the long-term success of their organizations, and of business itself, will require positive social change today. As Porter and Kramer later point out, “An affirmative corporate social agenda moves from mitigating harm to reinforcing corporate strategy through social progress” (2006, p. 84).

### Leadership from Both Business and Business Schools

It isn't uncommon in the world of management education to debate whether it's business or business schools that lead the way when it comes to new ideas, approaches, or practices.

The answer should be *both*. Fundamental shifts in strategy, new and improving practices, and the like must be driven quickly into business and management curricula. Yet, rigorous and independent business and management insights that abstract from the experience of any single company and integrate theory across multiple disciplines are needed to enhance business and management practice. Social responsibility is a prime example of the need for complementary leadership from both business and business schools. Business schools must respond to, and lead, efforts to develop socially responsible and sustainable business.

*It isn't uncommon in the world of management education to debate whether it's business or business schools that lead the way when it comes to new ideas, approaches, or practices. The answer should be both.*

Business schools worldwide have already begun to take action, individually and collectively:

- Seeds planted in 2002 eventually grew into EFMD's Globally Responsible Leadership initiative, which is "to promote understanding of what constitutes globally responsible leadership and to develop its practice" (EFMD, 2005, pg. 4).
- With its 2004 publication of *Ethics Education in Business Schools*, AACSB International began to focus on elevating achievement in business ethics education, which is broadly defined to include business and society, ethical leadership and decision-making, and governance.
- The Aspen Institute Business and Society Program has, through a variety of projects, identified and promoted the valiant efforts of business schools to prepare graduates in the social and environmental dimensions.
- Established in 2002, the European Academy of Business in Society (EABIS) is a unique alliance of companies, business schools, and academic institutions that, with the support of the European Commission, is committed to integrating business-in-society issues into the heart of business theory and practice in Europe.
- Now boasting more than 10,000 members, Net Impact evolved from student perspectives to formulate its mission to "make a positive impact on society by growing and strengthening a community of new leaders who use business to improve the world" (Net Impact, 2007).

Likewise, many businesses have joined forces to foster achievement in the areas of social responsibility. For example, the U.N. Global Compact is "a framework for businesses that are committed to aligning their operations and strategies with 10 universally accepted principles in the areas of human rights, labour, the environment, and anti-corruption" (United Nations, 2007). It is billed as the world's largest, global corporate citizenship initiative, and its main concern is with "exhibiting and building the social legitimacy of business and markets."

Now, each of the organizations mentioned above has combined to formulate a broader business school initiative under a set of Principles of Responsible Management Education (PRME). Under this framework, schools can voluntarily accept and report on an established

set of six principles, which addresses a wide range of ways that business schools can demonstrate leadership in the broadly-defined area of social responsibility.

## Daunting Challenges

The social, environmental, and economic problems of the world are vast and cannot be solved overnight; they will require sustained action and investment. Despite worldwide economic growth, a significant proportion of the workforce and population in many countries will remain in poverty. Wrenching changes resulting from globalization will impact jobs and lives more deeply and continuously. In a growing number of regions, diseases such as malaria and HIV/AIDS will impose huge economic and social costs, crippling societies and businesses alike. By most measures, current and projected resource (water, energy, land) use will exceed sustainable levels. Meanwhile, armed conflicts pose significant threats to economic prosperity. We should note that each of these problems also has a direct impact on higher education. For example, by the end of September 2007, Iraqi universities were near total collapse. Classroom and residential buildings were in ruins, and some experts estimate that as many as 1,000 professors had been killed since 2003 (Krieger, 2007).

To illustrate the potential for business schools to address critical social and economic challenges, we begin by noting that slightly more than one in four Indians (27.5 percent) live in poverty, with significant wealth disparities throughout the society (Government of India Planning Commission, 2005). Critics suggest that Indian business schools have not devoted sufficient attention to addressing the developmental needs of the country. These needs can be placed in context when we consider that only 59 percent of children enrolled in school reach grade 5, and that 44.3 percent of those 15 years or older cannot even write their own name (Mallick, 2001). To address India's developmental needs, Gupta and Gollakota suggest that the business schools should assume a leadership role in the development process and work toward making "the capabilities for entrepreneurship and leadership accessible to all" (Gupta and Gollakota, 2005, p. 52). They further recommend that:

[T]he IIMs should also adopt a more entrepreneurial mindset in relation to the challenge of the accessibility of business education. The lack of responsive programs for the smaller cities, smaller businesses, and women have resulted in access to quality business education being limited to the larger cities, being orientated towards the needs of larger businesses, and slanted towards the male-dominated business world. (Gupta and Gollakota, 2005, p. 52)

For business schools worldwide, there is an opportunity to move beyond simply *being* good — offering high quality education and obeying the law — to *doing* good. Business schools should solidify their role not only in advancing the careers of future graduates and improving business, but also in directly addressing social, environmental, and economic ills. This means strategically leveraging the talent, energy, and ideas of students, faculties, and staff to achieve social progress.

When it comes to business education and research, our chief concern in the area of social responsibility is the sustainability of action. As we shall see in the next section, business schools have been dealing with a wide range of difficult issues and challenges, including

increasing competition, faculty shortages, and financial concerns. In this context, it would be easy for schools to lose sight of their new-found responsibilities.

Before shifting our attention to recent developments in management education, we should admit to excluding the two most unambiguous trends of all global trends. First, the pace of change has been accelerating and has become more complex. Stronger ties among economies, advances in information technology, employment dynamics in a global services environment, emerging social needs, and the like have contributed to an increasingly complex and rapidly changing environment for business schools. Second, the likelihood of a surprise external shock has been increasing. In the future, a conflict (e.g., war, civil unrest, etc.) will appear in an unexpected place; a currency crisis will materialize from one region and ripple instantaneously around the world; a natural disaster will kill millions of people at once in one of a growing number of mega-cities. These shocks are not predictable, but they will happen with nearly 100 percent certainty. These final, underlying trends reinforce an overarching theme that the business schools of the future must be able to learn and adapt to survive, but they must be forward-looking, nimble, and quick to change so that they can also lead.

*For business schools worldwide, there is an opportunity to move beyond simply being good — offering high quality education and obeying the law — to doing good.*

# Recent Developments in Management Education

In this section, we discuss recent developments in management education in six areas: degree structures, size and growth, student mobility, diversification, funding and autonomy, and business school faculty. Our analysis reveals that the global trends described above have already begun to shape the course of management education. It is worth asking ourselves two questions as we explore developments in management education in the context of global trends. Are business schools adapting quickly enough to provide what the world demands of them? If not, what are the critical obstacles or challenges?

## Degree Structures

We begin our discussion of recent developments in management education with an overview of degree structures. This overview provides a foundation and context for understanding other topics in this report and, by itself, uncovers several key trends that will have important implications for the future of management education.

Figure 1 (below) introduces a general framework for understanding the structure of business and management degree programs worldwide. We apply this framework to discuss current similarities and differences among degree programs, as well as future developments.

**Figure 1 – Degree Program Framework**

Doctoral 3–5 years*	Research Orientation		Practice Orientation	
Master's 1–2 years*	General Business and Management	Specialized Business or Management		Research
Undergraduate 3–5 years*	General Education with specialization in Business and Management		Specialized Business or Management	
			General Business or Management	

\*Full-time equivalent years of study.

## Classifying Business Degree Programs

Most degree programs worldwide can be placed into one of three levels: undergraduate, master's, and doctoral. We offer additional distinctions at each level. For example, any master's degree in business can be categorized as general, specialized, or research-oriented. However, three cautions regarding the interpretation of this framework are in order. First, the visual structure of the diagram is not intended to prescribe a definite progression. For example, in some cases, a master's degree may not be required to enter a doctoral program. Similarly, an undergraduate degree in business is not usually required to earn a general business master's degree. Second, sometimes the lines separating degree levels are unclear. For example, undergraduate and master's programs are sometimes combined to form a single program, and certificate programs fill gaps between levels. Finally, we should caution that the terms *management* and *business* also vary, to some extent, by country. For example, some take *business* to exclude public sector and not-for-profit management. In some countries, business education includes accounting education. Some people apply the term *management* to exclude other fields, such as marketing, finance, and information systems. Throughout this study, we use the terms *business* and *management* interchangeably and in the broadest and most inclusive sense when referring to education.

### Undergraduate

Undergraduate business education prepares students for entry-level positions in business and management. Most often, these degree programs include a general education component (e.g., sciences, mathematics, social sciences, liberal arts, etc.), general business and management education (e.g., accounting, finance, management, marketing, strategy, operations, etc.), and an option to take additional courses in elected areas of emphasis. Undergraduate degree programs usually involve three to five full-time equivalent (FTE) years of study. If a program is three years, it is usually preceded by at least 13 years of previous schooling at the primary or secondary level. Examples of undergraduate (or first) degree titles include licence (France, three to four years), Licenciado en Administracion de Empresas (Mexico, four to five years), Bachelor of Science (Netherlands, three years), Bachelor of Business Administration (United States, four years), and Laurea (Italy, three years).

In addition to degree titles and number of FTE years of study, undergraduate degree programs vary internationally in several other ways. For example, first degrees might be general or broad-based in scope or they might be specialized, either by function (e.g., marketing, finance, information systems) or sector (e.g., financial services, manufacturing, leisure, real estate). For example, in Ghana, business students earn a Bachelor of Business Administration, but specialists in accounting earn a Bachelor in Accounting. In some cases, students receive a preliminary degree or certificate prior to earning an undergraduate business degree for entry-level qualification. For example, in Chile, students first earn a Licenciatura en Ciencias Económicas y Administrativas, then an Ingeniero Comercial, which is required for a career in business. In some countries, schools distinguish between different degrees in business and management in terms of prestige. In Algeria, for example, graduates earn either the Diplôme d'Etudes Universitaires Appliquées (DEUA) or the License or Diplôme d'Etudes Supérieures (LES or DES), with the latter being more prestigious.

## Master's

There is even more variance in degree structures at the master's level. Master's degrees usually involve one to two FTE years of study beyond the bachelor's degree (which is not necessarily in business) or four to five years of total higher education. We further delineate the master's qualification into three categories: general business master's (e.g., Master of Business Administration, Master of Science in Management), specialist master's degree (e.g., MSc in Finance, Master of Accountancy), and research master's (e.g., Master recherche, Master of Philosophy). It is important to point out that in some countries (in Europe, for example) additional distinctions are drawn within the category of general business master's. For example, the European Quality Link (EQUAL) separates the MSc from the Master of Business Administration (MBA), primarily in terms of experience required to obtain the degree — the MSc is “pre-experience,” and the MBA requires “significant” experience. In the framework depicted in Figure 1, both are generalist degrees.

Master's degrees, especially the generalist type, are also fragmented according to structure, though the lines of separation have become increasingly blurred. They vary according to whether work stoppage is necessary (full-time or part-time), level of work experience required (e.g., professional MBA vs. executive MBA), and format of delivery (e.g., online, modular, or in-house). We should point out that the clear trends at the master's level have been to expand the number and types of degrees, exploit new forms of customer segmentation, and blur distinctions among programs. For example, some schools have begun to promote MBA programs as specialist degrees (e.g., MBA in Information Technology). For students and employers, the chief benefit has been a huge expansion in the number of options available to earn a master's degree. However, the trends have also made it more difficult to comprehend and act on the differences between programs and the schools that offer them.

