



**ADB Working Paper Series**

**Education Impact Study:  
The Global Recession and the  
Capacity of Colleges and  
Universities to Serve Vulnerable  
Populations in Asia**

---

Gerard Postiglione

No. 208  
March 2010

**Asian Development Bank Institute**

Gerard Postiglione is a professor at the University of Hong Kong.

The views expressed in this paper are the views of the authors and do not necessarily reflect the views or policies of ADBI, the Asian Development Bank (ADB), its Board of Directors, or the governments they represent. ADBI does not guarantee the accuracy of the data included in this paper and accepts no responsibility for any consequences of their use. Terminology used may not necessarily be consistent with ADB official terms.

The Working Paper series is a continuation of the formerly named Discussion Paper series; the numbering of the papers continued without interruption or change. ADBI's working papers reflect initial ideas on a topic and are posted online for discussion. ADBI encourages readers to post their comments on the main page for each working paper (given in the citation below). Some working papers may develop into other forms of publication.

Suggested citation:

Postiglione, G. 2010. Education Impact Study: The Global Recession and the Capacity of Colleges and Universities to Serve Vulnerable Populations in Asia. ADBI Working Paper 208. Tokyo: Asian Development Bank Institute. Available: <http://www.adbi.org/working-paper/2010/03/29/3644.education.impact.study/>

Please contact the author(s) for information about this paper.

Gerard Postiglione: [hkugerry@gmail.com](mailto:hkugerry@gmail.com)

Asian Development Bank Institute  
Kasumigaseki Building 8F  
3-2-5 Kasumigaseki, Chiyoda-ku  
Tokyo 100-6008, Japan

Tel: +81-3-3593-5500  
Fax: +81-3-3593-5571  
URL: [www.adbi.org](http://www.adbi.org)  
E-mail: [info@adbi.org](mailto:info@adbi.org)

© 2010 Asian Development Bank Institute

**Abstract**

This paper reviews the capacity of colleges and universities to serve poor and vulnerable populations during past and present economic shocks. The main argument is that the environment of the global recession—an Asia far more economically integrated than during past economic shocks, with more unified aspirations to be globally competitive and socially responsible—need not delay reforms in higher education. In fact, the global recession is an opportune time for higher education in the Asia and Pacific region to continue reforming governance and administration, access and equity, internal and external efficiency, and regional collaboration. This paper proposes a series of measures to increase the resilience of higher education systems in serving poor and vulnerable populations during the economic recession. These measures include: (i) tuition assistance, subsidies, and loans; (ii) information and guidance for first-generation college students on choosing appropriate programs of study; (iii) community-based vocational and technical higher education that provides jobs in a rapidly changing labor market; (iv) innovative forms of cost sharing between public and private institutions of higher education; (v) resource decisions made on the basis of performance-based objectives; (vi) intensification of philanthropic culture that provides scholarships for poor students; (vii) upgrading of research about problems confronting poor communities; and (viii) regional strategies across the Asia and Pacific region for closer instructional program collaboration among colleges and universities

**JEL Classification:** I2, I20, I21, I22, I23, I28, I29.

## Contents

1.	Overview .....	1
2.	Looking Back to See Ahead.....	1
3.	Recessions, Regional Integration, and Higher Education Expansion .....	3
4.	Economic Shocks and Higher Education Reform: People’s Republic of China, Mongolia, and Viet Nam.....	4
	4.1 People’s Republic of China.....	4
	4.2 Mongolia.....	5
	4.3 Viet Nam.....	7
	4.4 Other Asian Systems .....	8
5.	A National Perspective on Higher Education During Recessions.....	8
	5.1 Income Groups Disproportionately Affected.....	10
6.	Perspectives on Responding to Economic Crises.....	11
7.	Lessons of the Global Recession.....	12
8.	Selected Recommendations .....	13
	8.1 Tuition Assistance, Subsidies for Poor and Vulnerable Students, and Loans..	13
	8.2 Information and Guidance for Students from Poor and Vulnerable Populations .....	14
	8.3 Labor Markets and Community-Based Vocational and Technical Higher Education.....	14
	8.4 Performance-Based Measures .....	14
	8.5 Cost Sharing.....	15
	8.6 Diversification and Differentiation of Institutions .....	15
	8.7 Philanthropic Ventures.....	16
	8.8 Upgrading of Research.....	16
	8.9 Regional Strategies to Attract International Students .....	16
9.	Conclusion.....	17
	References .....	19

## 1. OVERVIEW

During the 1980s, countries in Asia that borrowed from the World Bank and the International Monetary Fund (IMF) were instructed to cut back on government spending, including that for higher education. Likewise, during the late 1990s, Asian colleges and universities became casualties of the financial crisis. The effects still linger in some countries. However, the global recession of 2008 runs counter to this trend. The response of developed nations has been less about cutting back and more about the rebuilding and strengthening of colleges and universities. At the same time, there is a growing consensus among scholars of Asian higher education that the financial architecture and governance of higher education needs reforming (Lee 2004; Mok 2006, 2008; Tilak 2004). Therefore, asking developing countries in Asia to cut back on their knowledge infrastructure is difficult to justify as developed countries do the opposite. Although there is no way to escape the difficulties of the global recession, the answer for the developing nations of Asia is not to undo the gains in higher education of the last 20 or 30 years.

Past economic shocks in the Asia and Pacific region have generally limited the capacity of their colleges and universities to serve vulnerable populations. These populations vary somewhat among countries, but, at one time or another, have encompassed the urban poor, newly unemployed households of the lower middle class, recently unemployed urban workers, and rural migrants in manufacturing and related sectors, as well as rural populations of women and ethnic minorities, including those with basic education. Although government responses are formulated, sometimes on the advice of donor agencies, recessions share the essential result of intensifying poverty among the poor and augmenting vulnerable populations through a massive increase in unemployment.

However, the global recession differs in fundamental ways; not so much in its source or intensity, but in the rapidly changing context of regional development in Asia. The environment of the global recession is that of an Asia far more economically integrated than during past economic shocks, with more unified aspirations about becoming globally competitive and socially responsible as it moves toward the center of the world economic system (Asian Development Bank [ADB] 2008a; United Nations Educational, Scientific and Cultural Organization [UNESCO] 2003). It follows that past assumptions about higher education and its function in national development need be reconsidered to enable effective responses from government and the private sector.

## 2. LOOKING BACK TO SEE AHEAD

The effects of the Asian financial crisis of 1997–1998 and the response by governments tell an interesting story. In the case of Southeast Asia, the intensity of the crisis' effects varied somewhat across countries depending on their economies, share of public and private institutions, and college enrollment rates in domestic and international institutions. However, governments shared a number of response patterns.

Indonesia shifted the share of education resources toward basic and away from higher education. As Purwadi (2001:71) noted, "the crisis simply prevented pupils of low economic status from affording even the least costly university education." Applications declined at elite private colleges and universities, but some households were able to shift over to less expensive public colleges and universities, while youth from poor households were more likely to drop out. Economic subsidies from the government were reduced even while some institutions endeavored to cut or eliminate tuition fees for selected poor students. Institutions were differentially affected and some gained more financial independence and autonomy as they were forced to find alternative ways to mobilize resources.

In Malaysia, the middle class was particularly hard hit. When funds for overseas study were drastically reduced, enrollments at public institutions shot up even while the government instituted austerity measures that cut operating and development expenditures by 18% (Hassan 2001). Low-income *Bumiputra*<sup>1</sup> were hard-pressed to continue in higher education. The pressure increased as public universities were corporatized and many established foundations and subsidiaries to mobilize funds. The government responded with a National Higher Education Fund to help students afford study fees. Malaysian students overseas returned home and public-private higher education franchising developed further.

Thailand's higher education budget declined during the economic crisis. Investment expenditure was halved. Student loans were made available on a wider scale. However, the number of students applying for places declined by 30–60% and private vocational colleges could only meet a third of their targets (Varghese 2001). Dropout rates increased as children helped support their households. When enrollments began to increase again, it was in the public sector, with a 23% rise. Also, similar to Malaysia, fellowships to study overseas were canceled.

Similar effects were apparent in the Philippines, where the economic crisis initially stalled higher education enrollments, particularly in the private sector, and where quality remained a key concern. Philippine households cut expenditures on nonessential goods, and education's share of the total household budget increased slightly from 10.0% to 10.3% on average between 1997 and 1998. The government provided scholarships on a limited scale. The focus was on wider social-protection strategies supported by international donors (Ablett and Slengesol 2001).

