



Beyond the Apex:
Toward a System Level Approach to Higher Education Reform in Vietnam
July 2010

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Preface

This is the second of two white papers produced by The New School and the Vietnam Program at the Harvard Kennedy School's Ash Center for Democratic Governance and Innovation with funding from the United Nations Development Programme (UNDP) in Vietnam. The first paper, "The Intangibles of Excellence: Governance and the Quest for a Vietnamese Apex Research University" was completed in June 2009 and revised in January 2010; the key findings of this paper are included in an appendix. Both the first paper and the present study draw intellectual inspiration from a path-breaking study conducted ten years ago by the Task Force on Higher Education and Society, a blue-ribbon commission convened by the World Bank and the United Nations Education, Scientific, and Cultural Organization (UNESCO), and chaired by Professor Henry Rosovsky of Harvard University and Professor Mamphela Ramphele of Cape Town University. The Task Force was mandated to study the challenges associated with improving higher education in developing countries. Key findings were published in a report in 2000 entitled *Peril and Promise: Higher Education in Developing Countries*.¹

This paper was written by Laura Chirot of The New School and Ben Wilkinson of the Harvard Kennedy School Vietnam Program. The sections on the financing of higher education and expanding access to higher education were written by Dr. Trần Thị Quế Giang of the Fulbright Economics Teaching Program. Appendices were contributed by Professor Philip Altbach of Boston College, Dr. Malcolm McPherson of the Harvard Kennedy School, and Professor Võ Tông Xuân of An Giang University. This paper benefited from the input and feedback of many individuals inside and outside Vietnam. In particular we wish to thank Mr. Bob Kerrey, president of The New School; Mr. Markus Urek of the New School; Professor Henry Rosovsky of Harvard University; Mr. Tom Vallely, Professor David Dapice, and Dr. Jonathan Pincus of the Harvard Vietnam Program; Professor Altbach; Professor Phạm Duy Nghĩa of the University of Economics-Ho Chi Minh City and the Fulbright Economics Teaching Program; Dr. Phạm Thị Lý of Hoa Sen University; Professor Huỳnh Đình Chiến of Hue University; Professor Xuân and many other Vietnamese people who shared their time and insights with us. Research support was provided by Christopher Behrer, Hoàng Bảo Châu, Nguyễn Thị Diễm My, Thúc Minh Nguyen, and Văn Thị Quý. The UNDP provided invaluable intellectual support throughout the research and writing of this paper.

¹ Hereafter *Peril and Promise*. The full text of the report can be downloaded at the Task Force website: <http://www.tfhe.net>.

Executive Summary

...Overall, the quality of education and training in our country lags far behind many other countries in the region and the world. This condition was recognized early on. The Party and the State have [adopted] many correct resolutions and policies that have not been implemented seriously. Several years ago, we searched restlessly for solutions, but the situation has changed slowly. Until now, differing points of view, even diametrically opposed views, have yet to be discussed in order to determine effective policy directions. Persistent weaknesses and inadequacies have had a significant impact on economic, cultural, and social development.

General Võ Nguyên Giáp, *VietnamNet*, 2007.

A broad consensus has emerged in Vietnam that higher education is in need of deep and wide-reaching reform. This consensus extends from students and their families to public intellectuals and educators to policymakers at the highest levels of government. Vietnam's national competitiveness increasingly depends on skilled human capital, which its higher education system is not delivering. Ever growing numbers of families are choosing to send their children abroad for undergraduate and even high school education in order for them to acquire the skills and credentials needed to succeed in the global economy. Study abroad, however, is only an option for a lucky elite of university-age students. If Vietnam is to achieve growth with equity, tap its best talent, and fulfill its economic potential, it must improve its domestic higher education system.

The Vietnamese government has recognized the gravity of the situation. In 2005, the government issued Resolution 14 (14/2005/NQ-CP), which called “fundamental and comprehensive renovation of higher education.” Since then, the government has released a series of policies and plans calling for reform of nearly every aspect of the system. The state has recently identified management as the core problem in higher education. In April 2009 the Politburo found that “educational management retains many weaknesses and is the principal cause of many other weaknesses.”² In January 2010 the Party commission of the Ministry of Education and Training adopted a resolution on the “renovation of higher education management”, which concluded: “In the time to come, in the face of rapidly rising social demand for education and the continued increase in the number of universities, it will be impossible to improve the quality of education and training without sweeping, vigorous, and path-breaking responses...”³ In May 2010 the National Assembly completed a investigative report on “Implementing policy and law on establishing schools, investment, and assuring quality in higher education”,⁴ which exposes gaping holes in the regulatory and legal framework and provides an empirical

² Conclusion No. 242-TB/TU, 15/4/2009.

³ Resolution No. 5-NQ/BCSD, 6/1/2010.

⁴ Report 329/BC-UBTVQH12, 29/5/2010.

foundation for the government's current efforts to improve management, in particular to better define responsibilities among various state agencies and universities.

This is the second of two UNDP-sponsored papers on implementing higher education reform in Vietnam, both aimed at supporting the government's ongoing policymaking process. The first paper addressed a cornerstone goal of the government's reform agenda: to build an apex research university.⁵ It argued that Vietnam's current approach to creating top-tier universities has emphasized inputs such as money and infrastructure at the expense of other, intangible factors that are no less determinative of outcomes—namely, good institutional governance. Merit-based personnel systems, an ironclad commitment to academic freedom, and a high degree of autonomy in operational and academic matters are prerequisites for universities to achieve research and teaching excellence, as is demonstrated by the examples of elite universities in China and India. These principles of governance are applicable all academic institutions, but they are most critical at research universities, which link countries to global knowledge systems and strive to attract and train a nation's best scholars and scientists.

This second paper looks beyond the apex to suggest a system-level policy framework for designing and implementing a modern, expanded, quality system of higher education in Vietnam. Our analysis is motivated by the pressing, complex questions confronting higher education policymakers today: what is the tradeoff between expanding enrollment and improving educational quality? What is the role of the market in higher education? How can universities and colleges equip students with the skills to support Vietnam's development? How are standards enforced in a system of nearly two million students and four hundred universities and colleges, and can decentralization help? What will drive the transition from a state controlled system of higher education to a state supervised system of autonomous institutions, as conceived by Resolution 14?⁶ These questions are the crux any system-level reform effort.

It is often said that Vietnam has an advantage in being a late mover in its socioeconomic reforms because it is able to learn from international experience. This is certainly true in higher education. For many countries it has taken decades of concerted effort to build the diverse network of institutions needed to deliver both mass access and excellence. Higher education reform is a long process, and Vietnam needs to base its own reforms on a strong understanding of how reforms have proceeded in other countries. Policy documents have already identified many of the elements of systemic reform that

⁵ *The Intangibles of Excellence: Governance and the Quest for a Vietnamese Apex Research University*, June 2009. Available at <http://ash.harvard.edu/extension/ash/docs/Apex.pdf>.

⁶ Resolution 14 set three key goals for transforming the relationship between the state and universities: "Transfer public universities to a mechanism of autonomous operations"; "End line ministry ownership [of universities], create a mechanism to represent state ownership in public universities"; "Focus state management on: building and directing the implementation of development strategies; developing the quality assurance and accreditation system; perfecting the legal environment; increasing oversight and investigation; macro-regulation of higher education; and meeting the country's human resources needs for every era."

international experience suggests are important, including autonomy, strong accreditation schemes, and community and industry participation. This paper seeks to enhance that understanding by drawing on international experience in a range of settings that are relevant to Vietnam's case.

The Ministry of Education and Training has already taken some concrete steps to begin the process of reform. It has increased transparency requirements, particularly through the Three Disclosures policy, and has delegated greater control to universities over some financial and operational decisions. Education systems and institutions change slowly, and it will take time to see and evaluate the impact of these initial steps. We observe, however, that reform efforts generally emphasize campaigns and short workshops for university administrators, rather than the deep structural transformations to management and personnel policies that are needed to achieve lasting institutional change. Meanwhile, the alarming reality is that the system is developing in a different direction, as has been observed by Vietnamese public opinion and affirmed in the National Assembly's 2010 investigation into higher education.⁷ This paper finds that the prevailing trends in Vietnamese higher education are commercialization—manifested by crowded public university classrooms, revenue-generating part-time programs, and profit-seeking private institutions—and decentralization, in which responsibility is being shifted to local governments and universities before appropriate accountability mechanisms have been put in place to ensure the public interest.

Vietnam needs a workable strategy based on valid assumptions to guide the making of specific policies on issues from accreditation to the role for private universities. Yet, despite the Ministry of Education and Training's drafting and redrafting of extensive strategy documents, this paper finds a wide gap between Vietnam's objectives and the policy actions needed to achieve them in a number of key areas. Below are the paper's main conclusions for Vietnamese higher education policymakers.