## Doctoral

Business doctoral degrees usually carry one of two titles: Doctor of Philosophy (Ph.D.) or Doctor of Business Administration (DBA). These titles do not fall perfectly into the categories we assign (i.e., research orientation and professional orientation). Though it has become less common in the United States, for example, the DBA is viewed as interchangeable with the Ph.D., as they are similar in structure and both are considered research doctorates. However, in Europe, it is not uncommon to view the DBA as focusing more on application and practice than a Ph.D.. Both might necessitate a master's degree for entry, but the DBA often also requires significant management experience. Practice-oriented doctoral degrees do exist in the United States; however, they are not usually called the *DBA*. For example, Case Western Reserve University offers an Executive Doctorate of Management (EDM), which differs in content, structure, and expectations from the DBA. It is also important to note that doctoral programs differ not only terms of research or practice orientation, but also in terms of structure. For example, in some countries, substantial course work is required in early stages. In other countries, especially in Europe, doctoral students begin with structured research supervision.

There are several important trends emerging in doctoral programs worldwide. First, the number of professional doctorate programs, which place relatively more emphasis on practice

than traditional Ph.D. programs, has been growing. Second, institutions have been incorporating more structured course work into the early stages of doctoral programs. Both of these trends have been more evident in Europe. In North America and other parts of the world, professional doctorates have been less likely to take hold, and doctoral programs historically have included substantial course work. Although it is too soon to call it a trend, we are beginning to see more examples of cooperation among institutions in doctoral education. Again, Europe appears to be leading the way in collaborative doctoral education.

### Diversity and Quality of Business Degree Programs

We analyzed program information from more than 600 business schools worldwide, using data provided by AACSB International. Our analysis of this data reveals substantial diversity among programs across and within countries. Program titles, delivery methods, and characteristics vary widely. This diversity holds the benefit of providing a wide range of options to meet the needs of students who differ significantly by their objectives (e.g., career change vs. career progression) and characteristics (e.g., location, experience, resources).

However, increasing diversity, fragmentation, and blurred boundaries have also caused confusion in the marketplace. For example, it has become impossible for employers to understand exactly what is an MBA. These factors have also limited international student mobility and competition. Initiatives such as the Bologna Accord in Europe; the General Agreement on Trade in Services; and the United Nations Educational, Scientific and Cultural Organization's (UNESCO's) Global Forum on International Quality Assurance, Accreditation, and the Recognition of Qualifications are designed to overcome this challenge. For example, the Bologna Accord will not only harmonize degree structures in Europe, but make them more consistent with the rest of the world. The standardization of degree structures will increase student and employment mobility and the intensity of international competition in management education. However, there is growing concern about variation in the quality of business programs. Although increasing competition can elevate quality in most industries, it cannot be relied on exclusively to ensure quality, especially across borders, in education. Degree education is complex and expensive, yet good information about programs and providers is generally less available and more difficult to understand than information on most other products and services.

### Size and Growth

Collegiate management education is a large and growing industry. Limitations in data availability and quality prevent precise measurement, but we can provide some estimates based on existing information. In 2004, 132 million students were enrolled in tertiary education (UNESCO, 2006). Assuming business and management studies represent 10 percent to 20 percent (a conservative range), there were between 13.2 million and 26.4 million students of business and management in 2004. The World Bank estimates that global spending on higher education amounts to US \$300 billion (*Economist*, 2005). Again, if business and management represents only 5 percent to 10 percent of the total (assuming that other programs, such as engineering and medicine are more expensive), between US \$15 billion and US \$30 billion is spent on university-level business and management education

annually. In the United States alone, the operating budgets of business schools total more than US \$6 billion (AACSB, 2005).

*Between US \$15 billion and US \$30 billion is spent on university-level business and management education annually.*

### How Many Business Schools?

According to the GFME's publication, *Global Guide to Management Education 2006*, there are more than 8,000 institutions that offer undergraduate, master's, or doctoral degrees in the 47 countries about which data are available. Table 3 (overleaf) breaks down the list by degree level.

The table, obviously, is far from complete. As of 2006, there were 192 United Nations member states, including virtually all internationally-recognized independent countries. These countries have more than 17,000 universities and other institutions offering terminal degrees after three to four years of higher education (UNESCO, 2006). That leaves us a wide range, somewhere from 8,000 to 17,000, for our estimate of the number of business schools. Four important points, mostly derived from what we don't know, emerge from our initial analysis of the number of business schools in the world.

1. There are several reasons why it is difficult to establish a more precise census. The most important reason is the absence or poor quality of national level data by program field. In many countries, national level data is not collected or reported in ways that are comparable or useful to business education. For example, it is not uncommon to embed business degree offerings within a larger category, which makes it impossible to count how many institutions award business degrees.
2. A related point is that we do not have information about the number of institutions that offer business and management degrees in more than half of the world's most populous countries. For example, six of the 10 most populated countries in the world (Indonesia, Brazil, Bangladesh, Russia, Nigeria, and Japan) are not represented in the table. Indeed, 29 of the 50 most populated countries are not represented in the table. This is important, because some of the most significant challenges are centered in regions that are least understood – a theme throughout this report.
3. The table draws attention to the relatively high importance of undergraduate business education, which receives a disproportionately low share of the public's attention. For example, in China there are nearly 1,400 institutions that offer business and management undergraduate degrees, but only about 100 offer MBA degrees. In Mexico, there are about 1,000 institutions granting undergraduate degrees in business, compared to 450 institutions granting master's degrees in business. In the Philippines, more than 1,100 institutions grant undergraduate degrees, compared to a little more than 200 granting master's degrees in business. Similarly, doctoral education represents only a small share (8 percent) of the total number of institutions offering business degrees in our sample.
4. The table does not sufficiently characterize the diversity of institutions that deliver

**Table 3 – Number of Institutions Awarding Business and Management Degrees by Country**

Country	Undergraduate	Master's	Doctoral	Total*
Argentina	69	33	5	
Australia	39	39	39	
Austria	22	26	6	
Canada	60	40	20	
Chile	60	13	0	
China	1,396	96	NR	
Hong Kong SAR	28	44	18	
Cyprus	10	5	1	
Estonia	5	5	3	
Finland	12	12	9	
France	100	100	NR	
Germany	32	32	59	
Ghana	10	4	0	
Greece	20	41	8	
Hungary	35	13	11	
Iceland	4	3	1	
India	NR	NR	NR	1,200
Ireland	27	20	15	
Italy	NR	NR	NR	68
Korea	218	210	130	
Latvia	20	12	2	
Lithuania	36	14	5	
Mexico	1,000	450	20	
Morocco	NR	NR	NR	17
Netherlands	NR	NR	NR	36
New Zealand	25	10	10	
Norway	27	8	3	
Pakistan	NR	NR	NR	87
Philippines	1,127	216	44	
Poland	420	200	50	
Portugal	50	20	5	
Singapore	5	6	5	
Slovenia	5	4	3	
South Africa	NR	15	NR	
Sweden	29	29	15	
Switzerland	15	9	9	
Thailand	95	61	9	
Turkey	NR	NR	NR	77
United Arab Emirates	18	7	NR	
United Kingdom	NR	NR	NR	102
United States	1,550	890	130	
Venezuela	5	17	2	

\*If Breakouts Not Reported (NR)

degree-based management education. For example, it does not separate public and private institutions. Contributors to the *Guide* were not asked specifically to make such a separation, though it appears that most have included private institutions. Regardless, these numbers should be taken as a minimum to allow the possibility that a number of private institutions may have been excluded from the counts. It's not only the public/private dichotomy that matters here. It's also important to note that the institutions on this list vary significantly in terms of structure, mission (e.g., teaching vs. research, global vs. regional or local, etc.), and quality. We explore the diversification of institution types in the section that follows.

### Growth in Management Education

Countries around the globe have experienced tremendous growth in management education. Perhaps the most significant contributing factor has been growth in higher education, in general. In 1991, only 68 million students were enrolled in tertiary education (UNESCO, 2006). Driven by growth in college-age populations and increases in higher education participation rates, enrollment grew 94.1 percent to its 2004 figure of 132 million. According to UNESCO, between 1991 and 2004, the number of tertiary students more than tripled in Sub-Saharan Africa and the Middle East and more than doubled in all regions of East Asia and Latin America. Interestingly, East Asia and the Pacific now represent the largest proportion of tertiary students and have experienced the greatest growth in the absolute number (25 million) of students. It's also worth noting at this stage that North America and Western Europe now represent only one-quarter of the total participation in higher education. That's down from 38 percent in 1991.

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Due to the absence of good data, it is difficult to describe growth in business and management enrollments globally. However, in many countries, we know that participation in degree-based business education has grown rather quickly. For example, demand has been particularly strong in China, where in 1991 only 86 students graduated from MBA programs (Gatti, 2006). In 2006, 39,841 students applied for “fall MBA” programs in state-owned universities, of which only 15,217 were admitted (Wang, 2006). During the same period in the United States, the number of business bachelor's and master's degrees awarded expanded by more than 21 percent and 68 percent, respectively (National Center for Education Statistics, 2006). By 2004, the number of MBA students in India had risen to about 75,000, up from 12,000 in 1991 (Gupta & Gollakota, 2004). The same upward trend has been found in almost every country for which data is available.

We also see significant growth in business programs. According to the Graduate Management Admission Council, 3,710 new graduate management programs were added

in the 10 years between 1997 and 2007. The growth has been accelerating, with 641 of these new programs added in 2007, compared to only 74 new programs added in 1997. Interestingly, less than 20 percent of all the new programs added between 1997 and 2007 were introduced by schools based in North America (GMAC, 2007).

Growth in business education has also been reflected in the number of business schools. Because global indicators are not available, we will provide a couple examples. In China, the number of local institutions awarding MBA degrees expanded to its current number (100) from close to zero in 1990 (Chunjun, 2005, p. 169). Even in the mature U.S. market, according to the National Center for Education Statistics (2006), the number of institutions awarding business bachelor's degrees increased by 299 (11.7 percent) in just four years between 2000 and 2004. The number awarding master's degrees grew by 192 (17.2 percent). Similar growth stories are shared around the world.

Among the factors contributing to the growth in business education are the spread of democracy, transitions to market-based systems, and more widespread participation in the global economy. For more than 70 years before the break up of the Soviet Union, Russians and the other ethnic groups within the Union lived under a centralized economy that discouraged private enterprise. Therefore, prior to the early 1990s, business schools were negligible in higher education. However, since the market reforms were introduced during the early 1990s, the number of business schools grew rapidly. Puffer (1996) estimated that in the early 1990s, the number of business schools in Russia tripled. Even in long-standing market-based economies, such as Japan, retreating commitments to lifetime employment in companies have given rise to new graduate schools of business.

The global trends introduced earlier in this report will continue to drive growth in management education. For example, favorable demographic conditions in age categories typical to higher education in Asia and the Americas will foster growth. A study undertaken by the Shanghai Jiaotong University in China shows that the demand for management professionals is extremely high (Shanghai Jiaotong, 2006). The study claims that there are 10 million businesses in China, including 284,000 state-owned enterprises and 300,000 joint venture or foreign-invested firms, and concludes that the demand for MBAs will soon reach 37,400 annually. As mentioned in our earlier discussion of the demands on management education, research by the management consulting firm McKinsey & Co. has led to speculation that if China retains its current pace of macroeconomic development, more than 75,000 well-trained high level executives will be needed during the next several years — some 70,000 more than are currently available (Gatti, 2006; *Newsweek*, 2005).

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In many parts of the world, increases in management education represent purposeful public investments to enhance international competitiveness or are the result of broader

policy initiatives. In Europe, for example, programmatic reforms are predicted to increase the demand for graduate business programs, despite dramatic drops in college-age populations. According to the GMAC Bologna Project Task Force (2005), by increasing enrollment levels and graduation rates, changes in the structures of higher education will bring into the educational pipeline more than 2.4 million new bachelor's degree graduates — who are ready to consider graduate management education — per year.