Across developing countries in Southeast Asia, college and university budgets were sacrificed in favor of school budgets. The switch from private to public institutions increased, while government subsidies or loans helped alleviate some of the hardships. More domestic study—rather than overseas study—refocused the goals of higher education. Private institutions suffered, but in some countries they formed franchises with public institutions. Public institutions became less dependent and more autonomous, and in some cases became corporatized. Twinning opportunities with overseas institutions increased. The biggest victim was quality, as investment components and governance reforms were delayed in favor of merely sustaining recurrent expenditures for minimal survival.

One worthwhile effect was that institutions gained more autonomy and responsibility for fund raising and a more entrepreneurial spirit. However, sustained reforms in governance were minimal and the quality of instruction and relevance of research remained among an assortment of areas in higher education in need of reform. As the effects of the global recession linger, there is good reason to consider how to foster innovative reforms.

Among developing countries, the People's Republic of China (PRC) capitalized on the Asian financial crisis by expanding higher education when job markets weakened but household savings and family values were substantial enough to support enrollment fees. While expansion occurred largely in the state sector, the PRC also encouraged non-government colleges to expand, thus providing more opportunities to those from previously underserved populations. Meanwhile, it consolidated resources to attain economies of scale, introduced reforms in personnel administration, strengthened its assessment of the quality of instruction, and still managed to support the development of world-class universities.

In general, Asian colleges and universities have a checkered past in weathering recession and economic shock, especially as they impact on particular income groups, regions, and sectors of the labor market. Inadequate government responses may be due to anachronistic assumptions about the role of higher education in development. This paper argues that any

---

<sup>1</sup> Bumiputras means princes of the Earth and embraces ethnic Malays and other indigenous ethnic groups in Malaysia, where Bumiputra laws are designed to provide opportunity for the majority ethnic Malay population to balance the economic dominance of Malaysia's Chinese population.

further delay of substantial reforms in the governance of higher education during recession runs the risk of a long-term handicap to global competitiveness and sustained hardships for underserved vulnerable populations. Mongolia and Viet Nam are two examples of nations that are facing important decisions as to how to proceed in the reform of higher education during the global recession.

### **3. RECESSIONS, REGIONAL INTEGRATION, AND HIGHER EDUCATION EXPANSION**

Economic globalization has transformed the role of colleges and universities in the Asian region. Rapid expansion has been fueled by an increased demand for higher education that has been fostered by the successful popularization of basic education, rising household expectations, government subscription to the discourse of knowledge economics, human resource needs, and increased availability of distance programs, and private for-profit programs (Postiglione and Tan 2007). From institutions that prepare an elite stratum, colleges and universities are becoming institutions serving multiple stakeholders. Enrollment in higher education is expected to double in five years and triple in 10 years in many developing countries in this region (ADB 2008b). Among the challenges will be improving knowledge transfer to poor communities, preparation of vulnerable youth for an increasingly competitive labor market, and confidence by households to send a child to college or university. Institutions of higher education are also becoming symbols of national ambition during times of growth as well as recession.

During past economic crises, higher education budgets have been secondary to those for basic education. However, the global recession requires different measures, including a shift toward cost sharing among different levels of the education system, a trend that is increasing in many parts of the world (Johnston 2004; Woodhall 2007). For these and other reasons, development agencies are shifting their educational funding toward regular and higher vocational education (Sarvi 2008).

Asian economies are more integrated than ever before and the demand for human resources is growing rapidly. The global financial recession has affected growth in selected sectors (World Bank 2009a). When the region last weathered an economic shock in 1997–1998, the experience provided relevant insights for the global recession and its implications for higher education, which has expanded rapidly due to rising social and economic demand (Lee and Rhee 1999). Sharp shifts in international finance promise to remain an occasional reality of the economic landscape as Asia drives toward the center of the global economy. Yet, such shifts need not deter reforms in Asian higher education as it expands access to more diverse populations and sustains Asia's knowledge transfer and economic growth. A recession is an opportune time for higher education to continue reforming institutional governance while it resists marginalizing populations from poorer regions and those who become vulnerable during major economic downturns (Varghese 2001).

Topics worthy of examination in developing regions of Asia include the effects of the economic shift on student access and retention, changes in household perspectives and strategic decision making, innovation and resilience in institutional governance, the quality and relevance of knowledge and skills transmission, cost-sharing arrangements and the sustainability of private higher education, trends in international student mobility and transnational academic collaboration, the mobility of the academic profession, the shrinkage of the graduate employment market, and funding for research (in science, technology, and medicine) that aids poor communities (Chapman and Austin 2002; Huang 2006). While the scope of this paper does not permit addressing these aspects in detail, it is possible to review selected literature and data regarding the experience of higher education in selected developing countries of Asia during financial slowdowns. Government policies to ameliorate

negative impacts on higher education during economic crises can be reviewed and assessed for their effectiveness.

## **4. ECONOMIC SHOCKS AND HIGHER EDUCATION REFORM: PEOPLE'S REPUBLIC OF CHINA, MONGOLIA, AND VIET NAM**

### **4.1 People's Republic of China**

The global recession continues to take its toll. Even in the PRC, where government measures have been effective in easing the effects of the recession, up to 41 million workers lost their jobs (40% of total global layoffs), and 23 million remained out of work as of October 2009 (Cai, Wang, and Wang 2010). However, the PRC is adhering to its human resource blueprint (that by 2020 young people will average 12.8 years of education), which means that enrollment in higher education will not be cut back (6 million were admitted last year), despite the fact that expansion has resulted in increased unemployment among colleges and universities graduates. By July 2009, 68 percent of 6.11 million university graduates had found jobs, leaving nearly two million still unemployed.

Measures have been instituted to expand opportunities and find work for graduates. There is also a renewed focus on postsecondary-level vocational and technical colleges, especially as more households drop the traditional emphasis on academic higher education. This is occurring as vocational–technical and community colleges align themselves more closely with the needs of the labor market. In the PRC's case, as well as for other countries in Asia, demography has become a key factor in higher education planning. By 2020, the number of students in primary and junior secondary education will drop by 18 million. With a rising aging population and a decline in the school-age population, a shift of resources toward basic education and away from higher education could have unfavorable long-term implications.

The PRC's higher education institutions expanded rapidly in 1999. Since then, about 5 million students have been admitted annually. Universities resorted to banks for loans to support capital construction costs, resulting in high levels of debt. Such pressures make it difficult for universities to focus on teaching and research, thus compromising the quality of higher education. Low quality also contributed to the high level of graduate unemployment. According to one report, only about 7% of the students about to graduate in July 2009 had managed to secure jobs by March 2009. This is down about 50% from the same period the year before. In fact, the demand for graduates seems to have dipped by 20%, due largely to the global economic slowdown (Qiwen 2009). The PRC's Ministry of Education reported in 2009 that the number of graduates had topped 6 million, a figure far beyond the 1.45 million who graduated in 2002. The global recession has not alleviated the pressure on the close to 2 million graduates who still need jobs (Zhou and Lin 2009). In January 2010, Chinese Premier Wen Jiabao warned that university graduates face a grim job market as the global slowdown takes hold of the economy (Reuters 2010).

There is an increasingly popular view that graduates in the PRC simply lack certain skills that are relevant to the needs of the labor market. For example, international companies often complain about the lack of appropriately skilled PRC graduates. Companies have to invest in training their new college-educated staff in order to bring them up to par with the standards required for international companies.

It is not only foreign companies that struggle to find skilled graduates. At a job fair in Beijing, local employers expressed concern about the quality of graduates (Patton 2009). Domestic companies often indicate a mismatch between their needs and what graduates possess. The

global slowdown has put pressure on Beijing to address the shrinking number of jobs available for young graduates.

With the aim of raising quality, the PRC has moved quickly to capitalize on PRC-foreign collaboration in higher education. While one of the major reasons for PRC-foreign partnerships has been to raise the quality of education in the PRC, many believe that educational quality has remained unsatisfactory because partnerships are driven more by commercial benefits than academic motives. The lack of internal governance and quality monitoring by partners has not helped to alleviate the problem. Yet the view remains that to cut transnational partnerships in higher education would be a profound mistake, especially in anticipation of the global economic recovery (Hvistendahl 2009). For countries like the PRC, the view is that higher education has become more important because of the global financial crisis.