First, a defining characteristic of a well-functioning mass system of higher education is a clear hierarchy of higher and vocational educational institutions oriented toward meeting diverse student and labor market demands. Research universities sit at the top of the differentiated system, filling society's need for top tier science and scholarship. Underneath, a network of two, three, and four year college and university programs—differentiated by mission, not by quality—provides access to large numbers of students. International experience demonstrates that the key to expanding enrollment to mass levels is to channel most new students into professionally-oriented institutions, often in community or technical colleges. Different types of schools are linked together into a coherent, integrated system that allows successful students to transfer up to higher levels. Differentiation reduces the waste and redundancy caused by the proliferation of new universities, and eases pressure on public budgets.

⁷ See "Universities are chaotic, nobody is responsible" ["Đại học lộn xộn, không ai chịu trách nhiệm"] *Tuổi Trẻ*, 8-6-2010.

Vietnam has recognized the development of differentiated, regional networks of colleges and universities as a goal in multiple policy statements. Resolution 14 set a target for 70-80% of students to be enrolled in professionally-oriented programs by 2020. But to date there are no specific policies or financing structures in place to recognize and foster the unique strengths of different kinds of institutions. On the contrary, the chief incentive for vocational schools, colleges and universities is to generate revenue. The consequence is indiscriminate upgrading of vocational schools to colleges and colleges to universities, and planning for the development of new universities in every province. The reality is that most provinces do not have the resources or the need for their own university, but that all could benefit from a network of dynamic, locally-engaged community colleges and vocational institutions. However, in Vietnam today, most of the expansion in student enrollment is taking place through part-time programs. Up to 50% of all Vietnamese students are studying in revenue-generating part-time (*không chính quy*) university degree programs, which are largely concentrated in economics and business-related disciplines and have much lower standards than full time programs.

We observe that China and other countries in Southeast Asia have focused their resources and attention on a small handful of top apex universities, while devolving responsibility for the rest of the system to the market and local governments. Vietnam exhibits a worrying tendency in the same direction. Vietnam plans to borrow \$500 million from multilateral lenders to build four “new model” universities, intended to reach the top 200 in an unspecified international ranking table within a decade. However, there is no policy agenda to develop higher quality regional universities and technical colleges or vocational schools; the strategy seems, rather, to be to rely on the market to develop these tiers. Research universities are a critically important component of higher education systems, but a single-minded focus on the apex will leave the great majority of university and college students stuck in low-quality, second-rate programs. Though they do not bring the international prestige associated with top-tier apex universities, regional universities and colleges open access to disadvantaged students and regions, and they educate most of Vietnam’s workforce. Non-research universities and technical colleges have helped to create a skilled workforce in countries where existing universities were viewed as non-responsive to industry needs (Ireland, Finland) or where graduates from elite universities often went abroad (India) instead of remaining in the national labor force. Vietnamese policymakers should not neglect these lower levels of the system in their reform efforts.

A second theme of the paper is that shifting from state control to state supervision of higher education does not imply diminishing the state’s importance. The state is the lead actor in guiding the emergence of a well-designed, modern higher education system. Countries, particularly in Western Europe, that have transitioned from state control to state supervision have done so by creating regulatory and incentive frameworks to support institutional accountability and autonomy. These policies, which include quality assurance and accreditation schemes, strong university governing boards, and performance-based funding mechanisms, form the architecture of a competitive, autonomous higher education system with ever-improving standards. For Vietnam to

make this transition, the state will need to perform a more limited number of planning and oversight functions, but more effectively than it currently does. A recent OECD study about China observed that the Chinese higher education system is “under-planned at the strategic level” but “over-regulated at the operational level.”⁸ The same is true in Vietnam. Key academic and operational decisions about who can study, who can teach, and what can be taught, are decided by the state. Meanwhile, execution of key state functions, such as planning for a rationally differentiated network of institutions and enforcement of minimal quality standards, is very weak.

This paper argues that decentralization of oversight to lower levels of government is not the answer, either. Vietnam’s 63 provinces and cities are small units, and provincial governments have limited capacity and expertise. Universities are complex institutions that teach specialized disciplines. It is unrealistic to expect local departments of education and training, whose mandate has long been inspecting primary and secondary schools and administering exams, to take on the responsibility for overseeing universities. More robust system-level planning and oversight—at a national or regional level—must go along with more autonomous universities. The absence of an appropriate oversight framework in Vietnam has resulted in a situation in which institutions have more autonomy but fewer incentives to improve quality.

A third point is that, as many Vietnamese lawmakers and commentators have observed, “socialization” is not a catch-all solution for the country’s problems in higher education.⁹ There exists in Vietnam significant confusion about the role of the market in higher education. This paper distinguishes between a “market” in education and the “commercialization” of education. A well-functioning market in higher education is a good thing. It is characterized by healthy competition between institutions for students and financing, within a framework of standards. Modernizing university governance for a mass education system requires acknowledging the role of the market, and setting up the appropriate regulatory structures for it to function. Commercialization, on the other hand, implies the buying and selling of training and degrees with a profit motive. In Vietnam, the market regulatory framework is still in its earliest stages of development; while commercialization is the predominant trend in both the public and private education sectors. In many cases, what the government calls “socialization” is synonymous with commercialization.

For-profit private education can play a constructive but limited role in a differentiated higher education system. For-profit providers can provide quality training in computer

⁸ Michael Gallagher et al, “OECD Reviews of Tertiary Education, China”, 2009.

⁹ At a conference in March 2010, Deputy Đào Trọng Thi, chairman of the Committee on Culture, Education, and Youth of the National Assembly, said, “I think that socialization is a very big issue that needs to be more carefully researched and requires specific policies from the highest levels. The National Assembly needs to come to a consensus and clarify the meaning of the terms ‘for-profit’ and ‘not-for-profit.’” PH. Đông - TH. Hùng “Renovating higher education – we need a bigger and more thorough perspective” [“Đổi mới giáo dục đại học - Cần tầm nhìn cao hơn, thấu đáo hơn”,] 31/03/2010, <<http://www.sggp.org.vn/giaoduc/2010/3/222190/>>.

skills, foreign language, business administration and other vocational subjects. Offering courses in these fields does not require much capital investment in the form of facilities or expert faculty. The potential market is also exceptionally large, and entry qualifications are low. However, few for-profit institutions in Vietnam will have enough resources to offer courses in the natural sciences and engineering. They will not be interested in the social sciences and humanities because the market is too small. Furthermore, the profit motive will drive these institutions to accept students based on their ability to pay rather than scholastic aptitude or merit. Seen in this light, decisions to equitize public universities or to rely heavily on for-profit private universities have serious consequences for Vietnam's ambitions to build a quality higher education system that meets the needs of the economy and society.

Fourth, infeasible or contradictory quantitative targets do not advance the government's reform agenda. Many of the government's targets are worthy objectives, but are not backed up by the policies or resources that would be needed to execute them; while others are contradictory, such that the pursuit of one goal undermines another. For example, the government aims to raise enrollment in engineering and technology from today's 21% of all students to 35%. In the sciences it wants to increase enrollment from the current 2% to 12% of all students.¹⁰ This is an excellent goal, as international experience shows that moving up the value chain in manufacturing and achieving sustained growth in sectors like information technology require a large corps of engineers. OECD and Asian countries that have achieved high levels of enrollment in engineering and technology have done so by vigorously expanding technical colleges and institutes and targeting scholarships and loans for students in these fields.

Yet, Resolution 14 also set a goal to increase enrollment in private higher education institutions to 40% of all students. The increasing reliance on for-profit, private universities is certain to decrease the share of science and technology places relative to business studies and other profitable courses. Currently, private universities operate under a hazy legal framework and are entirely reliant on tuition payments, making it impossible for them to finance the laboratories, equipment and qualified faculty required to introduce technology and engineering courses. This is even truer in the pure scientific fields. More private universities are therefore unlikely to lead to greater access to science and technology education. Science and technology has characteristics of a public good, and without significant government investment, it will be undersupplied by the market.

Policymakers have also tended to be unrealistically optimistic about how much money universities will be able to mobilize from the private sector. Resolution 14 set a target for 25% of all university income to come from science and technology revenues (services, funded research, patents, etc.) by 2020, which MOET adjusted to 20% in its draft *Proposal to develop education 2009-2020*.¹¹ The current level is only 3.4%. Diversifying

¹⁰ *Decision 121/2007/QĐ-TTg* and Standing Committee of the National Assembly, Report 329/BC-UBTVQH12.