## Student Mobility

In 2004, 2.5 million students studied outside of their home countries, an increase of 41 percent (1.75 million students) since 1999 (UNESCO, 2006). Almost all of this growth, however, can be accounted for by increases in higher education enrollments in general, which expanded by 40 percent over the same period. But, for the largest host countries (United States, United Kingdom, Germany, France, Australia, and Japan), mobile student populations grew almost three times as fast as domestic enrollment — 41 percent compared to 15 percent (UNESCO, 2006). International mobility is expected to continue growing. By 2025, it is projected that there will be 7.2 million international students (Boehm, et al., 2002). Among the factors contributing to this growth are rising income levels, globalization of business, and efforts to harmonize degree structures (e.g., Bologna Accord).

## Implications of Increasing Mobility

International student mobility is of keen interest to institutions of higher education and to countries because of the substantial economic impact. This is no doubt well-understood by institutions in the United States, United Kingdom, and Germany, which combined host more than half of all foreign students. France and Australia also host a significant number of foreign students. For example, the Institute for International Education (IIE, 2007) estimates net contributions by foreign students and their families to the U.S. economy to be US \$14.5 billion. But international student mobility is perhaps of greater interest to business schools than other disciplines because of the large percentage of international students that study business and management. For example, according to the Institute for International Education, 17.7 percent of international students originating from the United States and 17.8 percent of foreign students in the United States study business and management (IIE, 2007). More of these students tend to pay full-tuition, in contrast to domestic students, who often pay discounted fees.

For the purposes of this study, it is useful to state briefly the factors that tend to motivate students to study abroad. Some see foreign study as an opportunity to prepare to live and work in an increasingly global society and economy. Of course, this motivation may be especially salient for students of business. But students also choose to study abroad because of the lack of access to higher education in their home country or to receive a better quality education. When viewed from this perspective, patterns of student mobility may reveal strengths and weaknesses in education by country or region.

The following data about the home countries of international students, all from UNESCO's recent study (2006), show some interesting patterns. Of every 10 tertiary students studying

abroad, four are Asians, three are Europeans, and one is African. Interestingly, Sub-Saharan Africa has the highest outbound mobility ratio — one out of 16 students from the region studies abroad. The largest groups of mobile students come from East Asia and the Pacific (29 percent) and Western Europe (17 percent). It is important to note, however, that the order of these shares has changed significantly from five years ago, when the European share was 22 percent and the East Asian and Pacific share was 24 percent. It is also worth noting that 77 percent of Western European students stay within their region to study. UNESCO also points out that the countries with the largest populations of young people have the highest absolute numbers of internationally mobile students and the biggest shares in the distribution of mobile students by origin. Again, this reinforces our theme that many of the issues and challenges in management education are most pronounced in developing countries.

Understanding the patterns of student mobility not only provides insights into the strengths and weaknesses of education in various countries, but also contributes to our understanding of human capital flows, which increasingly involve knowledge workers. Human capital flows can impact management education in two significant ways: 1) directly, through relative competitiveness in attracting the best faculties, and 2) indirectly, by affecting national and regional economic competitiveness. The factors affecting “brain drains” or “brain gains” are obviously complex, but are especially important to countries concerned about international competitiveness. For example, a recent study by the Chinese Academy of Social Sciences (2007) found that between 1978 and 2006, more than 1 million Chinese students studied overseas, and about 70 percent did not return to their home country. This data elicits questions about whether China can move from a manufacturing focus to a knowledge and services orientation — a transition that many view as necessary during the next decade.

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Before continuing, it is important to note that more and more institutions — especially business schools — are forming alliances and establishing branch campuses with schools outside of their home country to bring their resources, brand, and degrees to high-demand countries or regions. In a 2004 study of members of AACSB International, EFMD, and the Canadian Federation of Business School Deans, nearly half the respondents indicated that their business school has, or is considering, an alliance agreement with schools in Western Europe. Additionally, nearly a third of respondents said their business school has, or is considering, an alliance agreement with schools in Asia (*BizEd*, 2005). Meanwhile, highly recognized business schools have expanded their global footprint by creating new campuses in other countries. For example, the University of Chicago’s Graduate School of Business has campuses in London and Singapore. INSEAD describes itself as a “business school for the world” and has two comprehensive, fully-connected campuses in France and Singapore.

Australia has been especially assertive in reaching out globally. According to the Observatory on Borderless Education, all but one of the 39 government-approved universities in Australia has established overseas degree programs or branch campuses (Bollag, 2006).

### Diversification

Another important development in management education is the trend toward diversification in higher education. New types of higher education institutions have emerged, largely to serve the growing demand from bulging traditional college-age populations and working professionals who are seeking to upgrade knowledge and skills.

### Rise of the Private Sector

One component of this trend has been the rise of private-sector education. In Latin America, independent private institutions enroll more than 50 percent of the total number of tertiary students in Chile, Brazil, Paraguay, and Colombia (UNESCO, 2006, p. 30). More than 60 percent of tertiary students are enrolled in independent private institutions in Korea, Japan, the Philippines, and Indonesia (UNESCO, 2006, p. 30). In Sub-Saharan African countries, the number of private-sector institutions grew from an estimated 30 in 1990 to more than 85 in 1999, though most of this growth was in African countries where economic liberalism is now fairly well-established (World Bank, 2002, p. 69).

The trend has also been most evident in countries transitioning from central planning to market-based economies. For example, the former socialist countries of Eastern Europe and Central Asia had close to 350 private institutions in 2002, compared to zero in the early 1990s (World Bank, 2002, p. 70). Evan Kraft, of the Croatian National Bank, and Milan Vodopivec, of the World Bank, argue that, for transition economies such as those in the former Soviet Union, “the most significant new development has been the emergence of many new private schools, taking over a significant share of the enrollment in business education” (Kraft and Vodopivec, 2003, p. 254). The growth of private business schools represents one of the biggest challenges for state business schools in these countries.

We should be careful to note that private institutions may be not-for-profit or for-profit, with the former forbidden to distribute surpluses to shareholders or individuals and often enjoying tax exemptions and subsidies from public agencies. It isn’t clear, at this stage, how each type has contributed to the growth of institutions worldwide. In the United States, it appears that private for-profit institutions have experienced the most significant growth, from 169 in 1999, to 350 in 2005, despite massive consolidations (*Chronicle of Higher Education*, 1999, 2005). According to the National Center for Education Statistics (2006), the number of business master’s degrees awarded by private for-profit institutions in the United States increased 295 percent during a four-year period (from 6,709 in 2000 to 19,766 in 2004). The increasing penetration of for-profit institutions is becoming a global trend.

### New Institutional Forms

However, the scope of diversification is not limited to the growth in private-sector education. Community colleges and technical institutes have expanded both in number and in the types. They’re also offering more different levels of degrees. Distance education providers have emerged

around the globe. New institutional forms, such as virtual universities, and franchise universities have been developed. And new players such as publishers and libraries have become degree providers. Management education has not been insulated from this trend toward diversification. Indeed, many observers argue that management education has been at the forefront in driving many of the changes. Business schools have consistently created new program models to deliver management education. They've segmented MBA degrees by age demographic, experience, convenience, industry-focus, and functional specialization. Business schools have created global partnerships and joint ventures to deliver degrees (mostly MBA) and set up new campuses in foreign countries.

### Diversity and Quality

As a whole, these changes have been viewed positively. For students, access to higher and business education has never been greater. Competition can enhance productivity and efficiency. However, the trend has made it more important — yet increasingly difficult — to assure the quality of education and accuracy of information about educational programs. Our research and interviews indicate rising concerns about increasing variance in the quality of degree-based management education. Accreditation and other forms of quality assurance have played an important role in ensuring the quality of educational programs within many, if not all, developed countries. However, few developing countries have established workable accreditation and evaluation systems to protect the public. Furthermore, increasing cross-border education has added complexity. More accreditations are available, but they are of uneven quality. And the absence of coordination among accreditation bodies increases costs. There are now several global accreditation schemes available, but these are still somewhat restricted in the scope of eligible missions and market penetration. Combined, AACSB and EFMD's EQUIS have accredited business schools in only 41 countries. Nearly all of these schools are in developed nations. For example, 98 percent of AACSB accredited institutions are in countries classified as “high income” (defined as US \$10,066 or greater gross national income per capita) by the World Bank (AACSB Web site).

To summarize our discussion of recent developments in management education so far, we expect continuing growth in management education, increasing diversity of business degrees offered and business degree providers, and expanding cross-border provision of education. Given the limitations on quality assurance that already exist, these trends signal a risk of increasing quality variance around the globe. As we shall see next, issues related to funding, autonomy, and shortages of academic faculty will only add fuel to this growing concern.

### Funding and Autonomy

In most countries, higher education historically has been viewed as a public responsibility, with financial support and direction drawn largely from the government. But, this is changing. The global trend, though inconsistent, has been toward shrinking government financial support and delegating more decision-making authority to institutions. On the surface, these two developments complement one another; both point toward institutional independence. However, these changes challenge governments — which are taking on less responsibility for institutions' financial sustainability — to continue to ensure that the institutions respond to

public interest agendas. Meanwhile, institutions struggle to generate revenues to sustain quality and achieve aspirations, and they must balance more complex portfolio objectives, respond to more diverse — and sometimes conflicting — stakeholder perspectives, and expedite efforts to create innovative programs to differentiate themselves among competitors. Governments need funding levers, regulation, and incentive structures to pursue public agendas. Institutions need autonomy and flexibility to succeed in increasingly open and competitive markets. In some countries, the delegation of decision-making is forthcoming, but has not come soon enough relative to changes in funding proportions. In other countries, governments have cut funding, but put in place policies that create perverse incentives, increase bureaucracy, or stifle innovation.

### Rise in Private Financing of Higher Education

In most countries, we have seen evidence that the proportion of higher education expenditures supported by non-public sources has been increasing. For example, of the OECD countries for which data were available, eight saw increases in private expenditures that exceeded increases in public expenditures (Hahn, 2007, p. 7). In Canada, Italy, the Netherlands, and Switzerland, public expenditures decreased in real terms. In the United Kingdom, the “real value of the resource per student paid by the government has declined more than 50 percent [during the period between 1980 and 2005]” (Watson, 2005, p. 268). In the aggregate, the Institute for Higher Education Policy based in the United States points out in a 2007 report that private expenditures on higher education relative to gross domestic product doubled between 1995 and 2003 (Hahn, 2007, p. 2).

The expansion of private finance and education mostly has been in response to rising demand and escalating costs, but all of the global trends and developments in management education described so far have, in some way, contributed to this development. Globalization and the rise of services have elevated the importance of higher education in developing knowledge economies. Technological advances, harmonization of degree structures, increasing student mobility, and innovative organizational structures have altered the competitive landscape. Now, competition is more intense, global, and multidimensional, as schools compete for the best students and faculty.

There are three important points to make about the expansion of private financing in higher education. First, its most sizable contributors have been students and their families, due to increased tuition and fees. Second, in most countries, government support has not declined in absolute or real terms, but rather the proportion of government financing has shrunk relative to private expenditures. That is, public expenditures simply have not kept up with expansion of education. For example, between 1995 and 2003, private expenditures (adjusted for inflation) doubled, and public expenditures increased by 50 percent in OECD countries (Hahn, 2007). Third, though there are many perceived benefits of private financing (e.g., the opportunity to reallocate public funds for other uses, diversification, reduced corruption, and more equitable access), private financing, especially through tuition increases, has met criticism and protests in many countries.