## 4.2 Mongolia

Despite the global recession, Mongolia is determined to move ahead in restructuring its higher education system (Postiglione forthcoming a). Selected key education indicators rival those of its neighbors in northeast Asia—the PRC, Republic of Korea (hereafter Korea), and Japan. It has a literate population, a popularized school system, and a higher education enrollment rate that has ballooned within a few short years to nearly 80%. This enrollment rate includes a thriving sector of vocational–technical higher education. Since 1990, when the country moved from a planned to a market economy, the private higher education sector has grown to encompass a third of all enrollments. Most colleges and universities are in the capital city, where 40% of the national population resides. The rest of the population, also literate and schooled, adheres to a nomadic lifestyle. English has replaced Russian as the official second language of this land of 2.8 million people, the largest landlocked country in the world. Historical circumstance has made Mongolia the most Europeanized state in East Asia. However, its people retained the Asian value of acquiring as much education as possible.

Mongolia ranks seventh internationally in the share of GDP (9.0%) allocated to education, and its education law guarantees that at least 20% of the government budget is spent on education (Government of Mongolia 2006). Yet higher education receives only 12% of that amount. This made sense for a developing country in transition. However, the time is ripe for a rethink of the higher education system, including its funding structure. State universities obtain government funds for heating and lighting, but little else. One university leader pointed out that 80% of academic staff salaries come from student fees. A national fund for higher education provides coverage to one child from each civil servant's family, and support is also provided for outstanding students from poor families. However, there is also a view that higher education is a source of poverty because 67% of the personal loans taken by countryside cattle-rancher families is spent on the higher education of their children.

With such high literacy, school attendance, and higher education enrollment rates, as well as a sustained Asian value toward education, Mongolia would seem to be in a good position to provide more equitable access to poor groups and to move ahead with higher education reform and restructuring that would bring the standard of teaching and research to internationally recognized levels. Nevertheless, the global recession has created severe limits on reform for the time being.

Mongolia faces several daunting challenges. First, government spending on higher education is severely limited in comparison to other regional players. For example, the two economies of Malaysia and Hong Kong, China overshadow most Asian countries with respect to per student expenditure as a share of GDP. Mongolia's transition to a market-oriented system included introducing fees for higher education. However, unlike governments in the PRC, Japan, or Korea, Mongolia's can not make the same investment in its top universities. The evidence suggests that the amount of government investment in

higher education does matter, not only to the quality of teaching and research but also to ensuring access to all who meet the criteria for admission. Hong Kong, China spends about 30% of its education budget on higher education and has the highest concentration of top-rated universities, all government funded, in one city in Asia. Moreover, government ensures that loans are available to university students that need them. While there are also some Asian governments that allocate a smaller slice of the pie to higher education, improving access for poor populations and raising the quality are difficult to achieve with a 12% slice of the education budget for higher education.

Second, the quality of private higher education has yet to surpass that of public institutions. Despite their short history, private institutions are catching up and some offer programs competitive with those at the public institutions. One view is that state institutions receive such a small portion of funding that they actually operate with state titles but in private mode. However, heads of private sector institutions would like more support from the government. Some would approve of a scheme that placed one third of tertiary students in state institutions with the private institutions enrolling the rest. In Indonesia, Japan, Korea, Philippines, and Taipei, China, private universities enroll the majority of students—in some cases more than 80%. Mongolia's private institutions enroll 34% of all students and do not believe that the playing field is level.

Third, while the massification of higher education has helped expand access, there are also far too many institutions of higher education in Mongolia. With 162 institutions, the average number of students at each is about 900; a figure that do not permit attaining an economy of scale. Consolidation has been used to address this problem elsewhere. For example, the average number of students in the PRC's institutions was 3,112 in 1990, up from 1,919 in 1980, when about 80% of higher education institutions had fewer than 4,000 students and 60% had fewer than 3,000 students. However, by 2000, 612 colleges and universities were consolidated into 250, and several universities now have over 50,000 students. Other countries are dealing with similar problems, especially at the outset of privatization when many small colleges—sometimes with poor quality instruction—were established. After the initial phase of privatization, the need for quality assurance often ends in the closure and consolidation of many institutions.

Mongolia is a developing country that aspires, as do its neighbors in northeast Asia (the PRC, Japan, and the Republic of Korea), to have internationally recognized research universities. The intention to establish highly recognized research universities has to be matched by a national budget that does not skimp on funds for research and development. Some continue to argue that making a direct association between R&D budgets and research productivity is risky. (The research and development [R&D] budget for Hong Kong, China is only 0.7% of GDP, but the economy has a very high per capita rate of research output). Regardless, Mongolia's R&D budget of 0.28% of GDP places it 70th in the world (Hong Kong, China ranks 50th). Colleges and universities in Mongolia spend about 1.5% of their institutional funds on research. Those in the United Kingdom spend about 7–10%. Therefore, Mongolia's research universities will remain hard pressed without a larger national R&D budget.

The academic profession in Mongolia has to find better ways to retain top scholars. Meager salaries are an obstacle to improving quality. It is not unusual for faculty to leave universities to enter the business sector where they can earn higher wages. At present, part-time staff who have to work elsewhere to supplement their income account for 18% of all academic staff in public and 44% in private institutions. Attracting and retaining the best academic staff has to be a priority, but the state of the economy greatly inhibits the ability of colleges and universities to do this.

While the discovery of large mineral deposits means that a promising economic future awaits Mongolia, the global recession has put most higher education reform on hold. In the meantime, the economy is too weak to support its large number of university graduates and

many seek employment elsewhere. The reason has a great deal to do with the quality of higher education, where major reforms are critically needed. If the above challenges facing higher education are urgently addressed, Mongolia will find itself better prepared to take advantage of the opportunities on its horizon.

### 4.3 Viet Nam

Since 1989, Viet Nam has had one of the fastest-growing economies in the world, with access to education increasing at all levels. This includes growth in access to primary and junior secondary education, with a renewed focus on ethnic minority-populated areas.

Viet Nam's General Statistics Office indicated in 2008 that GDP had passed US\$1,000 per capita. Although low within the Association of Southeast Asian Nations (ASEAN), incomes have risen almost fourfold since 1989. Those living on less than US\$1 per day have fallen from 60% to below 12% (World Bank 2008a). Viet Nam experienced two decades of rapid economic growth at an average of 7.4% a year between 1989 and 2008. However, export growth slowed as the global recession took hold and inward investment declined (Picus 2009).

Rural populations, particularly women and minorities, were the first victims of the economic downturn with a rise in jobless rates. Over 20% of migrant workers have returned to their home provinces since the beginning of 2009, having lost their jobs in industrialized areas. The country implemented an economic stimulus package of more than US\$8 billion to address the crisis. With many migrant workers and extensive remote regions populated by ethnic minority groups, more support for basic education and pipeline programs that widen the pathways to higher education for these groups are needed. The recession is an opportunity for Viet Nam to focus more intensively on the socioeconomic development of these poor and vulnerable populations.

The rapid period of economic development that preceded the global recession saw increased educational opportunities across diverse populations. The recession threatens a setback in socioeconomic development and access to higher education at a time when Viet Nam has been working to improve the quality of its higher education system.

Viet Nam aims to continue in its aim to reach the Millennium Development Goal of Education for All, including for its diverse ethnic minority population, by 2015. However, it also plans to move ahead with its bold plans for development and reform of higher education. This includes a major upgrading of the quality of its universities, which it sees as central to its economic rise and regional integration. As Huong and Fry (2004: 301) note: "The country's success in realizing its intellectual potential will depend on improving both the quality and efficiency of its university system." Viet Nam has rapidly expanded an indigenous system of higher education that aims to strengthen a knowledge economy with graduates that can adapt to new technologies and flexible labor markets. The continued reform and development of universities in Viet Nam is essential for it to become "a major player on the world scene economically, culturally, and intellectually" (Huong and Fry 2004: 329).

Viet Nam plans to open a new science university in 2010. The Hanoi University of Science and Technology (HUST) aims to have a 10% intake of foreign students. The recruitment of academic staff will include half of whom can be considered as having attained an international standard of excellence, as indicated by the publication of research papers in top international journals. HUST would be part of a national plan to establish four world-class research universities by 2020. The other three universities include the Viet Nam-Germany University, opened in 2008 in Ho Chi Minh City, and two other institutions, including the planned American International University (Down 2009, World Bank 2009b).