¹¹ *Strategy to develop education 2009 – 2020, 14th draft*.

financing is an important goal—the state budget cannot bear the entire financial burden for higher education, but families’ ability to pay is also limited. However, the government needs to be realistic about its expectations for industry contributions. In advanced countries, attracting patent revenue and commercially funded research depends on advanced intellectual property rights and technology transfer regimes, a high degree of operational autonomy, and high quality research that can attract resources from the business sector. Universities that generate high revenues from patents and industry collaboration are leaders in medical and hi-tech fields. In Vietnam, however, companies do not yet generate significant demand for science and technology. Vietnamese businesses compete mostly on cheap labor and resource exploitation. On the supply side, universities are not a source of innovation, as indicated by Vietnam’s abysmal patent and international publication records. Absent dramatic institutional transformation in universities and modernization of Vietnam’s central-planning era scientific research apparatus, a significant increase in private science and technology revenues is unlikely to materialize.

Finally, this paper finds that a lack of resources is not the main barrier to the development of the Vietnamese education system as a whole. By most measures, Vietnam is already spending heavily on education. Vietnam’s real spending on education at all levels (primary, secondary, and tertiary) rose by 125% between 2001 and 2008. In 2008, Vietnam allocated 20% of the state budget to education, which is comparable with its middle-income neighbors, and well above the 16% East Asia Pacific regional average. However, education expenditure is inefficient and is beset by structural imbalances, particularly in two respects. First, too little money is allocated for higher education as a percentage of the education budget: Vietnam devotes around 12% of its education budget to higher education, while globally, spending on higher education often accounts for one-quarter to one-third of total expenditure. Second, spending has a strong bias in favor of capital investment over current expenditures, reflecting an overemphasis on the “hardware” of education—buildings and infrastructure—at the expense of the “software,” including human capital. In the region, the average share of current expenditures in total education spending is 86%, while 14% goes to capital investment. In Vietnam in 2008, the ratio was 72% for current expenditures and 28% for investment.¹²

It is widely recognized that there is a great deal of waste and inefficiency in education spending, but schools are never subjected to full financial audits. Instead of forcing discipline and transparency onto schools, the government is raising tuition rates at all levels, from primary school through university. Yet, this paper demonstrates that if resources were spent more efficiently, public universities and colleges could be paying their faculty higher salaries today. The implication of this analysis for higher education is that the most urgent need is not to increase resource levels but to change the pattern of expenditure and increase the efficiency of resource use.

¹² MOET, *Proposal to renovate education finance 2009-2014*.

To summarize, higher education policy in Vietnam is characterized by a large and growing gap between the government's ambitious plans and targets and the real situation on the ground. This disconnect between target setting and starting point is by no means unique to higher education policy or to policy making in Vietnam. Institutional reform is a difficult and often painful process that entails overturning long established patterns of rewards and advantages. It is not unusual for politicians and government agencies to prefer inspiring visions of an imagined future to the grim reality of a system that is still in the early stages of reform. Nevertheless, success depends on the capacity and willingness of Vietnam's policy makers to set realistic goals and to formulate workable strategies to achieve them, based on an objective assessment of the present situation and a detailed understanding of international experience.

There are policy solutions to the challenges Vietnam faces in higher education, and the government has identified all of them. Nearly every point we mentioned above can be found in government documents and statements. Yet, five years after the promulgation of Resolution 14, little progress has been made in implementing the revolutionary changes it envisioned. Ultimately, Vietnam's bold visions will only take on meaning if the government summons the political will to break with the status quo and aggressively pursue its goal of a large, modern, quality higher education system that serves Vietnam's development.

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Beyond the Apex:

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... [H]olistic analysis of higher education systems has rarely been attempted. It does not mean reverting to centrally planned systems—far from it. Instead, it offers the ability to balance strategic direction with the diversity now found in higher education systems across the developing world. This diversification—a reaction to increased demand—has brought new providers (especially from the private sector) into the system and encouraged new types of institutions to emerge. It promises increased competition and, ultimately, improved quality. Unfortunately, this promise will not be delivered if diversification continues to be chaotic and unplanned.

The Task Force on Higher Education and Society, *Higher Education in Developing Countries: Peril and Promise*.

Introduction

Vietnam has set the ambitious development goal of becoming an industrialized nation by 2020. Higher education will be central to developing the skilled, dynamic workforce needed to realize this aspiration. The Ministry of Education and Training and the National Assembly are currently formulating a series of major tertiary education reform policies to upgrade quality, expand access and renovate state management. This paper seeks to inform this policymaking process by suggesting a guiding framework for the systemic reform of Vietnamese higher education. Specifically, we argue that the concept of a “rationally differentiated” system, characterized by a clear hierarchy of tertiary institutions oriented toward meeting diverse social and labor market demands, can serve as an organizing principle to translate goals into effective policies. Though Vietnam, like many countries, has focused attention on the development of elite research universities, this paper is concerned with higher education *systems*—the networks of institutions, including regional universities, colleges, professional schools, and private universities, which educate the majority of the country’s workforce in fields such as engineering, healthcare, agricultural science and business. An adaptable and quality higher education system able to produce ever-growing numbers of capable graduates can help Vietnam to maintain and build on the impressive gains it has made since *đổi mới*. Conversely, a stagnant, low-quality system would threaten to derail Vietnam’s ambitions.

Vietnam’s higher education system is bursting at the seams after fifteen years of rapid growth. Between 1990 and 2008 the system absorbed a thirteen fold increase in students and more than a threefold increase in higher education institutions. For much of this

period, reforms to governance, at the system and institutional levels, were minor, although over the past two years the pace of policy reform has picked up markedly. Insatiable social demand has created a booming market in higher education that includes new types of public university programs as well as private providers, but this market operates under an incomplete legal framework and is overwhelmingly commercially-driven. Accountability and quality standards are weak, particularly in non-standard (*không chính quy*) programs, which account for up to half of total enrollment. As a result, Vietnamese society is questioning the sustainability of the current model for expansion. In February 2010, Prime Minister Nguyễn Tấn Dũng issued a directive calling for a new emphasis on improving quality and management in the development of higher education.

VOICES | Prime Minister Nguyễn Tấn Dũng

1. It is necessary to thoroughly realize: expanding the scale of higher education must proceed in tandem with assuring and elevating the quality of training. Resolutely eliminate the lack of oversight of quality. Create a mechanism and a motivation in state management of education institutions in order to execute the target of ensuring and elevating the quality of training.
2. The renovation of higher education management including state management of higher education and the management of training institutions will generate breakthroughs leading to the comprehensive renovation of higher education, from then assuring and elevating training quality, and sustainably elevating the efficiency of scientific research.¹³

It is clear that Vietnam will have to continue to expand enrollment and build new institutions: university enrollments still remain low compared to countries in the region,¹⁴ with only 15% of the more than one million students who take the university entrance exam gaining a spot in university. But, as observed in the Task Force on Higher Education and Society's remarks above, this expansion will need to proceed according to a carefully designed strategic vision.

Economic transformations are placing growing demands on Vietnam's higher education system. Vietnam has achieved growth by shifting labor from agriculture into higher productivity occupations in industry and services. Beyond this initial stage of economic and human development, the presence of skilled technicians and managers becomes more important.

Human capital has become a bottleneck in Vietnam's development. Foreign firms consistently report encountering difficulties with human resources in Vietnam, which has

¹³ Prime Minister "Decree on Renovating University Management 2010-2012" 296/CT-TTg, 27/02/2010.

¹⁴ According to UNESCO, in 2005 gross tertiary enrollment was 16% in Vietnam, compared to 21% in China, 32% in Malaysia, and 43% in Thailand.

driven some to scale back their investments.¹⁵ But a skilled labor force is not just a requirement of foreign investors like Intel and Foxconn; it will also be critical to making possible the emergence of large, competitive, domestic firms that will drive Vietnam's growth and spearhead integration into international production chains. The Vietnam Business Forum, a gathering of local and international businesses convened by the Ministry of Planning and Investment and the International Finance Corporation of the World Bank Group, consistently cites skilled labor supply as a major problem. Indeed, in its most recent position paper, the VBF observed that according to surveys, the human capital shortage is felt most acutely by Vietnamese firms.¹⁶

VOICES | Professor Phạm Duy Hiền*

Since embarking on the process of market-oriented reforms more than two decades ago, Vietnam's per capita income is poised to surpass the 1,000 USD threshold, enabling the country to claim "lower middle income" status. The fact remains, however, that the Vietnamese economy is overwhelmingly concentrated in low value added sectors such as agriculture, natural resource exploitation, and light manufacturing... If Vietnam is to move up the value-added ladder and integrate into global supply chains it will need a much larger corps of skilled workers, especially in science and technology related fields, than its university system is currently capable of producing.¹⁷

*Vietnam Atomic Energy Agency

To take just one example of the role that higher education will play in Vietnam's development progress, Vietnam aims to become a "strong nation in information technology" over the next decade,¹⁸ but the lack of qualified engineers and programmers has been a barrier to Vietnam's hundreds of small IT firms growing into larger companies.¹⁹ International experience from India to Ireland clearly demonstrates that a large cohort of mid-level engineers provides the labor supply for a successful IT industry.²⁰ While India's Institutes of Technology rank among the most famous institutions of higher learning in the developing world, it was actually the large number of

¹⁵ John Ruwitch, "Firms struggle to hire skilled professionals in Vietnam," *Reuters*, May 12, 2009. <<http://www.reuters.com/article/idUSPEK46232520090513>>. Accessed 13 May, 2009.