### Greater Autonomy in Higher Education

As we have noted, funding and autonomy are inextricably linked. There are many dimensions of autonomy (e.g., the legal standing of the institution; control over the institution’s strategic

plan or objectives; status of, and policies for, managing staff; ownership of assets; and commercial freedom) that impact the competitiveness and sustainability of an institution. The extent of freedom along each of these dimensions affects the ability of institutions to compete. Although not always the case, most institutions are seeking greater autonomy to be more entrepreneurial and market-driven, to increase tuition levels, to create new programs more quickly in response to market opportunities, and to hire faculties at market rates that generally exceed internal benchmarks.

Sometimes autonomy is impacted indirectly through incentive structures. For example, in some countries, formulas for funding based on enrollments, research, and other performance measures have replaced traditional transfer mechanisms and now allow more flexibility at the institutional level in allocating resources across faculties, departments, and programs. To many, this is seen as a way to make institutions more demand-driven or to improve performance relative to national goals. Others see these mechanisms as misinformed, overly bureaucratic and burdensome, and misaligned with current educational realities.

We should note that concerns about autonomy relate not only to the role of governments in achieving public agendas, but also to the rising role of private-sector involvement. There have been increasing concerns about: conflicts of interest in the provision of student loans to finance increasing tuition levels, research that is increasingly funded by for-profit companies, and recruitment practices that focus on economic, rather than academic, objectives.

### Added Complexities of Business Education

Issues and challenges related to funding and autonomy take on greater complexity within the context of business schools, which most frequently are administratively housed within a larger institution or are required to be responsive to other organizations. For example, in France, “institutions have to find subsidies from the state or from other institutions such as chambers of commerce. In order to obtain these subsidies, business schools have to comply with different constraints, which are often considered as non-compatible with their original mission, by accrediting organizations” (Rousseau, 2005, p. 64 to 65). International competition, which is decidedly more pronounced in business education, creates a tension between local regulation and obligations and global aspirations. Many schools are caught in a two-way squeeze. At the same time that they are investing huge amounts of resources to enhance their brand and reputation through quality full-time and global executive MBA programs, they are being pressured by institutions and governments to take on more undergraduate students without commensurate increases in resources. Meanwhile, schools unburdened by expensive research faculty are attracting a large number of students interested in part-time programs, which historically have subsidized schools’ investments in other, more costly, programs.

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Growing shortages of business faculties, accelerating change in business, and rising benchmarks for physical infrastructures have led to additional resource requirements for business schools, which are most often over and above that provided by governments and umbrella institutions. Increasingly, business schools are pursuing strategies for enrollment management, quality enhancement, and income generation through program innovation, branding, restructuring, alliances, franchising, and mergers — all of which require more autonomy and flexibility than they have had historically.

A prominent theme throughout the interviews and literature review conducted for this report was that the lack of sufficient financial resources has hampered the ability to build capacity by attracting research faculty, installing state-of-the-art information technology, and improving physical infrastructures. For example, many of the business schools in Africa are public institutions, and government funding has not kept pace with the financial resources required to build an effective business school. According to Eon Smit, director of the University of Stellenbosch Business School in South Africa, “all business schools attached to universities suffer from cuts in government funding” (Smit, 2005, p. 226). The source of funding for business schools in Australia and New Zealand also is a major issue. Many faculty members in these countries strongly believe that the governments are providing insufficient funds. Roger Juchau, a professor at the University of Western Sydney, writes that the Australian government has “long starved management education (since the 1980s) of funds to mount world-class business education” (2006).

So, if not from public coffers, where will additional funds come from? There are no universal or easy answers. It depends on local conditions (e.g., decision-making autonomy, competition, experiences with philanthropy, and research experience). Many U.S. business schools within public institutions have introduced differential tuition for undergraduates. In these schemes, business students pay incrementally higher tuition than others, and the business school retains the difference. In many other countries, policies in public institutions limit the cost of tuition to a low amount across all academic fields, regardless of the higher salaries earned by graduates from professional schools compared to graduates with arts and science backgrounds. Even in private colleges, fees are often set artificially low for business courses. Adei explained that in Ghana, demand for business courses is high, and fees for such courses are paid in private colleges, “but [fee] levels are low — scarcely up to US \$2,000 equivalent per annum. The master’s programs are better endowed, as they charge fees up to US \$4,000 per annum” (Adei, 2005, p. 78). Yet, an increase in tuition fees is an unlikely solution to the under-funding of business schools in the short term, because most business schools in Africa lack the autonomy to set their own tuition fees. Similar constraints are evident across Europe. Funding arrangements of European business schools must be considered in the context of the prevailing political climate. Marie-Laure Djelic, a professor at ESSEC

*Beyond the difficult prospect of increasing tuition fees, in many countries, there are few options available to business schools to improve their financial situation.*

Business School, points out that “education is still largely seen as a public good by most Europeans, who already pay a lot of taxes in most countries, which makes it very difficult to charge high tuition fees” (2006).

Beyond the difficult prospect of increasing tuition fees, in many countries, there are few options available to business schools to improve their financial situation. Philanthropy, a prominent source of funding for North American business schools, is not currently a viable option in other parts of the world. In Australia and New Zealand in the 1990s, one response to perceived inadequate funding from government sources was to promote the growth of MBA programs largely by attracting international students from Asia. Peter Reed, director of MBA Operations at Monash University, notes that, “toward the end of the 1990s, the number of international students enrolled in Australian MBA programs exceeded the number of local students” (2006). This was also the case in New Zealand. However, by 2005, the environment had changed. Reed points out that competition from business schools in East and South Asia was a major factor in this change:

The demand from international students [choosing] to study in Australia dropped significantly. The strengthening Australian dollar and the emergence of high quality business schools in countries such as India and China — in addition to the quality business schools that had been established in Hong Kong and Singapore — were significant factors (2006).

Consequently, the need to secure new, more stable sources of funding has become a major challenge for business schools in the region. Juchau suggests that “the current salvation ... is believed to be in executive education and professional management programs [as well as] lots of engaged and commissioned research work” (2006).

### Funding Implications for Management Education

Education and research could suffer from insufficient funding. For example, Edward Chow, dean of the College of Commerce of National Chengchi University in Chinese Taipei, stated that, “public universities are currently experiencing a continued decline in the budget allocated to national universities ... [which necessitates] either an increase in tuition fees or compromise and settling with providing only adequate education” (2006). In Australia, Kevin O’Brien, emeritus professor at the University of South Australia, (2006) describes a “race to the bottom,” as universities with insufficient numbers lower the length and rigor of their MBA programs to attract students. He continues by pointing out the importance of accreditation standards to deter such admissions strategies and to ensure mission integrity. John Murray, professor of Business Studies at the University of Dublin in Ireland, observes that a consequence of the “commoditization of the MBA and the drift down in the age of graduates is that the MBA gets an increasingly skeptical reception from employers” (2006).

Research expenses have increased due to shortages of top faculty and rising library and database costs. Thierry Grange, dean of Grenoble Ecole de Management in France, argues that the cost of delivering management education, including its research component, has grown so that it is “now as expensive as technology education” (2006). In response to these rising costs,

Grange predicts that, throughout Europe, there will be a transition from public to private funding and that this major change “will affect business school governance and strategy.” Others might argue, more convincingly, that the quality of business school research will sooner diminish.

Insufficient funding also limits innovation, as schools find it more difficult to invest in new product development and assume risk. But, to many, the main barrier to innovation comes from limitations to decision-making autonomy. Regulation is often seen as a constraint on innovation in education. For example, in countries such as China where curricula content is influenced by decisions at the government level, schools have less flexibility to be innovative in their design of courses and programs. Alternatively, governance structures might impact innovation through accountability and reward structures that are misaligned, or by contributing to inflexible cultures.

Chow argues that although Chinese Taipei’s public universities offer the highest quality education, a problem arises in that “because they are government-owned institutions, the main mission of these universities is to advance the government’s policies in the field of education” (2006). He believes that the organizational structure “encourages a culture that lacks responsibility centers and the drive to execute, because credit for the successes and the responsibility for failures of university initiatives are attributed to the policy-making body instead of the individuals holding executive positions.”

Also from Asia, Won Jun Lee, associate dean of the SKK Business School at Sungkyunkwan University in South Korea, points to governance as a major concern leading to inflexibility. “Most Korean universities are strongly regulated by the government ... This then makes the administration at the university level rigid” (2006). In recent years, however, the South Korean Ministry of Education and Human Resources Development has been noted by some schools to have responded, to a limited extent, to calls for a relaxation of government regulations.

Many educators throughout Europe also believe that governance structures and limitations to decision-making slow innovation in business education. For example, Bruno Dufour, former head of EM Lyon in France, argues that business schools require more autonomy from their host institutions and, in some cases, from the government, if they are to respond more effectively to their constituencies in today’s environment (2006).

Before concluding this section, we should note that freedom from government regulation and control does not necessarily mean less accountability. Former INSEAD Dean Gabriel Hawawini points out that as the business of business schools becomes more complex, it is “attracting more attention and increasing scrutiny from outsiders (government, the press, [and] the broader public)” (Hawawini, 2005, p. 777). He recommends that:

To protect themselves against making major errors of judgment on financial and strategic matters, schools will not only have to improve their management structure and practice but will also have to benefit from boards made up of experienced business people and administrators (Hawawini, 2005, p. 777 to 778).

## Business School Faculty

Together, students and faculty bring life to higher education — students through their preparation and desire to learn, and faculty through their scholarship and passion for teaching. We have seen that business schools can expect to find growing numbers of capable students, but will they find sufficient numbers of qualified faculty? Unfortunately, management educators are consistently pessimistic. Many believe that qualified faculty have become too scarce to find, too expensive to hire, and too difficult to retain.

## Global Shortages of Doctorates

Business schools' investments in doctoral degree education have not kept pace with the growth in undergraduate education and increasing expectations for research. In a 2007 survey of AACSB members worldwide, nearly 90 percent of respondents listed faculty recruitment and retention issues related to doctoral faculty shortages as among their top three challenges for the next three years (AACSB, 2007a, p. 3). The most recent comprehensive study, "Sustaining Scholarship in Business Schools," was published by AACSB International in 2003. In the report, AACSB projected a shortfall of nearly 2,500 doctoral faculty members by 2012 in the United States alone (AACSB, 2003). A broader global study has not been attempted, but our interviews confirm that many schools are facing difficulties — sometimes severe — in recruiting doctoral faculty. In Africa, Adei reported that, "business schools in Ghana are faced with an acute shortage of academically qualified and experienced faculty" (Adei, 2005, p. 78). Likewise, Jonathan Cook told us, "attracting and retaining good faculty is probably the single most quoted issue for deans" (2006). In China, Zhao Chunjun, professor at the School of Economics and Management of Tsinghua University, argues that "both the quantity and quality of faculty in business and management schools need to be improved" (Chunjun, 2005, p. 171). In fact, Stefano Gatti, of SDA Bocconi, states, "data available [from a McKinsey study] indicate a ratio of 20 full-time teachers to 10,000 students in business and management" (Gatti, 2006).

In India, a survey conducted in 2003 by Cosmode Management Research Centre (a think tank founded by leading Indian academics) found that although 550 out of a total of 773 full-time faculty members at the top 15 Indian business schools had a doctorate, only 1,181 out of 2,361 faculty at the top 100 business schools had a doctorate (Cosmode Management Research Centre, 2003). Furthermore, about 70 percent of Indian business schools have fewer than seven members of faculty, and they usually do not have a doctorate (Zachariahs, 2003). The Cosmode Management Research Centre (2003) estimates that the shortage of doctoral-qualified faculty in India amounts to 7,200.