The Higher Education Development Policy Program, along with the Second Higher Education Project and the New-Model Universities Project, supports the Government's Socio-Economic Development Plan 2006–2010 and its Higher Education Reform Agenda.

These programs aim to strengthen governance, rationalize financing, improve the quality of teaching and research, improve accountability for performance, and enhance transparency in financial management within the higher education sector (World Bank 2009c).

Like Mongolia, Viet Nam also has a thriving sector of vocational-technical education. This growth in postsecondary education does not only include universities. Viet Nam has established a network of community colleges that provide a vocational and technical education within a flexible structure of instructional service. Such institutions tend to be more resilient during a recession. Reforms in higher education that involve the establishment of a system of community colleges helped expand opportunities to bring educational progress and jobs to poor communities. As Dang and Nguyen point out (2009: 97), "This ensures a social balance in education --- training that helps the poor, especially talented poor students in socio-economically-backward localities, who find opportunities to access higher education." An important measure of socioeconomic success for Viet Nam's higher education system will be the successful expansion of its community college system to encompass poor rural populations, including women and minorities, and urban poor who become increasingly vulnerable during recessions due to the rise in jobless rates.

#### **4.4 Other Asian Systems**

Kazakhstan's higher education system has been hard hit by the global financial crisis, putting its plan to become an Asian tiger economy in jeopardy. Thousands of students are unable to pay tuition and fees. The government is addressing the problem through fast-tracking measures to assist financially strapped students (Lillis 2009).

In the Philippines, the Presidents' Forum at Ateneo de Manila University (January 2009) agreed on four strategies for universities to respond to the global financial crisis, including financial aid, student programs and services, organization management, and research. Among the suggestions to make college education more accessible to students from low-income families were student aid loans and subsidies, flexible payment schemes, scholarships, and discounts for international study. Organizational reforms, such as budget alignment, flexibility, and collaboration with other educational institutions and industries, were also mentioned as ways to cut costs and help set aside more of their budgets for financial aid to students. Finally, there was a call for more research to find ways of reducing the impact of the recession (Flores 2009).

The global economic crisis has accelerated the need for Asian universities to engage internationally, and to create regional mechanisms through which students and faculty members can move more easily from one country to another. The reform of higher education is central to continued internationalization for economic and social development. Although the global recession has hit some Asian countries harder than others, the downturn constitutes an opportunity to move forward with measures that will sustain the region's development.

### **5. A NATIONAL PERSPECTIVE ON HIGHER EDUCATION DURING RECESSIONS**

A higher education system is a national endeavor that strengthens capacity to participate effectively in an increasingly competitive global knowledge economy. It is also an enterprise that works best when it marshals talent and fosters leadership and commitment from all sectors of the national population (Task Force 2000). A financial crisis slices into the heart of this national endeavor by heightening the conditions that marginalize selected populations (ILO 1998). The poor remain affected, while the ranks of the vulnerable population grow larger as more citizens suddenly find themselves bereft of the financial wherewithal to cope. Moreover, economic crises and recessions have generally damaged the competitive edge of

higher education in Asia. Rather than viewing such times as opportunities to proactively push ahead with major reforms that over the long term will sustain the dynamic rise of Asian higher education within the global system, there is less emphasis on long-term planning than on short-term measures to attain financial buffering and minor management reorganization.

Despite the recent trend toward massification in higher education, students from poor and vulnerable populations in the developing countries of the Asian region are less prone to enter and complete a tertiary education during a recession, and their absence diminishes the representation of national diversity in colleges and universities (Altbach and Umakoshi 2004). Moreover, when poor populations do manage to attend and graduate, they are less likely to locate employment in a depressed labor market. Other populations become more vulnerable and cannot afford private higher education. They are limited in seeking higher education overseas and governments are more likely to reduce scholarships for overseas study.

For poor and vulnerable populations, household finance affects decisions about whether to attend regular or vocational colleges, or to defer a higher education. Economic hardships experienced by households during a recession can affect the ability of students to complete their studies. It becomes more difficult for some households to pay education fees and their children may not be able to repay loans, especially when they are unable to locate employment after graduation. Some households may decide to defer higher education opportunities or select more practical alternatives to an academic track. While household savings and the value that families place on education help sustain access rates in some countries, the choice of what postsecondary institution to attend and what major subject to study becomes of increasing concern to students and their families.

Students from poor and vulnerable populations often attend institutions more likely to experience a drop in the quality of instruction during a recession, thus further decreasing student competitiveness after graduation in an already tightly stretched labor market.

Finally, cutbacks in higher education due to recession also have the potential to affect the amount of funding available for research in the fields of medicine, science, and technology that help poor communities overcome health threats, increase food production, and improve conditions associated with development.

To be sure, the development issues and challenges will differ across the countries of the region. Whatever the case, ministries of education and college and university administrators will be confronted with more complex situations that require increasing strategic governance capabilities (Postiglione 2006). While there were generally major declines in university budgets during the Asian economic crisis of the late 1990s, some places soon began to expand enrollments. Enrollments rose in many PRC universities. Public universities diversified and increased their offerings of market-driven courses. However, this expansion took its toll on the quality of instruction. In countries with large private sectors of higher education, like Indonesia and the Philippines, many households with children in private higher education or in overseas colleges and universities moved them to public universities in the home country, where the fees were less and subsidies were more readily available. This substitution effect from private to public higher education affected the management of academic staffing, but it also initiated higher levels of management autonomy and stricter measures of financial accountability. Public and private colleges and universities tried to twin with overseas institutions to lower costs, and some tried to team up with banks to foster offers of long-term, low-interest loans to students.

The one constant challenge to higher education in any recession is bound to be the rising unemployment rate among graduates. Unfortunately, this was already an emerging issue as a result of the sudden regional massification of higher education that grew at the turn of the century. Still, patterns differ across countries. For example, unemployment of tertiary education graduates in some countries has been far worse than in others. Moreover, the patterns of unemployment may differ among graduates of public or private institutions, as

they do among graduates of regular or vocational-professional institutions of higher education (Postiglione 2009a, 2009b, 2009c, 2009d).

## 5.1 Income Groups Disproportionately Affected

Unlike the global recession, the Asian crisis of 1997–1998 resulted from overambitious private sector investment. The declining value of currencies led to crises in banking and manufacturing that eventually resulted in a loss of jobs and a decline in household income. The root cause was not public sector inefficiency but rather the unrestricted inflow of private capital and its sudden withdrawal. Private domestic investment and human capital still drive growth in most places in Asia. Since private colleges and universities in Asia also outnumber public ones in most countries, public confidence can more easily be shaken during a recession if higher education access and quality experience a setback.

Aside from the poor, the rising middle class—the main clients of higher education—were seriously affected. While there was an expectation after the economic shock of 1997–1998 that enrollment would be significantly affected, this was not the case in all countries. Part of the reason was that many Asian economies differed from developed economies that had large government sectors. Large public sectors would naturally be required to make severe cutbacks but the late 1990s Asian recession was a matter of private sector collapse. Therefore, employment in the public sector was not severely affected and this included public higher education. However, the emergent middle class was hard hit with job losses. Still, its demand for higher education did not change. Government institutions of higher education continued to operate and represented hope for the future to a class that associated its rising status with the dual pillars of wealth and education.

Since the public sectors were small and not deeply affected, higher education was not devastated on the same scale as the private sector. Private higher education revealed its fragility and lack of stamina within a financial meltdown. Although the massification of higher education had not started at the time of the 1997–1998 crisis, a large proportion of the colleges and universities in Indonesia and the Philippines were private institutions. The PRC, Malaysia, and Mongolia had also begun to establish private colleges and universities but they represented a small proportion of the total. Viet Nam led the way in the privatization of higher education in country and among its neighboring economies of Cambodia and the Lao People's Democratic Republic. The two major urban centers of East and Southeast Asia with market economies—Singapore and Hong Kong, China—had not strayed from a public sector-dominated system, though they have begun to do so since then. In most cases, the 1997–1998 crisis caused a decline in employment and household income that led to a steady divestment of income elasticity, which affected enrollments in private higher education.