¹⁶ Vietnam Business Forum (2008), Report on Business Environment Sentiment Survey 2008., (*Proceeding for the Vietnam Business Forum*, Hanoi, Vietnam, 1 December 2008).

¹⁷ Phạm Duy Hiền, "A comparative study of research capabilities of East Asian countries and implications for Vietnam", *Higher Education* (forthcoming) 2010.

¹⁸ Interview with Minister of Information and Communication Lê Doãn Hợp, "Information and Communications will be the spearhead to open the way" ["Thông tin và Truyền thông sẽ là mũi nhọn mở đường"], *Thanh niên*, 17 February 2010. <http://www.thanhnien.com.vn/News/Pages/201008/20100217093545.aspx>

¹⁹ Xuân Thi, "Vietnam software industry: Recognizing potentiality" ["Công nghiệp phần mềm Việt Nam: Nhận dạng tiềm năng"], *Sài Gòn Tiếp Thị*, 29 August 2009, <http://sgtt.com.vn/Thoi-su/Khoa-giao/56392/Cong-nghiep-phan-mem-Viet-Nam-Nhan-dang-tiem-nang.html>

²⁰ Ashish Arora and Alfonso Gambardella, ed., "From Underdogs to Tigers: rise and growth of the software industry in Brazil, China, India, Ireland, and Israel", (Oxford: Oxford University Press, 2005).

graduates from second tier technical colleges who provided the large pool of skilled labor that allowed India's software industry to take off.²¹

The development of higher education also has important social and political implications. Higher education opens the way to higher wages and a better standard of living, but poor families in Vietnam are much less likely to proceed to college or university.²² If current trends persist, Vietnam may find itself in the situation of its Southeast Asian neighbors, where elites exit the system and the poor are left to choose among second-rate domestic institutions. The ever growing numbers of self-financing undergraduate students going abroad is a harbinger. Perhaps most fundamentally, rising demand for tertiary education and growing public dissatisfaction with the current system have made reform a political imperative. As a senior Vietnamese policymaker observed to the authors, "I used to think that Vietnamese farmers wanted more land and better farming technologies...now I know that what they want more than anything is better education for their children." For millions of Vietnamese households, the fairness of the education system is a key factor in their perceptions of the government's efforts to achieve growth with equity. The government recognizes this imperative. In April 2009, the Politburo adopted a resolution stating that "education and training are not yet truly the top national policy priority." This was a startling admission in light of the many times in recent years that officials invoked the phrase "education and training is the top national policy priority."²³

Transitioning to a mass education system with modern governance structures is a complex process which poses serious challenges for all governments. The Vietnamese government has taken important steps to begin the process of reform. Resolution 14, promulgated in 2005, acknowledged the weaknesses of the current system and called for "fundamental and comprehensive reform." The last five years have seen a host of new policy initiatives touching on every aspect of the system; these efforts continue in 2010, with a particular focus on system-level management and quality issues. It is to the government's credit that it has allowed extensive and remarkably open public debate about the future of the country's higher education. This debate has generated a large body of policy-oriented scholarship on higher education reform written by Vietnamese and international scholars.²⁴

However, we observe a number of tensions in the policymaking process that threaten to undermine Vietnam's efforts to revolutionize higher education. These are listed below:

²¹ Devesh Kapur, "The Causes and Consequences of India's IT Boom", *India Review* 1.2, 2002, p. 97.

²² According to VHLSS 2004, the participation rate of the wealthiest quintile of Vietnamese society in higher education (40%) is around four times that of the two poorest quintiles (around 10% each). From The World Bank, "Vietnam: Higher Education and Skills for Growth", 2008, p. 24.

²³ Conclusion No. 242-TB/TU, 15/4/2009.

²⁴ Two recent English-language studies are The World Bank, *Vietnam: Higher Education and Skills for Growth* (Report No. 44428-VN, May, 2008); and Grant Harman et al., eds. *Reforming Higher Education in Vietnam: Challenges and Priorities* (The Netherlands: Springer, 2010). Vietnamese language studies are prolific and comprehensive, appearing in newspaper articles, interviews, white papers, and reports. This paper draws from writings by former Vice-President Nguyễn Thị Bình and National Assembly representatives including Deputy Nguyễn Minh Thuyết, as well as Professor Phạm Phú, and others.

- (1) **Lofty targets vs. weak implementation:** Vietnam has set a series of ambitious targets for building a tertiary system that is large, diverse and research-oriented and that adheres to international standards. However, these targets tend to be heavily quantitative and are often infeasible or incompatible with other, qualitative goals. Targets often lack any accompanying roadmap for implementation. To take one example, enrollments in private institutions are slated to rise to 30-40% of enrollment by 2020 as compared to 12% in 2009. However, policymakers have been slow to clarify the legal framework for private institutions; and as a result most private institutions operate as profit-seeking businesses, largely offering a mix of economics/business, foreign language, and computer courses. Lack of resources inhibits private institutions from offering technology and engineering courses. Yet, another target (Decision 121/2007/QĐ-TTg) envisions engineering and technology enrollments rising to 35% of total enrollment by 2020 as compared to 21% in 2009. Most OECD and newly industrialized Asian countries have somewhere between 20-30% of enrollments in engineering and technology;²⁵ and countries that achieve the high end of the range have vigorously pursued policies to promote technical education, such as targeted scholarships and loans and expansion of polytechnics. Policymaking needs to start with a realistic assessment of the conditions on the ground.²⁶ In some cases, the gap between targets and reality is so large no feasible policy can close it. Unrealistic targets engender cynicism and therefore tend to undermine the government's authority and capacity to promote change.
- (2) **Decentralization vs. oversight and strategic planning:** In higher education, as in other sectors of the economy and society, decentralization is a cornerstone of the government's reform agenda. The term is used as a catch-all to describe devolving responsibility for regulation, financing, and management to smaller administrative units, principally to academic institutions and provincial governments.²⁷ Different dimensions of decentralization should be disaggregated. On the one hand, universities need autonomy over management, financial, and academic decisions to be effective and dynamic. Stronger university councils play a role in the transfer of responsibility from the state to universities. Local higher education institutions with a mission for community education will only become responsive to local needs if they have deeper

²⁵ World Bank, Vietnam: Higher Education and Skills for Growth, Report No. 44428-VN, June 2008, 26.

²⁶ The recent evaluation conducted by the National Assembly group on "Implementing policy and law for establishing schools, investing and ensuring quality of training in university education" to serve as a foundation for redrafting the Education Law is an encouraging example of this sort of facts-based policymaking. See interview with Nguyễn Minh Thuyết, "We should not increase the number of public universities" ["Chưa nên tăng trường đại học công lập"], Tuổi Trẻ, 1 February 2010, <http://tuoitre.vn/Chinh-tri-Xa-hoi/361781/Chua-nen-tang-truong-DH-cong-lap.html>

²⁷ A newspaper reported in the fall of 2009 that in the revisions of the Education Law, "Testing and oversight of efficiency and quality in universities' and colleges' operations will be undertaken by the people's committees of every level [provincial, district], and founded on the regulations promulgated by the Ministry of Education and Training." *Hài Hà*, "Will university oversight no longer be the Ministry's 'privilege'?" [Giám sát đại học sẽ không còn là "đặc quyền" của Bộ?], *VnEconomy*, 3 October 2009, <http://vneconomy.vn/20091003071959917P5C11/giam-sat-dai-hoc-se-khong-con-la-dac-quyen-cua-bo.htm>

linkages and responsibilities to the local economy and society. In these respects decentralization is the right policy direction. However, in other respects regional and national frameworks are critical. Enforcement of minimum academic and organizational standards will have to come from above the provincial level—each of Vietnam’s 63 provincial governments does not have the human or financial resources to oversee their own sub-systems. A second issue is strategic planning. Effective tertiary education systems are composed of an integrated network of institutions with distinct but complementary missions to meet society’s diverse needs. Each province does not need its own university; what’s more, the public budget cannot support a university in each province. The effects of de facto decentralization on education planning are already visible. Many tertiary institutions do not have a clearly articulated mission. The widespread upgrading of specialized three year colleges into universities is an example of the absence of strategic vision. Current trends suggest that the higher education system would benefit from more, not less, active and effective oversight and strategic planning. Because Vietnam does not have a tradition of strong regional (i.e. supra-provincial) bodies, this oversight will likely need to be national in scope.²⁸

- (3) **Training for current vs. future social demand:** The Vietnamese government seeks a higher education system to “train in response to social demands.” Policymakers’ efforts have focused on ascertaining current business needs and encouraging institutions to offer training programs in these fields. This is an important pursuit. Market-driven vocational training can be enhanced by taking a bottom-up approach to governance at technical and vocational colleges with a mission for filling immediate labor force needs.²⁹ However, there is a second and long-term form of demand that requires government intervention: future demand for science and technology. As of 2005, 50% of Vietnamese students were enrolled in the two fields of education and economics/business,³⁰ while enrollment rates in engineering and technology and especially natural sciences are still low. Science and technology have significant public good qualities. Current business demand does not reflect the skills needed to move Vietnam into new knowledge-based industries ten years down the road.