The problems with faculty recruitment and retention aren't exclusive to research capability. In many countries, it has been equally difficult to recruit teachers who are experienced in domestic or global business, either because of their focus on research or because of the high cost of leaving lucrative management positions. As a consequence of the shortage of doctoral-level faculty in business schools, many business school faculty members are hired from the social sciences. This practice may exacerbate perceptions, identified throughout East Asia, that business degree programs are less relevant to business practice than they should be. For example, in Thailand, "most business programs are focused on disciplinary functions, analysis,

and technique [and] do not provide enough practical experiences to their students” (Islam & Liangrokapt, 2005, p. 250). In the Philippines, “the dearth of practitioner-oriented full-time business management faculty is a serious mitigating factor that constrains the delivery of excellent education by business schools” (Ampil-Tirona, 2005, p. 182). Similarly, in Japan, “practical teaching methods such as the case method, business games, and business plan making are still rare and are adopted only by a small number of advanced universities. Only 12.4 percent of the teaching staff has actual business experience” (Nezu, 2004).

### A Global Marketplace

It should be no surprise that faculty concerns are expressed globally among business school leaders. Just as business has globalized, so too has the market for faculty talent.

*Just as business has globalized, so too has the market for faculty talent.*

As shortages have materialized in the United States, business schools have drawn increasing numbers of faculty from Europe and other regions, creating a ripple effect. The “remuneration packages are still much lower in Europe (with only a few exceptions) than those in America” (Djelic, 2006). And differences in faculty salaries and currency values make U.S. recruitment in Canada particularly attractive. Unfortunately, Canada produces fewer than 100 business and management doctorates annually, and roughly half of those enter industry (Saunders, 2005, p. 36). Mark Crosby, associate dean of Melbourne Business School, notes that the worldwide faculty shortage accentuates the problem in Australia, where business schools have to compete with schools around the world for well-qualified faculty (Crosby, 2006). Top-tier East Asian business schools often prefer to hire faculty with doctorates from North American and Western European business schools, placing East Asian business schools in direct competition with better-resourced business schools in North America and Western Europe (Lee and Park, 2005). Cook highlights the same problem in Africa, which has been in a “vicious cycle of losing the best faculty to well-resourced northern universities or better-paid private-sector positions, leading to a deterioration of the quality of teaching and research, which in turn limits the supply of good faculty for the future” (2006).

In most Middle Eastern countries, salaries are below North American averages, but the several oil-producing nations have competitive salaries. Nonetheless, doctorates from the United States and Europe are sometimes difficult to attract due to significant cultural differences between Middle Eastern and Western cultures, as well as perceived country risk. Attracting faculty from other regions, such as from public universities in the United Kingdom or Europe, seems to be more feasible and common (Sayegh, 2007). Political instability and conflict make global recruitment more difficult in countries such as Lebanon, Iraq, and Yemen. Government surveillance of research and reporting requirements are also common in some Middle Eastern countries (Gillespie & Riddle, 2004). Additionally, some countries require researchers to secure a research visa prior to entering the country and conducting studies. These factors make it more difficult to attract faculty from outside the region.

## Doctoral Faculty Demand

Several of the trends already discussed converge to increase demand for business faculty worldwide. For example, a key driver has been growth in management education, especially at the undergraduate and master's level. In the United States, the ratio of undergraduate and master's degrees to research doctorates awarded in business increased from 250 in 1995 to 350 in 2004, with most of the change coming in the numerator (AACSB 2007b, p. 13; NSF et al., 2005).

Age demographics have also played a significant role in the demand for doctoral faculty. In many European countries where there are both Ph.D. and increasing numbers of DBA programs, doctoral production appears to be competitive and fairly stable, but is viewed as insufficient to meet the rather large pending mass of retiring faculty. Djelic notes, "the age pyramid is particularly unfavorable. In France, for example, an expected 50 percent of all researchers should be retiring over the next 10 years — and this applies in business disciplines as well as in other disciplines" (2006). In Australia, Crosby states, "changes in the demographics with regard to existing faculty (with many 'baby boom' faculty reaching retirement age) have led to a need to hire significant numbers of new faculty" (2006). Lindsay Ryan, director of Strategic Partnerships at the University of South Australia, confirms that faculty in Australian business schools have a "very high median age," which means that "during the next three to five years, there is going to be a large exodus from the higher education workforce" (2006).

By themselves, growth in management education and demographic changes cannot explain the rise in demand for doctoral faculty. Another important factor is the global rise in the importance of scholarship. In the United States, for example, only a minority of top schools could claim differentiation due to their emphasis on research in the 1960 to 1970 time frame, but by 1988, 26 percent of American deans said that their school emphasizes research at least as much as teaching (Porter and McKibbin, 1988, p. 153). By 2005, the percentage had risen to 43.3 percent (AACSB, 2005).

Governments in some countries have played a role in shaping demand for doctoral faculty by providing funding for institutions based on their research output. In Australia, for example, "research is now gaining higher priority over teaching and learning," Ryan explains. "This is partly an effect of government measures where funding is related to research output, and obviously, what gets measured gets done" (2006). In New Zealand, the government has introduced the Performance Based Research Fund (PBRF). This is controversial not only because it extends an audit regime, but also because it is an extremely extensive exercise. As David Buisson, former dean of the School of Business at the University of Otago, explains, this has had an important influence on faculty hiring practices. "The research-output focus of the government's PBRF funding scheme has heightened competition for highly qualified staff in a time when the recruitment of quality staff is already a problem" (Buisson, 2005, p. 152). In the United Kingdom, much of the government's financial support for each school is determined by the Research Assessment Exercise (RAE), a quality-control regime that measures the research output of departments within universities.

Global accreditation has also played a role in driving the demand for doctoral faculty. Both

AACSB and EFMD's EQUIS require faculty to do research and schools to have sufficient numbers of academically qualified faculty. Another factor is the proliferation of rankings of business degree programs, which help business schools to build and maintain reputations. Several rankings (e.g., *Financial Times*, *Business Week*) now include “intellectual capital” measures.

### Doctoral Faculty Supply

Why has supply not risen in response to increasing demand? In the United States, the production of business doctorates has declined mostly due to strategic and purposeful decisions on the part of large public university business schools. For most schools, the benefits of having a large doctoral program are small relative to the costs. Doctoral programs are costly and do only a little to enhance the overall reputation of the school when compared to full-time MBA programs. Similar explanations are offered in other countries. For example, Matthew J. Manimala, professor at the Indian Institute of Management-Bangalore, argues, “most schools [in India] are not interested in offering such a [doctoral] programme, as the financial benefits from it are not commensurate with the investments and efforts required for it” (Manimala, 2006, p. 12). However, there are differences across regions. The trouble in Sub-Saharan Africa and Latin America is that few domestic institutions currently have business doctoral programs, and they are immensely difficult to create without already having critical masses of faculty trained in research. In some countries, in Europe for example, the privilege of awarding doctoral degrees is limited to universities that are not as well equipped as other private business schools.

Low academic salaries relative to industry and misperceptions about academic careers have been important limiters in some regions and countries. Business schools often cannot compete with private-sector salaries. “Salaries in the university system are normally very low [in many African countries],” notes Juan Elegido, dean of the Lagos Business School. “As a consequence, good people do not seriously consider a university career” (2006). Nazrul Islam and Jirapan Liangrokapt, of the Asian Institute of Technology, write, “the main reason [that the number of doctorates is limited in Thailand] is that the remuneration package for Ph.D. graduates working in the academic sector is considered very low compared to those working in the business sector” (Islam and Liangrokapt, 2005, p. 250). Comparable observations have been noted by business school deans in India, where individuals with management Ph.D.s can earn significantly higher salaries in private industry than are attainable through one of the many available positions within business schools. Even in the United States, where business academic salaries are more competitive, nearly one in five business doctoral graduates enter industry or government.

In the United Kingdom, the Council for Excellence in Management and Leadership concluded from interviews with business school faculty in the late 1990s that “people in business were not seen to be sufficiently aware of what can be earned at the top business schools (taking into account extras like consultancy work), or of the potential for interesting work and creativity, which might encourage them into academic life.” The Council's report notes that the “particularly hard to retain groups were young people in the 28 to 34 age bracket who were offered high salaries by consultancies and corporates.” The report also

concludes, “the conditions of academic life were seen to have worsened considerably and become less attractive [due to factors such as] more regulation and accountability, more pressure, less freedom, [and] fewer holidays” (Williams, 2000, p. 40).

*Business schools often cannot compete with private sector salaries... Even in the United States, where academic salaries are more competitive, nearly one in five business doctoral graduates enter industry or government.*

In some areas, the poor quality of business doctoral education is to blame for the dearth of qualified faculty. In parts of Asia (e.g., Korea and India), despite their relative abundance, domestic doctoral programs seem to suffer from poor quality and students. As a result, many schools tend to rely heavily on recruiting from America or Western Europe. In the former Soviet countries, business school leaders cite a slightly different challenge. For example, Alexander Mechitov and Helen Moshkovich, both of the University of Montevallo, point out that prior to the early 1990s, university education in the Soviet Union had prioritized engineering and science (2006). As a consequence, when new business schools sought faculty, they had a plentiful supply of potential faculty members possessing strong quantitative and analytic skills. However, there was, and continues to be, a shortage of faculty who are trained to meet the demand for “soft” skills such as those acquired by studying liberal arts and social sciences (e.g., psychology and sociology), which were neglected during the Soviet era. We should note that the quality of some doctoral education has also become a concern in the United States. In some areas, such as accounting, the numbers of research-active faculty to support doctoral education have already reached critically low levels for a number of schools. In addition, nearly one in five (19 percent) doctoral candidates now graduate from schools that are not accredited by AACSB (AACSB, 2004).

Globalization has had an impact not only on faculty markets, but also on doctoral education itself. For example, in the United States, half of the business doctoral students are on temporary visa and are not immediately eligible for employment visas. Elegido believes that low levels — both in quantity and quality — of doctoral production in Africa have a rippling effect. “With some exceptions, the standard of doctoral education in all universities is low,” he says (2006). In response to the low quality of doctoral education in much of Africa, students often pursue a doctorate overseas. Yet, this produces another problem: brain drain. Elegido noted, “sending young faculty abroad to do their Ph.D. in most cases is not a solution, as most of them will not come back.”

### Implications for the Future of Management Education

Growing doctoral faculty shortages will have many important consequences for global management education. Some countries will fail to accommodate increasing demand with high-quality management education. This is particularly a challenge for developing countries where demand increases are already likely to strain educational limits. In some cases, only limited numbers of business schools will ever achieve a global level of quality.

The current situation in Israel illustrates this point effectively. An international committee appointed by the Council for Higher Education begins its 2007 report by citing the training of management elite as “a strategic goal for encouraging economic growth, social mobility, and prosperity in Israel.” Yet, in its study, the committee discovered that there had been “a rapid increase in demand for management studies, on the one hand, and a shortage in teaching infrastructure of requisite quantity and quality.” In 1990, there were 574 students working toward undergraduate degrees in business administration. By 2005, the number reached a record 8,592. But, the leap in enrollment was not matched in budgets, with the result being that many instructors in the new programs are “of low quality” and do not hold doctorates. Moreover, classroom hours were cut, classes were moved to evening hours, the school week was reduced to two days, many teaching positions became extremely part-time, and the faculty is reduced to retired professors “who are fed up and have lost the zest for teaching.” The committee concluded, “the result is a depressing decline in the quality of bachelor’s and master’s programs” (Traubmann, 2007).