Those households with substantial savings were willing to expend part of it for educational purposes. Where household savings are substantial, this Asian pattern exhibits itself in many cases. The PRC expanded its higher education at the end of the 20th century, which would have been impossible without the amount of household savings that families were readily willing to make available for study costs. There are similarities in the global recession in other Asian countries. Even when household savings are low, Asian families are willing to borrow and take out loans for their children's education (as noted for Mongolian cattle-rancher households, above).

In short, the 1997–1998 crisis did not shake the strong commitment to higher education of poor and vulnerable populations. However, attendance was weakened in selected institutional sectors by financial hardships. When household savings were low, decisions about education costs were made on more pragmatic grounds. The quality and relevance of education during economic setbacks becomes increasingly important. Since recession of the late 1990s, quality assurance measures in Asian higher education has been increasingly promoted by the ASEAN University Network, an organization under the auspices of the

Association of Southeast Asian Nations (ASEAN) (UNESCO 2004). The Internet has also become important for households as a source of information for making decisions about higher education in some countries, but in others there is still a need to improve the availability of both the information for decision making, and reliable and inexpensive counseling services for prospective students.

## **6. PERSPECTIVES ON RESPONDING TO ECONOMIC CRISES**

A time of recession also offers opportunities to take higher education reform forward in Asia's developing countries. Rather than conceive of responses to the recession as life boats to bring the system back to safety, responses can best be viewed as a way of exploring growth strategies to stimulate college and university reform beyond restoring past levels of access to poor and potentially vulnerable populations. Therefore, there is good reason at this critical juncture to gain a deeper understanding of trends during past and present slowdowns of public expenditure for higher education, effects of slowdowns on labor markets, and their implications for poor and vulnerable populations. While the origins, characteristics, and paths to recovery of the 1997–1998 crisis differ in fundamental ways from the global slowdown, many of the deleterious effects are the same.

As the recession recedes, the challenges of access to and relevance of higher education in developing countries in this region will not disappear. Even developed countries at the height of their economic prowess must constantly be vigilant about how to ensure that opportunities for a higher education are not reserved for privileged groups in society. However, developed countries have been far more successful in putting the mechanisms in place, including improved governance, that effectively deal with problems of access and relevance.

Therefore, the manner in which the global economic situation is addressed in Asia has long-term implications for the reform of higher education. In short, colleges and universities are essential for national development and in times of economic crisis, and it is mistaken to consider them as parts of the education system that can be sacrificed. They not only offer hope and confidence to poor and vulnerable populations, but also make contributions that are invaluable to national development. It is in times of recession that the opportunity arises to fine-tune institutional governance and policies.

Some common responses in higher education during the 1997–1998 crisis were budget cuts, staff reduction, less hiring, wage freezes, delays in building, tightly regulated utilities and maintenance, postponed library purchases, and canceled travel grants for international conferences. Declining household incomes were met with policy responses that increased the availability of subsidies for higher education. During that crisis, cuts in higher education were more on investment budgets than recurrent budgets. In response to students dropping out, student support systems were provided, including grants, loans, and scholarships. In some cases, they worked. However, results varied across countries and income groups. Private colleges and universities were strongly affected by drops in enrollment and diminished stock portfolios exacerbated the problem and required austerity measures that affected quality. Some families made a switch from fee-paying private higher education to less expensive public institutions.

Countries such as the PRC and Malaysia had large numbers of students studying overseas. Countries that had as much as a fifth of students studying overseas inevitably had to reduce fellowships and scholarships to study overseas. Although some countries tried to maintain overseas study fellowships, a more useful response was to establish a credit transfer arrangement that provided an opportunity for students to return from expensive overseas study and continue their education at home institutions.

Such responses to the global recession provided colleges and universities with more autonomy from government, financially or otherwise. This was an encouragement to the private sector and some new universities resulted. Since Western countries were less affected by the Asian crisis but increasingly affected by competition for students and the pressure to internationalize, representatives from many of them came to Asia to recruit students and fostered an increase in twinning programs.

Wealthy countries of the region could provide innovative financial support to students of higher education, despite the economic crunch, because of their access to resources, both institutional and technological. Students could be provided with graduate retraining at public expense. Colleges and universities offered courses in information technology, life sciences, and generic skills to make their graduates more marketable. Poorer countries had to cut back on their educational budgets and resorted staff retrenchment. This led to creative policy approaches like enhancing university autonomy and strengthening the capacity of these institutions to cope with sudden resource cuts.

The 1997–1998 crisis demonstrated that existing safety net systems were inadequate. Government responses were limited and only minor reform in higher education resulted from the experience. That is not to say that the experience was not useful. More than anything else, it appears that the global recession provides more of an opportunity to consider reforms in several areas, including policy and regulatory frameworks, governance and management of higher education institutions, and equitable access and support for disadvantaged students. At the same time, better regional cross-border collaboration among economies in the Asia and Pacific region holds promise for new forms of resource and cost-sharing arrangements. This also extends beyond the region to transnational collaboration and cost-sharing with colleges and universities in other parts of the world. Finally, aspirations within Asia for the region to become more globally competitive, not only as a knowledge economy but also as an area with more world-class universities, mean that research and innovation in science and technology need to be sustained during a recession.

The 1997–1998 crisis also confirmed the usefulness of periodic policy forums and other occasions where policymakers, scholars, and academics can come together to design systematic strategies for the development and improvement of higher education. Regional perspectives and consultations are needed. For example, Singapore avoided the 1997–1998 crisis by having invested in higher education; so did the PRC to some extent (Postiglione 2005).

## **7. LESSONS OF THE GLOBAL RECESSION**

Students from poor and vulnerable populations are not only less likely to find ways to cover their course fees, but are more likely to make decisions about their education based on limited knowledge of the quality of courses of study and their relevance to rapidly shifting labor markets. During this recession, a downward spiral in labor markets makes students and their families less convinced about the return rate for their investments in higher learning. This is also why their willingness to further their education beyond secondary school becomes more tenuous during recessions. The quality of vocational higher education and community colleges that have closer ties to the labor market will be a more important consideration. Those that do enter postsecondary institutions are more likely to drop out than other students. Whatever the case, the recession must not result in a situation that provides an unfair advantage for better-off groups that have escaped the worst excesses of an economic crisis.

Another response from the 1997–1998 crisis was the caution and concern about underfunding basic and senior secondary education. For example, sudden and large shifts of government financing to higher education in countries with developing market economies can be perceived as placing adequate financing for basic and secondary education at risk.

Some evidence shows that on average, low-income countries spend as much as 14 times more on higher education as on a secondary school student and 34 times more than on a primary school student (ADB 2008b, Glewwe and Kremer 2006). This disparity is a risk at the best of times, and an even greater risk during a recession. Therefore, a recession calls for urgent action, in particular the kind of cost-sharing and partnerships that will reduce the risk of widening disparities and ensure sustainable financing for all sectors.

The tendency for governments to protect basic and secondary education budgets during a recession, while understandable, can be short sighted. It is inevitable that higher education per student costs will remain well above other levels within the system. Yet countenancing inequity in higher education during a recession can have disastrous implications over the long term. Aside from the obvious loss of talent and the marginalizing of the poor, there is also a loss in the knowledge and skills available to serve in the social and economic development of poor communities.

During recessions, the sense of corporate responsibility becomes less robust and compromised by financial constraints (Salmi and Bassett 2009). Foundations and alumni may cut back on contributions aimed at helping poor students. Other private funding sources for university research that focuses on the plight of poor and vulnerable communities may be affected. The private sector and civil society need to respond by maintaining loans, scholarships, and deferred payback periods. Moreover, private institutions need to respond by providing students from poor and vulnerable populations with better information about course choices and labor markets. International groups that establish higher education programs in Asia need to avoid exploiting poor and vulnerable students for economic gain. Also, international foundations that support scholarships for students from poor regions need to ensure that these students are supported to study in programs that will aid community development in the regions from which the students come.

## **8. SELECTED RECOMMENDATIONS**

### **8.1 Tuition Assistance, Subsidies for Poor and Vulnerable Students, and Loans**

One of the useful lessons of the 1997–1998 crisis was the key role played by emergency subsidies to poor students. Though limited, these measures were essential for sustaining access to education and education completion rates. Nevertheless, the amounts and the means of selection and distribution of subsidies require greater transparency. No capable student should be prevented from continuing his or her education due to poverty.