²⁸ The theme of simultaneous need for more local input and improved top-down standards is raised in the World Bank’s *Vietnam Development Report 2010*. The report distinguishes between downward accountability (accountability to citizens for services) and upward accountability (adherence to laws, regulations, standards). It observes “Both forms of accountability are needed...the defining features of upward accountability are hierarchy and administrative rewards and punishment, while the defining features of downward accountability are feedback from clients, information for clients, and participation in decision making.” Available at <http://www.worldbank.org/vn/vdr>.

²⁹ A recent paper on Vietnam’s labor force suggests that Vietnam’s approach to vocational training tends to be top-down and supply-driven, rather than industry-driven, “and as a result do[es] not result in skilled, employable workers.” Ian Coxhead et al., “Getting to Work: RESEARCH TOPIC #8: Labour Market, Employment, and Urbanization in Viet Nam to 2020: Learning from International Experiences,” Project 00050577: Support for the Formulation of Vietnam’s Socio-economic Development Strategy (SEDS), 2011-2020, The Asia Foundation, December 2009.

³⁰ The most recent data indicate that 38% of students are in economics, law, or other social sciences, and 20% in education. National Assembly Report No. 329.

- (4) **Commercialization vs. the public interest:** The government is passing more responsibility for financing higher education to society and the private sector. The rise in tuition fees is one manifestation of this trend. The growing number of private education institutions is another. The commercialization of education programs by both private and public institutions is a third. For-profit programs can inject needed competition into the system, and can provide certain forms of vocationally-oriented training. However, education is susceptible to pervasive market failures and the state must intervene to encourage the market to provide certain services that society deems desirable, or to provide these services directly through public provision. Intervention can include strategic direction and planning, the funding of science-related instruction and research, ensuring social equity, improving market information and actively regulating quality. The relevant question is therefore not state versus private, but instead the structure of incentives facing both public and private institutions.
- (5) **State control vs. supervision:** The state has maintained tight control over management and academic affairs in an understandable effort to curb the system's chaotic expansion; until recently, however, it has not imposed standards for institutional accountability and quality. Transitioning to a mass system of higher education will require abandoning the "asking-giving" (*xin-cho*) framework and transitioning to the role of impartial regulator. Whether officially acknowledged or not, there exists a booming market for education in Vietnam. Like any market, education needs a rational regulatory structure to operate effectively, within which institutions compete for students and funding. Under a state supervised system, the state has fewer functions, since institutions take responsibility for their own internal organization and programs, but it has to perform those functions more effectively. These include ensuring minimum quality standards to protect consumers, providing overall steering, and investing in research and education that the market will not provide.

Resolving these tensions will require a strategic approach to reform that matches ends—overarching objectives and principles—to means—the concrete policy actions and processes needed to achieve them. In Vietnam, education policymaking tends to conflate the means with the ends; strategies containing detailed targets and regulations are drafted and redrafted, but the individual strands of the regulatory framework do not form a coherent strategy or vision, meaning that individual policies often contradict one another.

This is where international experience becomes relevant. Vietnam can learn much from other countries' experiences—positive and negative—about translating goals (such as an expanded private education, increased S&T enrollments or tertiary education to support nascent software industries) into effective policy actions. As the Task Force quote at the beginning of this section suggests, none of the tensions mentioned above is unique to Vietnam. It is remarkable that in developed and developing countries alike, reforms have taken very similar forms in responding to the common pressures of growing student demand, the exigency for higher education to be market-relevant, and pressure on state

budgets.³¹ This paper will draw from examples in China, Hong Kong, India, Ireland, Malaysia, Turkey and the United States, among others.

The paper proceeds in four parts. Part one proposes a set of organizing principles including differentiation, roles for the market and the state, and demand-driven training, to help make sense of the complex questions that arise in the discussion of system-level higher education reform in Vietnam. Part two takes stock of the current situation in Vietnam, focusing on the system's current shape and size, quantitative and qualitative policy planning initiatives, and education financing. Part three highlights international experiences in specific policy and regulatory areas that could provide guidance to policymakers designing Vietnam's reforms. Issues considered in detail include stratification, the development of technical colleges, regional linkages, accreditation and internationalization, financing, and the role of private providers. Part four assesses the political challenge facing Vietnam in moving from goals to implementation of comprehensive reform and advances a set of policy recommendations.

Four main appendices are included. Appendix 1 is a testimony from Professor Võ Tòng Xuân, founder and former rector of An Giang University, that illustrates the opportunities and constraints faced by a Mekong Delta regional university in the contemporary Vietnamese higher education system. Appendix 2, written by Professor Philip Altbach of Boston College, examines aspects of India and China's transitions to mass tertiary education systems and the relevance of these cases to Vietnam. Appendix 3 addresses the relationship between economic growth and higher education and the role of tertiary education in upgrading Vietnam's competitiveness. Appendix 4 is a summary of *The Intangibles of Excellence: Governance and the Quest for a Vietnamese Apex Research University*, written by the New School and the Harvard Kennedy School in June 2009.

³¹ See Philip G. Altbach, "The Logic of Mass Higher Education" *Tertiary Education and Management* 10 (Spring, 1999), pp. 107-124; Or D. Bruce Johnstone, *The Financing and Management of Higher Education: A Status Report on Worldwide Reforms*, (paper presented at the UNESCO World Conference on Higher Education, held in Paris, France on October 5-9, 1998), <http://www.worldbank.org/html/extdr/educ/postbasc.htm>

Part One: Important Concepts for Reform

I. *Rational Differentiation: A Guiding Principle*

A key insight from The Task Force on Higher Education and Society's *Peril and Promise* is that effective higher education is characterized by rational differentiation of the system in terms of the mission of individual institutions and groups of institutions. Elite research universities, regional universities, professional schools, teacher's training colleges and community colleges all have their role to play, and each is essential to the creation of a healthy higher education "ecosystem" that meets society's diverse needs. The basic structure of a differentiated system is a pyramid, with a selective research-intensive sector at the top and a mass system of comprehensive universities and technically or vocationally oriented colleges, dedicated to educating large numbers of students, at the base. Most students are channeled into polytechnics, community colleges, teaching-focused universities, and distance or continuing education programs. These middle and lower tier institutions open access to higher education for greater numbers of young people as a national system transitions from "elite" to "mass" or "universal" levels of enrollment.³² A growing number of these second and third tier are private. A differentiated system has a fairly rigid hierarchy of institutions, and fosters competition within institutional classes. Financial sources are diversified. Students are spread across a wide range of academic disciplines. The system is articulated, offering upward pathways for students to progress from colleges to universities and higher degrees. Institutions form a network across provincial lines to share expertise and equipment, and to avoid duplication and waste. Apex universities are connected with other universities and colleges, and the tertiary system is connected to the secondary and primary systems, so that lower levels benefit from the research and output of higher levels.

Differentiation responds cost-effectively to the tradeoff between expanding enrollment to meet social demand and conserving limited public resources. Vietnam is seeking to improve its scientific research capacity by developing apex universities. It is in the public interest for top universities to teach and conduct research in a wide range of disciplines, including the natural sciences and cultural studies, even though students shy away from the natural sciences because of unclear job prospects. But governments cannot afford to educate all students in public, research-oriented universities. A research-oriented apex depends upon a strong mass education system underpinning it to educate the majority of students. Large, accessible and competent second and third tiers providing quality technical and professional education reduce pressure on research universities. Without them, it becomes difficult to make a political case for high concentration of resources at

³² These terms were first used by Martin Trow, an American sociologist who argued that traditional research university systems are able to accommodate expanding student enrollment of up to 15% of the age cohort, but that after that point higher education systems have to undergo structural changes to accommodate larger numbers of students. Trow, "Problems in the Transition from Elite to Mass Higher Education" in OECD, *Policies for Higher Education*, Paris: OECD, 1974

the apex.³³ In the words of the Task Force, “A stratified system is a hybrid that marries the goals of excellence and mass education, allowing each to be achieved within one system and using limited resources.”³⁴