Dharni Sinha, founder and president of AMDISA, notes, “from the medium and long-term perspectives, another relevant issue related to faculty shortages is the inadequacy of good faculty research and publications. Only the top 20 to 30 schools produce a credible research and publications output” (Sinha, 2005, p. 111). The end result may be greater isolation of certain regions from the global business education community.

Basic academic research in business schools will suffer and, as a result, business schools will risk losing hard-earned credibility with academic institutions that are built on research capabilities. Similarly, the role of business schools in providing independent, rigorous, and relevant research to advance practice can falter, because the schools’ most critical resource — research-trained faculty — is in jeopardy, as numbers of trained faculty are dwindling, despite a growing need for them. The quality of teaching could diminish, as shrinking numbers of faculty are stretched over more students, and the use of temporary faculty expands. Each of these possibilities threatens the long-term future of business schools.

We are especially concerned about the ability of lesser-developed countries, which hold enormous potential, to become more competitive in the global economy. They require faculty that possess deep knowledge of global business and management theory, have local experience and an understanding of practice, and can facilitate learning among confident, ambitious, high-achieving students. In most cases, these countries lack the tradition and infrastructure to introduce or expand business doctoral education and the resources to attract faculty from the rest of the world. In a recent *Economist* article, the shortage of qualified staff was identified as the most important issue among chief executives managing businesses across Asia (*Economist*, 2007b, p. 60). The main explanation given in the article was that “rapid economic growth in the region has fished out the pool of available talent.” But, this was not the only influence they identified. According to the Asian executives, “there has also been a failure of education. Recent growth in many parts of Asia has been so great that it has rapidly transformed the types of skills needed by business. Schools and universities have been unable to keep up” (*Economist*, 2007b, p. 59). Given the important role that entrepreneurship and management plays in creating innovation demand, the risk many countries face is to be left behind in the knowledge-driven global economy.

# Five Global Challenges in Management Education

Our research and discussion has exposed a complex, dynamic landscape for management education. We have examined developments in management education in the context of accelerating global economic integration, expected demographic trends, advances in information and communication technology, growth in global sourcing of services, and emerging priorities related to social responsibility, governance, and sustainability. Throughout the first two sections of this report, we offered initial insights about an environment that holds great potential, but also creates new demands on management education. In this section, we assimilate and prioritize what we have learned to describe five pressing challenges for management education in schools of business worldwide. This list is not exhaustive, and the challenges are not mutually exclusive. The challenges are expressed in broad terms, so we encourage readers to consider how each may be experienced differentially depending on country, region, or environment.

## 1. Growth

All the indicators point to continuing increases in the demand for management education. Driven by demographics, economic trends, business expectations, and initiatives that expand access to higher education, future demands will come not only from traditional college-age populations, but also from working professionals who need to retool and reinvigorate their careers. Growth is, of course, a better scenario than decline or stagnation, but how do we maintain quality while continuing to grow?

This is not a new challenge. We have shown that most countries have expanded their number of business schools and programs in recent years. We now know that these expansions have led to diverging quality of management education providers. Through strategic investments and accreditation, many schools have achieved higher levels of quality. However, there are rising concerns about a growing number of institutions that make promises they cannot — or do not — intend to keep and offer programs whose quality is not assured by reputable accrediting organizations.

Aspiring business schools in many countries have found it increasingly difficult to build and maintain faculties with both academic qualifications and professional experience who are capable of conducting advanced research and teaching effectively. Similarly, government financial support for business education hasn't kept pace with growing demands, leaving some business schools to seek higher tuitions and new financial sources to compete internationally. Limited decision-making autonomy at these schools not only makes tuition increases unlikely, but also constrains their ability to respond to emerging curricula needs with innovative programs. For all of these reasons, it appears unlikely that business schools throughout the world can support continuing demand growth without significant changes in the way they assure quality, organize faculties, and finance and govern their programs.

In some developing countries in Asia and Africa, for example, we expect huge increases in college-age populations. There is great potential in these countries if management education

*Today's investment in infrastructure — and particularly doctoral education — will impact our future ability to meet demands for quality management education, especially in developing countries.*

is able to expand while also working toward achieving higher levels of quality. But, doing so will be increasingly difficult in the absence of qualified faculty, sufficient infrastructures, relevant instructional resources, and supporting institutions. For example, management education is higher education, and without quality supporting elementary and secondary level education, it will not grow. Similarly, many developing countries lack research experience and the emphasis on research that is necessary to shift from vocational training to higher levels of management education. Transition economies across Europe and parts of Asia — though they don't always face the same demographic trends — require investments to build educational and economic institutions to support entrepreneurship and innovation.

Today's investment in infrastructure — and particularly doctoral education — will impact our future ability to meet demands for quality management education, especially in developing countries. Future access to management education by young people will determine whether developing nations will thrive or languish in the emerging knowledge-based, market-driven global economy.

## 2. Balancing Global Aspirations and Local Needs

A recurring theme throughout this report has been tensions between global aspirations — of countries, schools, faculties, and students — and pressing local needs. These tensions are revealed on many dimensions: curricula, strategy, and collaboration, for example. Further economic integration calls for strengthening our curricula emphasis on global perspectives, but we cannot ignore unique histories, politics, and cultures. At the same time, as many schools seek global recognition for world-class quality, and accreditation focuses on the best schools in the world, we cannot forget that wider access to quality management education can contribute to economic and social progress in countries or regions with fundamentally different goals. While supporting national initiatives to fortify international competitiveness, we must also capitalize on the advantages offered by multilateral alliances and increasing student and faculty mobility.

Although these tensions are quite natural and are to be expected in dynamic and competitive environments, we should also be mindful that management education can enable both global and local success. The powerful forces of globalization, advances in information and communication technology, and further liberalization of services trade will not only demand more from management education, but also enable us to achieve local and regional goals and objectives. For example, international alliances and exchanges of faculties and students create opportunities to build banks of localized case studies, which can be shared worldwide through electronic channels. Expanding global footprints of individual schools give rise not only to globally savvy graduates, but also represent an investment in local economies. The real and more important question is, “How will we capitalize on these opportunities to balance our global aspirations against the needs of our regions, nations, and local communities?”

The GFME is particularly concerned about efforts within some countries to develop international graduate management schools that, by design, are highly selective and expensive to support. Achieving, and consistently improving upon, the highest level of quality is certainly important. Doing so can assist countries to attract knowledge enterprises, serve as a foundation

for broader management education objectives, and attract talented faculty and students. However, the GFME believes that these efforts should be complemented by broader strategies to expand access to management education, including undergraduate education, while ensuring sufficient levels of quality across education providers with diverse missions and stakeholder groups. Not every school in every country need hire from the dwindling supply of doctoral faculty or attain the highest level of accreditation when, clearly, the most pressing regional concerns are low overall educational attainment and extreme poverty, for example. At the same time, well-intentioned investments in world-class business schools should not come at the expense of investments in other quality management education programs that are accessible to a broader portion of the population. Rather, they should be viewed together as complementary investments in the future of business and society.

*Diversity is to be nurtured and celebrated.*

### 3. Quality Assurance

We have argued that expansion in management education has brought greater diversity among the programs and providers in management education. Schools have different missions and aspirations; vary in governance structures, faculty characteristics, and financial models; and are embedded in a wide array of cultures, histories, and governing systems. All of this diversity is to be nurtured and celebrated. Diversity means that students and employers have choices to meet their unique goals and accommodate their circumstances. It also fosters innovation among schools and programs.

However, as management education grows and students, graduates, and faculties become more mobile, we must be increasingly concerned about the maintenance and assurance of quality. AACSB International and EFMD's EQUIS have developed deep, yet flexible, standards to assess quality and support continuous improvement. These standards cover the full breadth of quality dimensions: mission, strategy, faculty, students, staff, curricula, educational outcomes, and research. The standards define *quality* and, because they are linked to the mission of the school, they are designed to ensure that quality depends implicitly on whether the promises of schools and expectations of students and employers are met. The standards allow for a wide range of promises, as long as they are communicated accurately and delivered sufficiently.

Unfortunately, growing demand and competition can increase the incentive for schools to exaggerate promises, leaving their graduates with unmet expectations. In the environment we described above, with doctoral faculty becoming more scarce and with shrinking financial support from governments, there are tremendous pressures to cut corners, promise more, and deliver less. In short, there are incentives for schools to compromise the integrity of their missions.

Global accreditations, such as EQUIS and AACSB, are essential to ensure quality. But, we have shown that they cover only a small fraction of the institutions that deliver degree-based management education. Moreover, most of the globally accredited institutions are in higher-income countries. In some countries, national accreditations, assessments, or regulations fill the void. Unfortunately, in others, including some regions where demand for management

education is exploding, viable and effective systems to promote quality in management education do not exist or are severely underdeveloped.

Transparency is important for our working definition of *quality*. If quality is about delivering on the promise of the school's mission and meeting expectations, then it is important to ensure that accurate data and information about the institution are available to the public. Appropriately so, accreditations have tended to focus on institutional improvement, while national systems are often regulatory or administrative in nature. It is thus noteworthy that few global structures currently exist primarily to inform and protect students and employers against the hazard of implausible claims.

Business school rankings publish data and information about programs and claim to play a role in holding programs and schools accountable for meeting student and employer expectations. However, they, too, cover only a tiny fraction of the programs offered worldwide, and educators have questioned their methodology and accuracy. There are growing concerns that rankings actually mislead, rather than inform, the public. Rankings have also led to unfortunate outcomes such as promoting homogeneity among programs and creating incentives to invest in short-term gains over long-term sustainability.

#### 4. Sustaining Scholarship

Throughout this report, we have highlighted the difficulties that schools have had in recruiting and retaining qualified faculty. For many schools, the challenge is to recruit faculty with doctorates to support missions that include research and scholarly approaches to teaching. Clearly, the demand for doctoral faculty has been outstripping production, leading to concerns about the ability of some of these schools to introduce or sustain an emphasis on scholarship.

We have argued that the problem is complex. It is not a temporary issue that can self-correct without intervention; rather, it appears to be a structural problem. In mature environments with a tradition of research excellence, there are systemic problems related to funding models and perceptions about academic careers. In less mature management education environments, the lack of doctoral programs has rendered it impossible to bolster faculty supplies. Even when there are sufficient numbers of doctorates, there are quality concerns that range from depth of knowledge of theory, capabilities to teach and conduct research, and experience to provide relevant education in a dynamic business environment.

By itself, the challenge of recruiting and retaining qualified staff would already be alarming to business school leaders, for it will take many years of sustained investment to bring doctoral production to the levels required. However, a greater sense of urgency arises when we consider the challenge in light of the growing demand for management education, rising costs, lack of quality assurance, and the integral role that management education and talent play in fostering innovation. Together, these concerns send a clear message that the challenge of sustaining scholarship should be a top priority for business and government leaders.

*The challenge of sustaining scholarship should be a top priority for business and government leaders.*

Meeting this challenge will require efforts to bolster doctoral production around the globe through regionally targeted investments, cooperation and collaboration, and innovation to develop and expand doctoral programs. Or, it will require new models for organizing faculties, developing and delivering curricula, and conducting research. Most likely, it will require both. In the end, the goal is to maintain or increase the quality of management education as demand continues to expand.

## 5. Aligning with the Future Needs of Organizations

By examining global economic and business trends, we have attempted to isolate the emerging needs of organizations around the globe. For example, we argued that the integration of economies will require stronger emphasis on global perspectives, fracturing value chains will require graduates to master important skills rather than just apply knowledge, and emerging emphases on social responsibility and sustainability will require new ways of thinking about business strategy. We should caution that these are only examples and are rather subjective. The point here is not that the needs of organizations have changed over time; they have and always will. What's new is that the pace of change has been accelerating. How can business schools structure themselves and build systems to learn about, predict, and react quickly enough to emerging needs?