Part of the answer would seem to be a national system of loans, rather than free education. The experience of developing countries with respect to student loan schemes is varied. Those developing countries which do not have the infrastructure needed to institute a comprehensive loan scheme are cautioned about abruptly starting one. Small countries such as the Lao People's Democratic Republic and Mongolia have different management challenges for implementation of a comprehensive system of student loans than large countries such as the PRC or Viet Nam. Measures need to be developed to ensure that loans do not become misdirected by recipients, whose families may be facing strong transitory financial crisis.

One way to address such challenges is to involve the institutions directly, though this may add to costs of maintaining records on the part of the institutions. In this respect, a proper balanced scheme should be reached. The aim in all cases should be to eventually launch a viable system of nationwide student loans for higher education, one that can survive amid future economic shocks and also guarantee a high degree of cost recovery.

Can current conditions support a more sophisticated system of recession proof student loans? The experience of developing countries with student loans was encapsulated in a World Bank paper (2008b). It is useful to examine the best practices in the different student loan systems of developing countries. Sarvi (2008) has taken note of studies by Ziderman (2004) and Woodhall (2007) that assessed the implementation of student loan schemes in five Asian countries. The study revealed weaknesses in areas such as “financial appraisal, forward planning, monitoring and evaluation, inadequate targeting, and inefficiency in collection” (Sarvi 2008:10).

## **8.2 Information and Guidance for Students from Poor and Vulnerable Populations**

Students, especially those from the first generation in their family to attend college or university, need guidance and protection from substandard higher education. This is especially needed during recessions when recourse cutbacks may decrease the quality of instruction in higher education. It is already clear in the global recession that many households are concerned about the quality of higher education. However, the decision on which institution to attend should still be a personal decision. Students who are willing to pay full fees and not get tuition support should be able to attend the academic programs they choose. Especially for students who receive tuition assistance, there is a need for government protection and a guarantee that they are receiving a quality education that has a good possibility of leading to productive employment.

## **8.3 Labor Markets and Community-Based Vocational and Technical Higher Education**

As higher education has rapidly expanded in many Asian and Pacific countries, the number of students unable to locate appropriate employment opportunities after graduation has greatly increased in some countries. The recession has intensified this problem. While massification of higher education provides more opportunities to poor and vulnerable populations, it also comes with higher fees for tuition, accommodations, books and other supplies. While the status of regular higher education has remained consistent and rooted in traditional values, there are increasing signs that households are expecting greater relevance of higher learning for the labor market.

Several developing countries in the region are responding to the pressure for greater relevance by placing more emphasis on higher vocational and technical education. However, there is a need to intensify the support for community-based vocational and technical education that can react quickly to rapid changes in the job markets and shorten the time to complete diplomas and degrees. These institutions also need to focus on generic skills, including communication, problem solving, and creative thinking that will help graduates adjust to future economic shifts that could cause restructuring of labor markets. These institutions also need to stay socially relevant to match local community development trends. As community college models have become disseminated across an increasing number of countries, they have demonstrated a high degree of flexibility in the delivery of instructional services, especially for underserved populations, and have helped students address the rapidly changing economic landscape.

## **8.4 Performance-Based Measures**

Quality indicators related to performance can decline during a recession. The emphasis given to performance indicators across higher education systems in the Asia and Pacific region differs significantly. A recent study revealed that academic staff in developing countries like the PRC and Malaysia saw less of a performance orientation in their

institutions compared to academic staff in more developed economies like Hong Kong, China and the Republic of Korea (Postiglione and Wang, forthcoming). There is a general need to narrow the gap in the use of performance indicators and provide transparent standards for judgment about quality for prospective students and their families. With respect to instructional quality, there is a great deal that can be done to identify and reward competent teachers. The extent to which a system of career incentives can be arranged to develop and retain high quality college and university academic staff during recessions is still an area in which developing countries can make a key part of their long-term planning.

Quality teaching has invaluable downstream benefits to a society experiencing an economic downturn. Quality instructional resources need to be recognized and should match with the provision of physical and social infrastructure that support continued professional development of academic staff.

## **8.5 Cost Sharing**

There is less reason to compartmentalize the financing of tertiary education such that it becomes an automatic transfer source of funds for basic education during a recession. It makes greater sense to take a more systemwide approach toward cost sharing among different levels of the education system based on present conditions and forward planning (SEAMEO 2005).

One of the positive lessons of the 1997–1998 crisis was the provision of more autonomy for public institutions to enter into new financial arrangements for joint academic programs with private institutions. Therefore, it is worthwhile to continue to examine a range of cost-sharing alternatives that involve public–private financing partnerships, and to more closely scrutinize legal and social policy issues that determine the success of cost-sharing reforms.

Institutions should be able to make choices from a wide range of policy options that can be adopted to ensure partnerships. More innovative financing mechanisms should be directed at improving both greater access for poor and vulnerable populations and greater quality assurance in higher education.

Public–private partnership models, including those that involve transnational collaboration, have a role in improving the external efficiency of higher education by creating innovative ways to offer new programs at reasonable costs. In some cases, governments provide land and infrastructure, with management and teaching handled by the private sector. Through such cost-sharing, colleges and universities can recover costs and ensure sufficient salaries to attract high-quality faculty members. In other cases, governments provide autonomy to private endeavors but set the upper limit on fees charged to students and ensures minimum standards. Whatever the case, possibilities of expanding private initiatives—consistent with public objectives—can be further explored. In some countries, public support remains essential where other actors are not available and where philanthropic initiatives can supplement the government-planned expansion of higher education.

## **8.6 Diversification and Differentiation of Institutions**

System and institutional diversification is on the rise, as public higher education has to respond to a more complex set of socioeconomic development challenges. Diversification is seen not only among traditional colleges and universities, undergraduate education-focused institutions, and research universities, but also community-driven vocational and technical higher education, as well as tertiary distance education. As program needs become more differentiated, there is a need to examine a wider variety of cross-institutional articulation and funding options between public and private, domestic and cross-national, providers (Postiglione 2008).

## 8.7 Philanthropic Ventures

Economic success in Asia has given birth to a spirit of generosity rooted in traditional values. The last decade has seen an exponential rise in the culture of philanthropy, and a significant part of this has been for the benefit of higher education. This has been the case more in some countries than others but the trend is unmistakable. There is a need to provide an environment of confidence about philanthropic partnerships by regulations that encourage involvement, provide accountability, and increase transparency, in order to help identify niches where fresh philanthropic partnership approaches can be launched to address needs in teaching, research, and service functions of colleges and universities.

## 8.8 Upgrading of Research

Much of tomorrow's socioeconomic development will be inextricably tied to higher education, including funding for university research laboratories (Postiglione 2009e). This funding can be used to support research in science, technology, and medicine that aids poor communities, as well as research focused on the effects of climate change on the Asian environment (ecological, economic, social, etc). The number and quality of research universities will increase. However, there is a need to consider strategic possibilities in an Asia-wide context. Research universities are the most expensive component of higher education, and their outputs are not always measurable in the short term. However, well-established research universities will become an indispensable part of regional integration into the global economy with important long-term contributions for facilitating innovation.

## 8.9 Regional Strategies to Attract International Students

For many years, Asia has contributed the largest number of foreign students to colleges and universities in the United States, United Kingdom, continental Europe, Canada, and Australia (Raychaudhuri and De 2007). In anticipation of future recessions, countries in Asia can be more proactive in attracting international students from outside the region. Along with increased trade and economic cooperation, Asian countries can foster a flourishing trade in educational services. Intraregional mobility of students is increasing and forecast to expand further with rising levels of science and technology. One study of intraregional mobility revealed that "as East Asian markets have been experiencing increasing enrolments from other East Asian countries throughout this decade, some traditional destinations have experienced noticeable declines in enrolments from some major East Asian markets or a flattening of demand" (JWT Education 2008: 11). East Asian universities are now very active in recruiting international students from East Asia (Table). Intraregional student mobility in East Asia over the medium to long term will continue to increase as the rate of student flows to Western countries slows. Tuition fees are between a quarter and a fifth of those in developed countries. Regional cooperation in this respect has advantages and collectively, Asian countries may be able to mitigate some of the impact of global recessions on their populations.