A single institutional type cannot meet the spectrum of social and economic demands placed on higher education. A wide range of functions is now expected from tertiary institutions: education, research (both basic and applied), international knowledge transfer, social inclusion, local and regional development, and support for civil society.³⁵ Politicians and citizens have high expectations of tangible returns: “There is a coincidence of greater community needs, greater technical capacities and greater social expectations (but not necessarily greater resources).”³⁶ Mission differentiation responds to these multifaceted demands by helping institutions to avoid overload and work to their comparative advantage. Technical colleges and research universities serve different student bodies and have different sets of goals, but they are equally crucial to an excellent higher education system.³⁷

Structural changes in the economy necessitate differentiation of institutional mission. The division of labor associated with industrialization stimulates demand for a more varied set of skills, such as mechanical, chemical, electronic and civil engineering, management, accounting, finance, marketing, information, and communications services, alongside continued demand for traditional specialties like medicine. More sophisticated management and administration of larger organizations and firms requires competency in teamwork, problem solving, creativity and analytical thinking. There is at once increasing demand for specialization and a need for general knowledge and skills that allow people to keep up with rapidly advancing knowledge and technological change. The Task Force says, “Institutional differentiation is a logical response to the increased specialization and importance of knowledge. In many cases, both new and reformed institutions can best serve the public interest by focusing on a well-defined set of goals for a particular set of students.”³⁸

Differentiation and articulation can also advance social equity. In an articulated and interconnected system, lower levels serve as stepping stones to further education. There are multiple entry and exit points. Not all students need or have the ability to be educated at a research university—but good students who for reasons of family finances or preparation cannot directly enter university should have the opportunity to enter junior

³³ Philip Altbach, “Empires of Knowledge and Development,” in *World Class Worldwide: Transforming Research Universities in Asia and Latin America*, ed. Altbach and Balan, 2007, p. 5-6. Also see Ted Tapper and David Palfreyman, “Converging Systems of Higher Education?” in *Structuring Mass Higher Education: The Role of Elite Institutions*, 324.

³⁴ Task Force, 53.

³⁵ OECD, 49-50.

³⁶ Michael Gallagher, “The Role of Elite Universities”, The Proceedings of the Third Annual Conference on World Class Universities, November 2009, p.84.

³⁷ David E. Bloom and Henry Rosovsky, “Higher Education and International Development,” *Current Science*, Vol. 81, No. 3, 10 August 2001, <http://www.ias.ac.in/currsci/aug102001/252.pdf>.

³⁸ The Task Force, 35.

college and then transfer up to higher levels. One feature of expanding access to a more varied student body is a greater need for flexible study options. Only some people will want or have the capacity to pursue conventional undergraduate and graduate programs. Many will find that their circumstances preclude full-time study. A higher education system that offers a diverse array of part-time, short-term and continuing education will provide worker-students with second and third chances to improve their skills in ways that boost their income and welfare.³⁹ Technology helps institutions to customize their programs for particular student needs.

Differentiation, or dedifferentiation, evolves in response to the external environment, for example consistency of government policies regarding funding and accreditation, and demand factors including student and labor market demand.⁴⁰ Institutional classes with different missions should be differentiated by funding source, regulatory standards, and governance mechanisms. Research universities require more autonomy than community colleges because the former aspire to achieve global standards in research and teaching across a wide range of disciplines. Their governance structures must provide them with the freedom to compete with the world's best and strong incentives to do so. By way of contrast, community colleges deliver a basic curriculum with an orientation towards vocational education rather than research. It is to be expected that their governance mechanisms should make them responsive to the needs of the local community.

A vision of a differentiated system should serve as a cornerstone for Vietnam's transition to a mass higher education system. Although Vietnam's Resolution 14 recognizes the need for a higher education ecosystem and Decision 121 (adopted in 2007 and discussed below) lays out a more concrete vision, at present incentives are not aligned in such a way as to encourage differentiation in terms of greater institutional focus and recognition of the comparative advantage of each institution. There is not a clear division of roles and functions between institutions, and there is a strong tendency toward convergence on programmatic types (universities and part-time programs) and disciplines (economics and business) that yield the most tuition revenue. Vietnamese students are currently concentrated in two disciplines, economics/business and education, with 21% in technology and engineering, and only 2% in natural sciences.⁴¹

Pursuing a differentiated system in Vietnam entails confronting the societal explanations for the enormous student demand for university degrees. One factor is clearly that Vietnamese culture places an extremely high value on attending university. Hiring requirements in the public and private sector also play a role in the phenomenon of

³⁹ World Bank 2003; 2006. Samih W. Mikhail, "The Alternative Tertiary Education Sector: More than Non-University Education", World Bank Working Paper, 2008, p.34 citing Bailey et al 2004.

⁴⁰ Van Vught 157, Neave 1979.

⁴¹ Newspaper reports indicate that within public universities, the number of students in the natural sciences and math is falling as students gravitate toward disciplines they perceive to be more practical. Đ.T.Duy, "Vital professions are losing attraction – Difficult, Dry, Suffering [Những ngành học "sống còn" đang mất dần sức hút - Kỳ cuối: Khó, khô và khổ,] *Tuổi Trẻ*, 25 August 2008, <http://www.tuoitre.com.vn/Tiayon/Index.aspx?ArticleID=333415&ChannelID=13>.

“chasing degrees” (*chạy theo bằng cấp*). Hiring and promotion depends upon having a university degree, along with a host of other credentials (e.g., a second university degree from an in-service program, English and IT certifications).⁴² Young people naturally do not want to limit their future prospects by getting a second-rate degree.⁴³ Culture changes slowly, but a concerted investment in professionally-oriented levels of the system can go a long way toward improving employers’ and students’ perceptions of the quality and usefulness of non-university degrees.

II. A Typology of Institutions

A differentiated system has three essential tiers: research universities, regional universities, and community/vocational colleges.⁴⁴ Alongside these tiers is an array of professional institutions. Each tier is characterized by a web of linkages connecting institutions both within the system—student pathways, shared expertise and equipment—and to external entities—local, regional, national or international.

In Vietnam, tertiary education institutional types have many different names and are overseen by MOET, various line ministries and provincial governments. We should stress here that names are less important than defining characteristics. The following classification is intentionally general. Treating these broadly similar institutional types under a common regulatory framework would help to rationalize Vietnam’s mesh of public colleges and universities.

It should be emphasized that these institutions take different forms in different countries, and there is no universally applicable structure for differentiated systems. The key elements of a three-tiered system are captured in the box below.

BOX | Institutions comprising a higher education ecosystem

Apex research universities. Apex universities are linked internationally and plugged into international currents of knowledge. They perform basic and applied scientific research in a wide range of fields, and achieve excellence in many disciplines. They are highly selective and they educate the country’s best undergraduate students. Many of their

⁴² Hoàng Ngọc Lữ et al., “Degrees are not to blame – the law also discriminates” [Bằng cấp không có lỗi – luật pháp cũng ‘phân biệt đối xử’], *Tuổi Trẻ*, 01 September 2009, <http://tuoitre.vn/Giao-duc/334574/Bang-cap-khong-co-loi.html>.

⁴³ Even studying in a Ministry of Labor (MOLISA) vocational college puts students at a disadvantage relative to students who have a MOET-run vocational college degree. Trịnh Vinh Hà, “Don’t force children to “go to universities one way only – Chasing degrees series” [Đừng bắt con em chỉ “một đường vào đại học” – Diễn đàn Chạy theo bằng cấp bằng mọi giá], *Tuổi Trẻ*, 04 September 2009, <http://tuoitre.vn/Giao-duc/335016/Dung-bat-con-em-chi-%E2%80%99Cmot-duong-vao-dai-hoc%E2%80%9D.html>.

⁴⁴ The government has expressed interest in a binary system of higher education, comprising research-oriented universities and professionally oriented programs. However, the recent focus on top-tier research universities, including the project to build four “world-class” institutions, indicates that the policy direction is toward a more vertically differentiated system, with some apex research universities standing above other universities. This is expressed in Decision 121/2007/QĐ-TTg.

undergraduates continue on to elite graduate programs. Over time, apex universities develop their own strong graduate training programs. In most countries these institutions are public, and largely publically funded; they are also not-for-profit. Apex universities play a leading role in the national education system. They are best placed to promote creative thinking and collaboration about other tertiary levels and the primary and secondary systems.⁴⁵

Regional universities. Regional universities are the heart of a modern higher education system. Their primary mission is to educate large numbers of undergraduate and masters students for entry into the “professional middle class” in fields such as agriculture and forestry, manufacturing, public administration, engineering and education, with an orientation toward local and regional needs.⁴⁶ Regional universities do some adaptive research, helping to disseminate knowledge to the country. These institutions have an explicit practice-oriented mission. Applied science and technology institutions also fall into this category. Most but not all of these institutions are public.