Recent criticisms have exacerbated this challenge. Targeting MBA programs, for example, some critics claim that business schools have become overly academic and, as a result, less relevant to business. Others have claimed that the content of what schools teach does not currently match the requirements of business. For example, some argue that schools do not place enough emphasis on the development of interpersonal, communication, and leadership skills in business programs, or that entrenched functional silos within curricula do not support the holistic requirements of business.

Two obstacles make this challenge particularly difficult to overcome. First, there are few substantial industry-level collaborations between businesses and business schools to discuss, debate, and jointly-define the future of management and management education. Many business schools have strong relationships with practicing managers and leading businesses and are constantly monitoring the business environment and making projections to refine and revise curricula. But, these individual efforts cannot capture and share the benefits that would be created from higher-level interactions between business and education communities. Business leaders and management educators do offer their opinions to one another, but these opinions often seem disconnected and idiosyncratic, because they are informed mostly by personal experiences, rather than broader discussion and analyses.

Second, we have seen that decision-making autonomy has, in some cases around the globe, been only slowly delegated to the institutions that deliver management education. Moreover, funding formulas and other factors such as rankings have created limited incentives to change — much less change quickly — in response to emerging needs. For example, although demographers have shown that the students of the millennial generation are more interested in social responsibility relative to money than the previous generation, some schools are reluctant to adapt their curricula and programs accordingly for fear that their reputation will suffer from the lower salaries their graduates would earn.

We have described five pressing challenges for management education. Each is important independent of the others, but they converge in ways that signal a sense of urgency. Management education is, by no means, facing a “perfect storm.” The challenges are not insurmountable. But, management education leaders must be proactive. In the next section, we present five recommendations that, if implemented, hold great potential for helping business schools and the people, organizations, and societies they serve to navigate the difficult terrain ahead.

# Recommendations

Business schools cannot overcome the above challenges on their own. Solutions will require collective approaches and, most importantly, the support and engagement of the business and societal stakeholders of business schools. In this section, we offer five recommendations to leaders in management education, management education associations, policy makers, and corporate leaders. Each recommendation involves a significant role for AACSB and EFMD, as well as for regional associations of business schools that play a direct and important part in shaping the future of management. Embedded in the recommendations are ideas for how business and government leaders can invest in the future of business by supporting initiatives to advance management education worldwide.

## 1. Advocate for quality assurance globally and locally.

We are concerned about diverging quality in management education. The growing demand for management education as well as number and types of providers, increasing fragmentation of degree programs, intensifying competition, globalization of education, and increasing student and faculty mobility have made quality more important to a wide range of business school stakeholders. Our main concern here is to ensure that the public, students, and employers, in particular, understand and can act on the variety of quality indicators that are already available.

Historically, most business school accreditations — such as AACSB and EQUIS — have focused on assessing quality for the purpose of improving management education. As such, they have developed comprehensive, yet flexible, ways of assessing quality and improving management education worldwide. Today, they are also expected to play a role in helping prospective students and employers to identify quality programs. Unfortunately, because global business school and program accreditations have been more internally focused, they are not yet widely recognized or sufficiently understood by external stakeholders around the world. Similarly, national authorizations and accreditations are not well understood across borders, even among management educators. The challenge is for business school and association leaders to work together to solidify and communicate the role of accreditation in assuring quality worldwide. To accomplish this, we put forth two recommendations.

- A. We recommend exploring collaborative international efforts to improve public understanding of business accreditation, especially what differentiates these accreditations from institutional accreditation and other forms of authorization. By increasing the public's knowledge about accreditation, prospective students and employers will be better equipped to identify and engage schools that are more likely to deliver on their promises. These efforts should not abstract from the differences in accreditation schemes, but should enhance the public's understanding of the general importance of business school accreditation as an indicator of quality.
- B. To more broadly assure quality worldwide, existing global accrediting organizations should continue to serve as a model for the development of more viable and complementary country-specific or regional accreditations. AACSB and EQUIS accreditations are global accreditations with standards that are broadly applicable in almost any setting. However, for many reasons, the vast majority of business schools are unable to attain these accreditations. By continuing to serve as models to the state or regional quality agencies to which these

schools are accountable, existing global accrediting organizations can promote a consistent underlying philosophy for business accreditation.

To be clear, these recommendations do not suggest merging standards and processes. The existence of many different international and regional accreditations is seen as a benefit, because it supports diversity and offers choices for business schools and programs. It allows accreditations to match the economic, political, and social context of business schools and facilitates efforts to address unique local issues and challenges. As prospective students and employers better understand the role of different accreditations, they, too, will view diversity in accreditation as an asset that will help them more effectively identify the program best suited to their goals and aspirations.

## **2. Invest in mechanisms to engage business and government leaders in envisioning future organizational and societal needs.**

We have described an increasingly dynamic business environment characterized by accelerating change, intensifying global competition, shifting strategic foundations, and evolving managerial skill sets. For business schools, this means that it will be more important, yet more difficult, to lead or stay abreast of changes and to react quickly and innovatively.

Historically, individual business schools have taken the lead in working closely with business organizations. In fact, some accreditation programs require schools to engage business stakeholders in developing learning goals and curricula. But, in the future, it will also be essential to develop industry-level dialogues regarding the future needs and expectations of organizations and societies. Global and regional associations of business schools, for example, can create effective ways of working with business and government leaders to peer into the future and benefit a wider range of schools by leveraging communication networks among their members.

Business school associations already reach out to business leaders to some extent. AACSB and EFMD have included corporations as part of their networks. Both organizations have held forums to engage business leaders in dialogues about the future. We see huge potential to build on these and other efforts to strengthen the industry-level partnership between business and business schools. For example, by working together with organizations of business practitioners (such as the Conference Board and Society for Human Resource Management), we can assemble the collective insights from business leaders, as well as leverage their channels to communicate about the challenges facing business schools and how they might invest in the future of business education.

Business investment in the future of management education — indeed, for the sake of its own future — can and should take place at the individual school level. But collective efforts must also be supported through organizations such as AACSB and EFMD that have the ability to motivate change among a wider set of schools through accreditation, collective engagement, advocacy, professional development, and communication channels.

## **3. Facilitate and encourage investments in doctoral degree education and other infrastructure development.**

Like other organizations in today's knowledge-based environment, business schools' most critical asset is intellectual talent. Yet, we have not been investing enough globally to develop the quantity and quality of future generations of business faculty. If not addressed, worsening

shortages of doctoral faculty will hamper our ability to support growing demand for quality management education, to understand and project the changing expectations of organizations, and to continue to assist in achieving social and economic development goals. The ability to meet each of these challenges is firmly grounded in research and scholarly approaches to management education.

Following its 2003 report on doctoral faculty shortages, AACSB has been engaged in a number of initiatives to address the problem. It has raised visibility about the issue through public relations and advocacy campaigns, clarified standards related to academic and professional qualifications, assisted in developing national and regional doctoral student recruitment events, created a brochure that is now widely used to increase interest in doctoral education, conducted more in-depth research (e.g., doctoral education in Latin America), and introduced targeted educational programs. For example, its professional qualification Bridge Program is designed to help highly qualified practitioners to become active members of business school faculties. Newly approved Post-Doctoral Bridge to Business programs at five schools will assist non-business doctorates with making the transition into high-demand fields in business schools.

Unfortunately, there are no quick fixes to address the complex causes of these shortages. AACSB's efforts have begun to make a difference, but have scale limitations in a global environment. Together, the whole business school community can play a role in raising public awareness about the issue and engaging business and governments in developing solutions. The business school community must convince business leaders and policy makers of the dire consequences of not investing in the future of quality management education through doctoral education. Quality will suffer otherwise, as will the ability of business schools to advance management theory and practice through research. As a result, organizations and economies will not perform to their fullest potential in the knowledge-driven, global business environment of the future.

*Two especially promising areas for doctoral education development are global collaboration and program innovation.*

We believe that two especially promising areas for doctoral education development are global collaboration and program innovation. Through cooperative efforts, doctoral production can expand, even in the face of resource constraints. It is noteworthy that U.S.-based schools have not been as interested in collaborating with one another to deliver doctoral education as have schools in Europe or Canada, nor have U.S. schools been as innovative as others around the globe in developing programs. For example, there is increasing interest among senior practicing managers to transition to academic careers by earning a doctorate, but no AACSB-accredited institution in the United States currently offers a Ph.D. in part-time format that allows for continuous improvement. For both collaboration and program innovation, we believe the advances in information technology can already accommodate the depth required of some doctoral-level coursework and research.

#### **4. Create an international clearinghouse for data and information related to business schools and management education structures, trends, and practices.**

We recommend collaborative efforts — led by AACSB and EFMD and involving other associations around the globe — to create and maintain a global clearinghouse for data and information related to management education in collegiate schools of business. Research conducted for this report uncovered gaps in the availability and consistency of information about the management education industry across countries. We have discovered that information about some countries does not exist or is inaccessible. For example, we could not readily find data about the number of institutions offering business degrees in 32 of the world's 50 most populous countries. Even when information is available, it is often not comparable or doesn't provide enough detail to offer much insight into management education in the country. Similarly, the absence of longitudinal data has hampered the study of trends. We recommend two approaches to the creation of this repository of information about management education.

First, we recommend that members of the management education community collaborate to collect and maintain comparable country-level data about the number and types of institutions offering business degree programs, total enrollment and graduates by degree level, and faculty counts, as well as qualitative information about the structure of higher and management education and reports about major issues and challenges. The primary goal of this repository is to provide structure to macro-level information, support efforts to track trends, identify emerging issues and challenges, and advance management education.

Through GFME, AACSB and EFMD already have taken initial steps to develop a clearinghouse of country-level information by publishing the *Global Guide to Management Education 2006*. The 283-page reference book includes profiles of 43 countries, complete with information on demographics, elementary and secondary education, and the structure of higher education. Sections on management education for each country address degree structures, student characteristics, faculty, governance, and financial models. Contributors, including representatives of management education from over 40 countries around the world, also described the most important issues facing business schools in their country. The GFME Web site ([www.gfme.org](http://www.gfme.org)) now houses information for more than 50 countries and could provide the foundation for building the global clearinghouse of country-level information.

*The rising challenge of quality assurance can be met only by promoting greater transparency and credibility in the information available about business schools and their promises.*

Second, we recommend that organizations of business schools collaborate to collect and maintain comparable school-level data about mission, programs, faculty, and students. The

rising challenge of quality assurance can be met only by promoting greater transparency and credibility in the information available about business schools and their promises. The main objective of this effort will be to provide consistent and reliable data about business schools to a broad range of constituents who want to learn about, and make decisions regarding, business schools and programs. The data collected can serve additional purposes such as serving as the foundation for creating of a core database to support research on business and management education. It is essential that this database be global because of the expected growth in management education in various parts of the world for which information is not readily available, our concerns about quality among programs, and the increasing mobility of students and faculties.

Creating a worldwide database of business school information will be difficult. However, AACSB already has taken the lead in this area and has developed a supporting infrastructure. Though its DataDirect service and Business School Questionnaire, AACSB has requested data annually from its members in more 70 countries around the globe. In 2006, more than 600 business schools in 43 countries provided data. This information included basic descriptions (e.g., public vs. private, school URL, and mission), degree programs offered, finances (e.g., operating budget and endowments), students (e.g., applications, admittances, enrollment, characteristics, graduates, and post-graduate employment), and faculty (e.g., characteristics). Currently, the emphasis for DataDirect is to assist business school leaders with planning and decision-making, but students and employers also benefit from the ability to search parts of the database to identify programs to meet their needs.