**Table: Outlook of International Higher Education Students**

## Top Five Source Countries

Country	No. of Students					Growth Rate (%)
	2000	2005 <sup>a</sup>	2010 <sup>b</sup>	2020 <sup>b</sup>	2025 <sup>b</sup>	
China, People's Rep. of	218,437	437,109	760,103	1,937,129	2,973,287	11.0
Korea, Rep. of	81,370	96,681	114,269	155,737	172,671	3.1
India	76,908	141,691	271,193	502,237	629,080	8.8
Japan	66,097	65,872	68,544	71,974	73,665	0.4
Greece	60,486	68,285	75,339	84,608	89,903	1.6

<sup>a</sup>. Estimated.<sup>b</sup>. Forecast.

Source: Bohm et al (2004).

## 9. CONCLUSION

Higher education in the Asia and Pacific region is approaching a historical moment in the sense that economic integration has reached a tipping point. The global recession provides an opportunity unlike any in the past 40 years to address the capacity of colleges and universities to serve poor and vulnerable populations. A measure of success in the next 40 years will be the extension of relevant higher-learning opportunities for all populations, especially those in the most remote ethnic communities of developing countries.

The global recession presents an opportunity to continue urgent reforms (Kuroda 2009). As the knowledge production and knowledge transfer systems of the region become as integrated as their economies, a highly collaborative layer of colleges and universities can promote high-quality, international recognition and global competitiveness. Governments and international organizations can help identify a series of centers in the region that excel in particular aspects of higher education and that have the capacity to respond to the demands from across the region. However, it is also important to anticipate future Asia-wide challenges.

This paper highlights the importance of the global recession as an opportunity for new thinking about comprehensive reform in education. The longer that colleges and universities continue to underperform, the greater will be the negative impact on the economies in Asia. In fact, underperformance will only compound the effect of this and any future financial recession. The OECD has demonstrated that underperforming education systems can have disastrous consequences and significant negative impacts on national growth (ADB 2008b).

In the wake of the global recession and a return to a more stable financial environment, government responses that simply restore previous funding patterns for education will find limited improvement in outcomes. This was the case with OECD countries and there is little reason to assume this will not be the case in Asia (OECD 2009). Comprehensive policy and structural reforms in education can better ensure improved educational outcomes. Yet social protection measures remain important in the short run.

In the long term, however, broad based inclusiveness in education systems for the underserved populations, including basic, vocational-technical, and higher education, both regular and vocational-technical, is necessary to make a significantly positive impact on economic growth. This impact can be accomplished by identifying underserved, disadvantaged, and vulnerable populations, and by creating a link that allocates financial aid directly to specific cohorts, such that these cohorts maximize their learning potential, avoid the waste of talent in these populations, and build knowledge and skills capacity for a human resource base that improves social and economic development across Asian countries.

The global economy will continue to encounter and transverse recessions, each with a unique set of characteristics. Such economic shocks reveal the fragility of colleges and universities to serve poor and vulnerable populations. While we are becoming increasingly familiar with the causes of economic crises and recessions, there has been a relative paucity of effective ideas about how to move forward, especially for colleges and universities to build up institutional resilience in time to face future global or regional recessions.

The manner in which each economic shock affects capacity is constantly evolving, with differing and numerous features. This complicates the challenge of building capacity. It is an opportune time to establish one or more regional institutes to bring together practitioners from the public, private, and academic sectors on a regular basis to analyze patterns and connect theory and practice. The aim would be to anticipate, as much as possible; to analyze the implications of potential economic downswings; and to shape new thinking about preparations, responses, and strategies to sustain the capacity of colleges and universities for serving their increasingly diverse populations equitably with relevant and high-quality higher learning.

There is a new urgency to identify and remedy deficiencies with fresh approaches and innovative policy options that embed resilience in the region's rapidly expanding system of colleges and universities. While it will not be easy to find ways to insulate higher education capacity from future economic shocks, colleges and universities must remain free to carry out their mission, encourage new partnerships, and pool ingenuity to innovate while trying to stay one step ahead in the competitive environment of knowledge production and transfer. In short, the goal is to ensure that colleges and universities can cope with future uncertain economic times and flourish within them.

## REFERENCES

- Ablett, J., and I.-A. Slengesol. 2001. Education in Crisis: The Impact and Lessons of the East Asian Financial Shock 1997–99. Originally presented at the United Nations Educational, Scientific and Cultural Organization (UNESCO) World Education Forum, Dakar, 26–28 April 2000. Education for All 2000 Assessment, Thematic Studies coordinated by the World Bank. Paris: UNESCO.
- Altbach, P. A., and T. Umakoshi. 2004. *Asian Universities: Historical Perspectives and Contemporary Challenges*. Baltimore, MD: Johns Hopkins University Press.
- ADB. 2008a. *Emerging Asian Regionalism: A Partnership of Shared Prosperity*. Manila: ADB. <http://aric.adb.org/emergingasianregionalism/>
- . 2008b. *Education and Skills. Strategies for Accelerated Development in Asia and the Pacific*. Manila: ADB. <http://www.adb.org/Documents/Studies/Education-Skills-Strategies-Development/Education-Skills-Strategies-Development.pdf>
- Asia-Pacific Programme of Educational Innovation for Development (APEID). 2009. *Higher Education in Southeast Asia*. Bangkok: UNESCO, APIED, SEAMEO/RIHED.
- Bohm et al. 2004. *Forecasting International Student Mobility: A UK Perspective*. London: British Council.
- Cai, F, M.Y.Wang and D.W.Wang eds. 2010 The China and Population and Labor Yearbook, Volume 2. Boston: Brill Academic Publishers.
- Chapman, D. W., and A. E. Austin, eds. 2002. *Higher Education in Developing Countries: Changing Contexts and Institutional Responses*. Westport: Greenwood Press.
- Down, D. (2009) Vietnam: Transforming Higher Education. University World News, March 22. <http://www.universityworldnews.com/article.php?story=20090320100538501> (Accessed on 20 February 2010)
- Flores, K. 2009. Financial Crisis To Hit Schools; Student Aid Schemes Proposed. ABS-CBN News. 24 Jan. <http://www.abs-cbnnews.com/nation/youth/01/24/09/financial-crisis-hit-schools-university-leaders-warn> (accessed 19 February 2010).
- Government of Mongolia (2006) Master Plan to Develop Education in Mongolia in 2006-2015. Ulaanbaatar: Government of Mongolia.
- Glewwe, P., and M. Kremer. 2006. Schools, Teachers, and Education Outcomes in Developing Countries. In *Handbook of the Economics of Education*, Vol. 2, edited by E. Hanushek and F. Welch. Amsterdam: North-Holland.
- Global University Network for Innovation (GUNI). 2006. *Higher Education in the World*, Chinese version, Paris: UNESCO.
- Hassan, A. 2001. Impact of the Economic Crisis on Malaysia. In *Implications of the Economic Crisis on Higher Education in East Asia: Country Experiences*, edited by N. V. Varghese. Paris: International Institute for Educational Planning (IIEP)/UNESCO.
- Huang, F. 2006. *Transnational Higher Education in Asia and the Pacific*. Hiroshima, Japan: Research Institute for Higher Education.
- Huong, P. L., and G. W. Fry. 2004. Universities in Vietnam: Legacies, Challenges and Prospects. In *Asian Universities: Historical Perspectives and Contemporary Challenges*, edited by P. A. Altbach and T. Umakoshi. Baltimore, MD: Johns Hopkins University Press.
- Hvistendahl, M. 2009. Presidents of Asian Universities Call for More International Partnerships. *The Chronicle of Higher Education* 55(34): 22.