Community colleges and vocational colleges. Two or three-year colleges equip students with mid-level skills for current labor needs. They have strong connections to the local economy and community. They also open higher education to wide segments of the population, particularly lower income students, while providing pathways to higher degrees. Colleges help students enhance their basic skills and knowledge, preparing some students to transfer to university. Colleges often expand access through lifelong learning, in-service education and adult education programs. Given their small size and sometimes remote location, junior colleges can benefit from what the Task Force calls a “learning commons”—a curriculum database, common IT resources and shared equipment.

Professional schools. Professional schools and faculties provide technical education in business, medicine, law and teaching. They can be public or private. Business programs are often established on the basis of international partnerships.

Distance education. Information and communication technology opens access to higher education by reaching students who for geographical, financial or professional reasons cannot attend traditional institutions. Distance education can be a cost-effective means of opening access, but quality standards are often a problem.⁴⁷

III. The Market and the State

In a differentiated higher education system, similar institutional types vie for students and funding in a robust market, while subject to oversight, often by the state, to ensure that competitive behavior is oriented toward the achievement of socially beneficial objectives.

⁴⁵ This may include promoting collaboration among the relevant administrators, undertaking applicable research, and designing approaches to help remedy deficiencies (whether of teaching methods, administration and management, or course content).

⁴⁶ Sachi Hatakenaka, *Higher Education in Turkey for the 21st Century: Size and Composition*, World Bank 2006, p. 36-39.

⁴⁷ Internet-based distance education in Vietnam is largely restricted to international institutions; Vietnamese universities offer part-time “distance” (tù xa) degree programs in the provinces in which the medium is correspondence and occasional meetings with faculty.

The appropriate roles for the market and the state may be the question arousing the most passionate debate in Vietnam.

VOICES | Former National Assembly Deputy Nguyễn Ngọc Trân

Having a market in education is indispensable....Objectively, there exists *supply* and *demand*, so the market for university education has been and is developing in our country. The slowness of state management to face this reality head-on causes confusing problems and hinders the smooth development of the market. [The state] calls on economic actors and individuals to invest in education and gives preferential treatment in taxes and land, but ‘prohibits exploiting education activities for the purpose of profit’ [Item 20 of the Education Law 2005] through many conditions that require “asking” and “giving.”⁴⁸ This is not enough. At first glance it seems close and water-tight, but it is actually contradictory and full of holes.⁴⁹

It is useful to distinguish between the “market” (*thị trường*) in higher education and “commercialization” (*thương mại hóa*) of higher education. A well-functioning market in higher education allows healthy competition between similar institutions for students and financing. Universities compete to establish strong reputations among students and employers in specific disciplines. They try to hire the most creative and productive scholars and produce the best research. Private institutions compete with public institutions. All of this happens under a framework of standards and oversight. Modernizing university governance for a mass education system requires acknowledging the role of the market, and setting up the appropriate regulatory structures for it to function. Commercialization, on the other hand, implies the buying and selling of training and degrees with a profit motive. In Vietnam, the market regulatory framework is still in its earliest stages of development; while commercialization is the predominant trend in both the public and private education sectors. For the positive aspects of a market-driven system to emerge, the state needs to counteract the negative tendencies of commercialization.

BOX | Key elements of the state’s role in higher education

Governments need to subsidize goods that would not be supplied by the market and perform functions the market cannot, including:

⁴⁸ *Trans:* Asking-giving (*xin-cho*) is a common Vietnamese phrase used to refer to a bureaucratically controlled, usually opaque framework for organizing the relationship between institutions and the state, in which institutions have to seek government permissions for individual decisions regarding student recruitment, academics, budget and so on.

⁴⁹ Nguyễn Ngọc Trân, “Two urgent problems in university education” [Hai vấn đề cấp bách trong giáo dục đại học Vietnam Net, 4.2.2010. <http://www.baodatviet.vn/Home/KHCN/Hai-van-de-cap-bach-trong-giao-duc-dai-hoc-1/20102/80115.datviet>

(1) Providing overall strategic direction and planning: National or regional policymakers are responsible for overall steering of the education system and developing workable strategies to achieve realistic goals. This includes planning for a stratified and rationally differentiated regional network of colleges and universities.

(2) Regulation for quality, accountability and transparency: The state sets standards for public and private institutions, and enforces them through regular and system-wide accreditation, performance reviews, and institutional audits. According to the Task Force, “Higher education institutions flourish in a legal and regulatory environment that encourages innovation and achievement, while discouraging corruption, duplication of effort, and exploitation of poorly informed consumers.”

(3) Support core disciplines: Higher education and scientific research have social benefits that are not provided when left to the market. Tertiary education left to the market alone converges on market-oriented disciplines.⁵⁰ Provision of high quality education and research in less lucrative disciplines from natural sciences to the arts and cultural studies is a public good that requires government support.

(4) Protect social equity: Higher education is a powerful means for social mobility. Talented students from poor backgrounds should have the same opportunities as wealthy students. Far-reaching student aid programs and a large system of open, *articulated* colleges protect equitable access.

We should be clear that there is a role for for-profit vocational education in a differentiated system. For-profit providers can provide high quality training in computer skills, foreign language, and business administration. They compete on the basis of reputation among prospective students and employers, so the best providers can be expected to charge the highest tuition and reinvest in their facilities and faculty. However, for-profit private education cannot fill two essential tasks. First, for-profits will not invest in money-losing disciplines in the social sciences, natural sciences, engineering and humanities. Real multidisciplinary universities cannot in fact cover their costs on the basis of tuition alone. A profit-driven education system will produce too many accounting and foreign language graduates—fields that have the highest payoff from students’ perspectives and do not require large capital investments in research and laboratories—and not enough sociology or biology majors. Second, for-profits will accept students based on their ability to pay, and not on merit. Although various forms of educational financing can help make for-profit institutions more accessible, in general profit-driven systems excludes talented students from poor backgrounds. Thus, in a well-functioning higher education system the role of for-profit training will necessarily be limited to certain applied fields.

To perform these crucial functions, the state needs to reorient itself from a position of

⁵⁰ For example, in Thailand, decreased government support and competition among institutions has led to “public universities having to cancel or combine non-market-driven degree programs”. Gamon Savatsomboon, “The Liberalization of Thai Education: Point of no return,”(Boston: Center for International Higher Education, 2006), http://www.bc.edu/bc_org/avp/soe/cihe/newsletter/Number42/p9_Savatsomboon.htm

“control” to one of “supervision.”⁵¹ We should emphasize the difference between control and supervision or regulation. Vietnamese higher education is highly *controlled*. University autonomy is still very limited, with the Ministry of Education and Training controlling personnel decisions, academic and administrative organization, and standards for university admissions. However, by MOET’s own assessment, there is a lack of effective *regulation* to ensure that minimal quality standards are met or that institutions are adhering to the law.⁵² MOET’s self-professed difficulty in overseeing the current system is a direct consequence of its lack of focus. Deputy Nguyễn Minh Thuyết of the National Assembly argues that delegating tasks to universities would free education policymakers to devote their energies to questions of national scope.

VOICES | National Assembly Deputy Nguyễn Minh Thuyết

[MOET] is a state management agency, so it must do the following jobs: First is to make regulations or to advise the level that has jurisdiction to make policy and [normative acts] laws. Second, to organize policy implementation, implement the law. Third is to inspect, investigate, discipline. This is the management responsibility of the state. Currently the Ministry is replacing universities too much, so it cannot do the big tasks [like constructing criteria and standards], while it is stretched to do all of the small tasks like organizing high school graduation and university entrance examination periods... This is the job of the universities, not of the Ministry.⁵³

The blossoming of alliance (*liên kết*), in-service (*tại chức*) and distance (*từ xa*) programs is a symptom of how weak system-level standards combined with excessive state control encourages commercialism at public universities. In an effort to maintain control over the expansion of the education system, MOET strictly regulates tuition fees and student quotas for regular undergraduate programs; but to meet the enormous excess demand for degrees, universities open in-service, distance and alliance programs where they can charge higher tuition to supplement their insufficient budgets. These programs essentially operate free of oversight, and cases of academic corruption are well documented (see Part 2).

Privatization is a sensitive issue in every country, and denouncements of the commercialization of education are commonplace. However, the role of the market differ across countries: market oriented education does not simply imply a “one-dimensional

⁵¹ The Task Force draws the distinction as follows: “State control of higher education has tended to undermine many major principles of good governance.” By contrast, “State supervision aims at balancing the state’s responsibility to protect and promote the public’s interest with an individual institution’s need for academic freedom and autonomy. The Task Force, 53.

⁵² Report 760/BC-BGDĐT, 10-11.