## **5. Facilitate multilateral collaboration among business schools.**

We believe international collaboration among business schools holds great potential to overcome the challenges described above. There already is a significant amount of global collaboration to deliver education and conduct research. However, the future will demand much more if business schools are to support regional development goals, increase access to management education, develop more innovative curricula, share in the development of instructional resources, and monitor and project the emerging needs of business organizations.

Business school leaders have questions about the viability, appropriate form, and true value of international partnerships and alliances. Informational gaps and differences in legal, accounting, and educational systems can be significant barriers for schools seeking partnerships. The point of this recommendation is to facilitate international collaboration among business schools by collectively providing market research and information about effective models for global partnerships, and by connecting potential collaborators who have similar interests.

High quality research about international collaboration is essential to this recommendation. This research should provide information about a wide range of topics such as the types and patterns of international alliances, critical success factors, and partner selection criteria. It should provide information about the challenges and opportunities by country and region, as well as examples of effective practices. Through thought leadership and research efforts, and by working together, management education associations can play a lead role in

conducting this research. For example, as early as 2005, AACSB, EFMD, and the CFBSB jointly developed and conducted a global survey on strategic alliances (*BizEd*, 2005).

We believe that associations of business schools also play an integral role in directly facilitating collaboration worldwide. Already, AACSB and EFMD support networking among business school leaders with global conferences and seminars, committees, and task forces. By introducing new structures (e.g., Web sites), these organizations can offer intermediary services to schools seeking to identify potential partners. Associations can sponsor periodic conferences to bring together schools interested in forming global alliances and to discuss related trends and practices. Already, GFME, EFMD, and AACSB are planning such an event for the fall of 2008.

As a part of this recommendation, we suggest concentrated efforts to help schools in developing countries become more involved with the global management education community. As we have shown, dramatic growth in college-age populations, widespread resource limitations, rising demands for skilled workforces, and daunting economic and social development will converge to make management education especially important in some developing countries. Yet, management education is least developed and understood in precisely these countries.

## Promise of the future

We have covered a lot of territory in this ambitious report. It draws on data and perspectives from a wide range of sources to describe trends and show how they will converge to create the challenges of the future. Our most modest objective was to bring some clarity to the emerging global landscape of management education, but we go further. Because management education has become increasingly critical to the future of organizations and society, we offer a series of recommendations that can assist leaders from management education, business, and government to shape the future.

At GFME, our capacity to create change is embedded in our founders, AACSB and EFMD, which had the vision to recognize that advancing management education requires cooperation among business schools and their associations around the world. Individual schools cannot do it alone. So, in our recommendations, we call on all schools, management education associations, businesses, and governments around the globe to look within their missions for opportunities to participate in global efforts to shape the future of management education.

We have been careful not to be insular in our approach. Indeed, we recognize that management education cannot be separated from business and society. Their interests are aligned, and they depend upon one another for success. Our hope is that this report will assist business schools to contribute most effectively to serving the needs of business and society. But, we also hope that it will motivate business and societal leaders to be proactive in their contributions to strengthen the future of management education in business schools. After all, management education is our investment in the future of business.

# Appendix: List of countries by region

## Asia (excluding Near East)

Afghanistan; Bangladesh; Bhutan; Brunei; Burma; Cambodia; China; East Timor; India; Indonesia; Iran; Japan; Laos; Malaysia; Maldives; Mongolia; Nepal; Korea, North; Korea, South; Pakistan; Philippines; Singapore; Sri Lanka; Chinese Taipei; Thailand; Vietnam

## Baltics

Estonia; Latvia; Lithuania

## Commonwealth of Independent States

Armenia; Azerbaijan; Belarus; Georgia; Kazakhstan; Kyrgyzstan; Moldova; Russia; Tajikistan; Turkmenistan; Ukraine; Uzbekistan

## Eastern Europe

Albania; Bosnia and Herzegovina; Bulgaria; Croatia; Czech Republic; Hungary; Macedonia; Montenegro; Poland; Romania; Serbia; Slovakia; Slovenia

## Latin America and the Caribbean

Anguilla; Antigua and Barbuda; Argentina; Aruba; Bahamas; Barbados; Belize; Bolivia; Brazil; British Virgin Islands; Cayman Islands; Chile; Colombia; Costa Rica; Cuba; Dominica; Dominican Republic; Ecuador; El Salvador; Grenada; Guatemala; Guyana; Haiti; Honduras; Jamaica; Mexico; Montserrat; Netherlands Antilles; Nicaragua; Panama; Paraguay; Peru; Puerto Rico; Saint Kitts and Nevis; Saint Lucia; Saint Vincent and the Grenadines; Suriname; Trinidad and Tobago; Turks and Caicos Islands; Uruguay; Venezuela; Virgin Islands

## Near East

Bahrain; Cyprus; Gaza Strip; Iraq; Israel; Jordan; Kuwait; Lebanon; Oman; Qatar; Saudi Arabia; Syria; Turkey; United Arab Emirates; West Bank; Yemen

## Northern Africa

Algeria; Egypt; Libya; Morocco; Tunisia; Western Sahara

## Northern America

Bermuda; Canada; Greenland; Saint Pierre and Miquelon; United States

## Oceania

American Samoa; Australia; Cook Islands; Fiji; French Polynesia; Guam; Kiribati; Marshall Islands; Micronesia, Federated States of Nauru; New Caledonia; New Zealand; Northern Mariana Islands; Palau; Papua New Guinea; Samoa; Solomon Islands; Tonga; Tuvalu; Vanuatu; Wallis and Futuna

## Sub-Saharan Africa

Angola; Benin; Botswana; Burkina Faso; Burundi; Cameroon; Cape Verde; Central African Republic; Chad; Comoros; Congo (Brazzaville); Congo (Kinshasa); Cote d'Ivoire; Djibouti; Equatorial Guinea; Eritrea; Ethiopia; Gabon; Gambia; Ghana; Guinea; Guinea-Bissau; Kenya; Lesotho; Liberia; Madagascar; Malawi; Mali; Mauritania; Mauritius; Mayotte; Mozambique; Namibia; Niger; Nigeria; Rwanda; Saint Helena; Sao Tome and Principe; Senegal; Seychelles; Sierra Leone; Somalia; South Africa; Sudan; Swaziland; Tanzania; Togo; Uganda; Zambia; Zimbabwe

## Western Europe

Andorra; Austria; Belgium; Denmark; Faroe Islands; Finland; France; Germany; Gibraltar; Greece; Guernsey; Iceland; Ireland; Isle of Man; Italy; Jersey; Liechtenstein; Luxembourg; Malta; Monaco; Netherlands; Norway; Portugal; San Marino; Spain; Sweden; Switzerland; United Kingdom

# Glossary of acronyms

AABS	Association of African Business Schools
AACSB	Association to Advance Collegiate Schools of Business
AAPBS	Association of Asia Pacific Business Schools
ABDC	Australian Business Deans Council
AIMS	Association of Indian Management Schools
AMDISA	Association of Management Development Institutions in South Asia
CEEMAN	Central and East European Management Development Association
CFBSD	Canadian Federation of Business School Deans
CLADEA	Latin American Council of Management Schools
EABIS	European Academy of Business in Society
EFMD	European Foundation for Management Development
EIU	Economist Intelligence Unit
EQUAL	European Quality Link
GBSN	The Global Business School Network
GFME	Global Foundation for Management Education
GMAC	Graduate Management Admission Council
GMAT	Graduate Management Admission Test
IIMs	Indian Institutes of Management
OECD	Organisation for Economic Co-operation and Development
PRME	Principles for Responsible Management Education
RABE	Russian Association of Business Education
UNESCO	United Nations Educational, Scientific and Cultural Organization

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# About EFMD

The European Foundation for Management Development (EFMD) is an international, membership driven organization, based in Brussels, Belgium. With more than 650 member organizations from academia, business, public service and consultancy in 75 countries, EFMD acts as a catalyst to promote and enhance excellence in management development in Europe and worldwide.

EFMD is recognized globally as an accreditation body of quality in management education and has established accreditation services for business schools and business school programmes, corporate universities and technology-enhanced learning programmes.

- EFMD **builds links** between leading business schools and companies.
  - EFMD acts as a thought-leader and disseminates **knowledge** on best practices and changing trends in management development and management education.
  - EFMD provides access to **quality improvement** through international accreditations and **benchmarking**.
  - EFMD **influences** international governmental and non-governmental **organizations** through advocacy and lobbying.
- EFMD has over 30 years of experience in the coordination of projects & activities that fosters an active dialogue and exchange between companies and academic organizations, in and beyond Europe. In a proactive manner it contributes to a search for, and generation of, new ideas for a continual enhancement of management thinking and practices.
  - Provides a context and environment that leads to professional networking and bridges the divide between the academic & business world.
  - Maintains a series of on-going activities enabling its members to learn, share and network which helps contribute to a better understanding of the continual changes in the business and management education environments.
  - Runs the European Quality Improvement System (EQUIS), which is one of the leading international systems of quality assessment, improvement, and accreditation of higher education institutions in management and business administration. Its fundamental objective, linked to the mission of EFMD, is to raise the standard of management education worldwide. EQUIS is not primarily focused on the MBA or any other specific programme. Its scope covers all programmes offered by an institution from the first degree up to the Ph.D. EQUIS has established its prestige and recognition worldwide. In its first seven years of existence, EQUIS has accredited 109 institutions in 32 countries.
  - Manages international projects in Asia, CIS and the Arab World and has strong relationships with sister associations in Eastern Europe, Central Asia, Central America, United States, Canada & Australasia
  - Has developed The Globally Responsible Leaders Initiative – endorsed by the United Nations Global Compact that focuses on how to handle global challenges and develop a new generation of globally responsible leaders and managers.

# About AACSB International

AACSB International – The Association to Advance Collegiate Schools of Business is an association of educational institutions, corporations, and other organizations devoted to the advancement of higher education in business administration and management. AACSB accredits 554 business schools in 31 countries, and serves a constituency of more than 1100 members in 69 countries. The world headquarters of AACSB International is located in Tampa, Florida, USA.

AACSB International was formed in 1916 and established the first set of accreditation standards for business schools in 1919. Accreditation by AACSB is the hallmark of excellence in management education and confirms a school's commitment to quality and continuous improvement through a rigorous and comprehensive peer review. AACSB International accreditation assures stakeholders that business schools:

- Manage resources to advance a vibrant and relevant mission.
- Advance business and management knowledge through faculty scholarship.
- Provide high-caliber teaching of quality and current curricula.
- Cultivate meaningful interaction between students and a quality faculty.
- Produce graduates who have achieved specified learning goals.

In addition to accrediting business schools worldwide, AACSB International is the business education community's professional development organization. Each year, the association conducts a wide array of conference and seminar programs for business deans, faculty, and administrators at various locations around the world. These programs help to equip business schools and their administrative staffs to think strategically, manage better, teach more effectively, and help improve the image of their respective institutions.

AACSB International's mission and commitment to the business education community also includes a wide array of other services, including:

- Professional development opportunities worldwide throughout the year
- Research and survey projects related to management education
- Special reports on industry trends and issues
- Quality periodicals, including BizEd, a bi-monthly magazine, and eNEWSLINE, a monthly electronic newsletter.
- Collaboration with management education associations, regional deans associations, and counterpart associations around the world.
- Interaction with the corporate community on numerous educational projects and initiatives
- World's largest and most complete database of business school information.
- Affinity groups for management education professionals with special interests.

AACSB International advances quality management education worldwide through accreditation and thought leadership.



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