- International Labor Organization (ILO). 1998. The Social Impact of the Asian Financial Crisis. Technical report for discussion at the High-Level Tripartite Meeting on Social Responses to the Financial Crisis in East and South-East Asian Countries, ILO Regional Office for Asia and the Pacific Bangkok, Bangkok, 22–24 April.
- Johnston, D. B. 2004. The Economics and Politics of Cost Sharing in Higher Education: Comparative Perspective. *Economics of Education Review* 23(4): 403–10.
- JWT Education (2008, February) International Student Mobility in East Asia. British Council, February. <http://www.britishcouncil.org/eumd-information-research-east-asia-student-mobility.htm> (accessed on 20 February 2010)
- Kuroda, H. 2009. Time to Make Asian Regionalism a Reality. *The Straits Times* (Singapore). 12 September.
- D. B. Lam and N. H. Vi. 2009. The Development of the Community College Model in Vietnam at a Time of the Country's Reorganization and International Integration. In *Community College Models: Globalization and Higher Education Reform*, edited by R. L. Raby and E. J. Valeau. Springer Press.
- Lee, J.-W., and C. Rhee. 1999. Social Impacts of the Asian Crisis. <http://ideas.repec.org/p/snu/ioerwp/no2.html> (accessed 20 February 2010).
- Lee, M. 2004. Restructuring Higher Education in Malaysia, Penang: Universiti Sains Malaysia, School of Education.
- Lillis, J. 2009. Kazakhstan: Economic Crisis Crimps Astana's Grand Plans for Higher Education. *Eurasianet*. 8 June. <http://www.eurasianet.org/departments/insightb/articles/eav060809.shtml> (accessed 20 February 2010).
- Mok, K.-h. 2006. *Educational Reform and Educational Policy in East Asia*. London: Taylor and Francis.
- . 2008. *Changing Governance and Public Policy in East Asia*. London: Routledge.
- Organisation for Economic Co-operation and Development (OECD). 2009. *Education at a Glance*. Paris: OECD. [www.oecd.org/dataoecd/32/34/43541373.pdf](http://www.oecd.org/dataoecd/32/34/43541373.pdf) (accessed 20 February 2010)..
- Patton, D. 2009. China: Pressure to Improve Graduate Job Skills. *University World News*. 5 July (Issue 0083). <http://www.universityworldnews.com/article.php?story=20090702190256276> (accessed 18 February 2010).
- Picus, J. 2009. Vietnam: Sustaining Growth in Difficult Times. ASEAN Economic Bulletin. April. [http://findarticles.com/p/articles/mi\\_hb020/is\\_1\\_26/ai\\_n32149050/pg\\_10/?tag=content:col1](http://findarticles.com/p/articles/mi_hb020/is_1_26/ai_n32149050/pg_10/?tag=content:col1) (accessed 20 February 2010).
- Postiglione, G. 2005. Higher Education in China: Perils and Promises for a New Century. *Harvard China Review*. Spring: 138–43.
- . 2006. Finance and Governance in Southeast Asian Higher Education. In *Higher Education in the World, 2006: The Financing of Universities*, edited by B.C. Sanyal and M. Martin. New York, NY: Palgrave.
- . 2008. 亚洲跨径高等教育转型 [Transformations in Transnational Higher Education]. 中國高等教育學會, 第 29 卷, 第 21-31 頁 [*Journal of Higher Education* 29: 21–31].
- . 2009a China's International Partnerships and Cross-Border Cooperation. *Chinese Education and Society*. Volume 42. Number 4, pp.3-10, New York, NY: M.E. Sharpe Publishers.

- . 2009b. Community Colleges in China's Two Systems. In *Community College Models: Globalization and Higher Education Reform*, edited by R. L. Raby and E. Valeau. Amsterdam: Springer Press.
- . 2009c. Institutionalizing the Community College Associate Degree in Hong Kong, with Stephen Kwok. In *A Global Survey of Community Colleges, Technical Colleges, and Further Education In Different Regions of the World*, edited by P. A. Elsner. Washington, DC: American Association of Community Colleges Press.
- . 2009d. China's Community Colleges: Remolding a Model to Meet Transitional Challenges, with D. Watkins and L. Wang. In *A Global Survey of Community Colleges, Technical Colleges, and Further Education In Different Regions of the World*, edited by P. A. Elsner. Washington, DC: American Association of Community Colleges Press.
- . 2009e. Establishing a Research University: The Case of the Hong Kong University of Science and Technology. Presentation at The Third International Conference on World Class Universities, Shanghai Jiaotong University, Shanghai, China, 1–5 November.
- . Forthcoming a. Mongolia's Higher Education on the Move. *International Higher Education*. Chestnut Hill, MA: Boston College Center for International Higher Education.
- Postiglione, G., and J. Tan. 2007. *Going to School in East Asia*. New York, NY: Greenwood Press.
- Postiglione, G., and S. R. Wang. Forthcoming. Governance of the Academy in Hong Kong. In *The Changing Academic Profession*, edited by W. Locke and W. Cummings. New York: Springer Press.
- Postiglione, G., and A. Xie. 2009. Catering for the Market: China's Graduate Employment Problem. *Chinese Cross Currents* 6(2): 80–87.
- Purwadi, A. 2001. Impact of the Economic Crisis on Indonesia. In *Implications of the Economic Crisis on Higher Education in East Asia: Country Experiences*, edited by N. V. Varghese. Paris: IIEP/UNESCO.
- Qiwen, L. 2009. Most College Students in Guangdong Still Await Offers. *China Daily*. 20 March.
- Raychaudhuri, A., and P. De. 2007. Assessing Barriers to Trade in Education Services in Developing Asia - Pacific Countries: An Empirical Exercise. Asia-Pacific Research and Training Network on Trade (ARTNeT) Working Paper 34. Toronto: ARTNeT, an initiative of UNESCAP and IDRC, Canada.
- Reuters. 2010. <http://www.reuters.com/article/idUSTRE5062AD20090107> accessed 17 February 2010.
- Salmi, J., and R. M. Bassett. 2009. *Impact of the Financial Crisis*. Washington, DC: The World Bank, September 9.
- Sarvi, J. 2008. Higher Education in Asia and the Pacific Region: Issues of Financing and Partnerships, Particularly from the Perspective of Access, Equity, Quality, and Diversity of Higher Education. Paper presented at the Asia-Pacific Subregional Preparatory Conference for the 2009 World Conference on Higher Education, Macau, China, 24–26 September.
- Southeast Asian Ministers of Education Organization (SEAMEO). 2005. *Long Range Planning for Higher Education*. Bangkok: SEAMEO Regional Center for Higher Education and Development.

- Task Force on Higher Education and Society. 2000. *Higher Education in Developing Countries: Perils and Promise*. Washington, DC: The World Bank.
- Tilak, J. B. G. 2004. Absence of Policy and Perspective in Higher Education. *Economics and Political Weekly* 39(21): 59–64.
- UNESCO. 2003. Higher Education in Asia and the Pacific 1998–2003: Regional Progress on Implementing the Recommendations of the 1998 World Conference on Higher Education. Paris: UNESCO Asia and the Pacific Regional Bureau for Education.
- UNESCO. 2004. Indicators of Quality and Facilitating Academic Mobility through Quality Assurance Agencies in the Asia-Pacific Region. Bangkok: UNESCO and Thailand National Accreditation Council.
- Varghese, N. V. 2001. *Implications of the Economic Crisis on Higher Education in East Asia: Country Experiences*. Paris: IIEP/UNESCO.
- Woodhall, M. 2007. Funding Higher Education: The Contribution of Economic Thinking to Debate and Policy Development. World Bank Working Paper Series 8. Washington, DC: World Bank.
- World Bank. 2002. *Constructing Knowledge Societies*, Washington D.C: World Bank
- World Bank. 2008a. World Development Indicators. [www.worldbank.org/data](http://www.worldbank.org/data) (accessed 27 February 2010).
- . 2008b. Financing Higher Education: Lessons From Developing Economies for Developing Economies. 143–174.
- . 2009a. Battling the Forces of Global Recession. East Asia and Pacific Update. April. Washington, DC: World Bank.
- . 2009b. Vietnam New-Model Universities Project. <http://web.worldbank.org/external/projects/main?Projectid=P110693&Type=News&theSitePK=40941&pagePK=64308295&menuPK=64282138&piPK=64309265> (accessed 13 October).
- . 2009c. Higher Education Development Policy Program Project Information Document P104694. Washington, DC: World Bank. [http://www.wds.worldbank.org/external/default/WDSCContentServer/WDSP/IB/2009/03/07/000104615\\_20090309100532/Rendered/PDF/HEDPP0PID0Appraisal.pdf](http://www.wds.worldbank.org/external/default/WDSCContentServer/WDSP/IB/2009/03/07/000104615_20090309100532/Rendered/PDF/HEDPP0PID0Appraisal.pdf) (accessed 10 September 2009).
- Ziderman, A. 2004. *Policy Options for Student Loan Schemes: Lessons from Five Asian Countries*. Bangkok: UNESCO and Paris: IIEP.
- Zhou, M., and J. Lin. 2009. Chinese Graduates' Employment: The Impact of the Financial Crisis. *International Higher Education* (55) Spring.