⁵³ Lan Anh and Ngọc Lành, “University Education Quality: Where’s the problem and how to solve” [Chất lượng giáo dục đại học: Vương ở đâu? Và giải thế nào?], *Nhà Báo và Công Luận*, 12 November.2009, <http://congluan.vn/Item/VN/Vandehomnay/Chat-luong-Giao-duc-Dai-hoc:-Vuong-o-dau-va-Giai-the-nao/C55CE8F57B636A40/>.

movement from ‘the state’ (understood as non-market and bureaucratic) to ‘the market’ (understood as non-state and corporate).⁵⁴ A distinction can be drawn between purposeful reforms to increase competition within a state supervised system—having a *market* in education—and de facto privatization in absence of system-wide standards—the *commercialization* of education. In Western Europe and newly industrialized East Asian countries, governments have attempted to use market pressures to create competitive universities, transitioning from state control to supervision. Conversely, in Vietnam, China and India, privatization has primarily manifested itself in the central government devolving responsibility for provision or financing to families, private schools or provincial governments.⁵⁵ Writing on transforming university governance in East Asia, Professor K.H. Mok argues:

Contrasting and comparing marketization and privatization projects of these [East Asian] societies, we may argue that for Hong Kong and Singapore, the reform strategies along the lines of marketization are to improve the efficiency and performance of the university sector instead of purely resolving financial difficulties, while marketizing higher education in Mainland China is primarily to address the limited state capacity in higher education provision.⁵⁶

Western European university reforms fall into the first category. Germany and France, countries whose universities and research institutes have a long and distinguished history, are also seeking to remedy lagging research performance and overcrowded classrooms by introducing competition among universities—heretofore completely lacking.⁵⁷ Having long treated higher education as a right and universities as public bureaucracies, both countries are granting autonomy to university presidents over personnel and budgets, and urging them to raise external funds, build linkages with industries, and increase research output. Performance incentives are being substituted for subsidies in a new “results-based culture.”⁵⁸ One component of these transformations is increased differentiation between universities. In Germany, where all universities have historically received equal treatment, the state is concentrating resources for research at a few top institutions through a competitive “Excellence Initiative.”⁵⁹

IV. Demand-driven training

⁵⁴ Ka-Ho Mok, 216,

⁵⁵ Devesh Kapur argues that in India, commercialization has taken the form of “de facto privatization,” not as a result of deliberate policy, but due to paralysis of the state sector. Devesh Kapur and Pratap Bhanu Mehta, *Indian Higher Education Reform: From Half-Baked Socialism to Half-Baked Capitalism*. “ (Paper presented at the Brookings-NCAER India Policy Forum 2007), 1.

⁵⁶ K.H. Mok, “Similar Trends, Diverse Agendas: higher education reforms in East Asia”

Globalisation, Societies and Education 1, No. 2, July 2003, p. 210.

⁵⁷ For a longer discussion of France and Germany see Jamil Salmi, *The Challenge of Establishing World Class Universities*, World Bank: 2009, 30.

⁵⁸ In both France and Germany, the campaigns to transform academic culture have met entrenched student and faculty resistance. Luke Slattery, “Liberté trumps égalité in Sarkozy’s revolution,” August 30, 2009, *University World News* 0090. Jane Marshall, “France: More autonomous universities”, January 17, 2010, *University World News* 107. On Germany, see *The Economist*, “On Shaky Foundations”, June 25, 2009.

⁵⁹ Salmi, 49.

Vietnam seeks a higher education system to train human capital for the country's continued rapid economic and human development. Since 2007 when MOET commenced its campaign to “train in response to society's needs” (*đào tạo theo nhu cầu xã hội*), discussion has focalized of the state's responsibility to determine current needs of businesses and forecast future needs.⁶⁰ Responding to societal demand will be an important principle of reform going forward, so it is useful to distinguish between three different kinds of social and economic demand.

First, there is the current demand of businesses. Truly “demand driven” education is not determined from the top down, but is tailored to the actual needs of local businesses and communities. Socially and economically responsive institutions have institutional mechanisms for sensing changes in student, social, and labor market needs; and they update curricula and programmatic offerings accordingly.⁶¹ Government-supported labor surveys can enhance this process.⁶² Local linkages are most important at vocationally-oriented institutions—provincial universities, community colleges and technical colleges—that aim to produce job-ready candidates for the labor market. In Vietnam the government has tried to keep training institutions informed of industry needs through conferences and campaigns. A strategy of more direct industry involvement, through policies requiring firms to train their workers and, in return, involving the private sector directly in designing course content, might be appropriate.⁶³

A second issue is that, in an environment where skill demand changes rapidly, “21st century” soft skills will need more emphasis. Narrowly framed, demand-driven training cannot serve as an overriding educational philosophy for Vietnam. While it takes time to build academic programs, specialized skills may become obsolete rapidly, based on market and technological trends that companies cannot predict. Businesses cannot always identify the exact skills they want graduates to have; or they seek a common, foundational set of skills as opposed to highly specialized skills, which they prefer to develop in-house. In many cases, complaints from Vietnamese businesses about time-intensive retraining for new employees reflect graduates' deficit of soft skills, such as creative thinking, communication and problem solving, rather than specific hard skills. Education programs should complement patterns of learning and knowledge generation in the rest of the economy. This will require efforts to adapt teaching and learning

⁶⁰ For example, see Lê Minh Tiến, “Training for social needs?” [*Đào tạo theo nhu cầu xã hội được không?*], *Tuổi Trẻ*, 11 September 2007, <http://www.tuoitre.com.vn/Tiayon/Indez.aspx?ArticleID=219513&ChannelID=119>

⁶¹ Sachi Hatakenaka, “The Role of Higher Education in High tech Industry Development: What Can International Experience Tell Us?” (paper presented at the Annual Bank Conference on Development Economics, Cape Town, South Africa, June 9-11, 2008), 18, <http://siteresources.worldbank.org/INTABCDESOUAFR2008/Resources/SachiHatakenaka.pdf>.

⁶² As national skill and labor demand surveys may be too general to help institutions improve their training, improving training institutions' and provincial governments' capacity to gather and share information may be more effective. Junichi Mori 2009, p.35.

⁶³ Coxhead et al, 83.

methods and student engagement to inculcate and reinforce habits of critical analysis, enquiry, and lifetime learning.

Finally, current market demand is not necessarily a good predictor of future demand. Vietnamese firms tend to be small and to compete based on cheap labor, not new technology. While the state cannot predict the specific mix of technical skills needed ten years down the road any better than businesses, it can provide special support for science and technology education before the market demand appears. According to the Task Force, “Science and technology have, to some extent, the character of a public good—and market forces often provide less demand for scientific research than is socially desirable. National governments (both singly and in concert) must therefore act to counter this market failure.”⁶⁴ In her analysis of the role of tertiary education in high tech industry development in a number of countries, MIT researcher Sachi Hatakenaka concludes:

It is also evident that there are two types of ‘responsiveness.’ One is to respond to an existing demand, and the other is to respond to an anticipated demand. The former is an issue that can be readily undertaken by institutions – though this will require certain institutional capacity. Responding to future demand is harder for individual institutions and indeed this is where there appears to be a role for government. Many governments played the critical role of establishing generic science and engineering education well before there was labor market demand, and that turned out to be a critical investment that started the chain of events.⁶⁵

When newly industrialized countries in East Asia reached a stage where growth in manufacturing made it imperative to impart more sophisticated skills to a larger proportion of the population, they expanded tertiary enrollments through a system of diverse institutions with a heavy focus on science and engineering education. China is currently focusing its massive investment in education on science and technology at the apex of its system. Before their periods of rapid growth, European economies like Finland and Ireland founded large polytechnic sectors to break into high tech service sectors.⁶⁶ In Vietnam the government should make investment in science and technology education and training a central principle of its reform efforts.

Having defined some organizing principles for Vietnam’s reforms, in the next section we turn our attention to how Vietnamese higher education system has actually evolved in response to social demand, and the accompanying policy initiatives.

⁶⁴ The Task Force, 71.

⁶⁵ Hatakenaka, 18.

⁶⁶ With the exception of Ireland, these countries did not treat science and engineering education as a purely economic supply side issue. While expanding S&T education, they simultaneously invested in research and development at apex research universities and institutes. However, this paper focuses on the education aspect, as the issues of innovation and research are addressed at length in *The Intangibles of Excellence*. Dan Breznitz, *Innovation and the State: Political Choices and Strategies for Growth in Israel, Taiwan and Ireland*, (New Haven: Yale University Press, 2007), 155-156.

Part Two: Snapshot of the Vietnamese higher education system

The rapid expansion of the Vietnamese higher education system over the past two decades has outpaced the evolution of the regulatory and legal framework. However, since the promulgation of Resolution 14 in 2005 the pace of policymaking has quickened with the issuing of laws, regulations and planning documents related to virtually every aspect and level of higher education. Part Two takes stock of the higher education system's recent transformations and the accompanying policy initiatives. The first section looks at the extent of the system's expansion and institutional types, as well as barriers to differentiation. The second section analyzes the evolution of the overall policy framework. The final section looks at the state of public financing for education, with special attention to the issue of "socialization" (*xã hội hóa*).

I. *Size and shape of the system*

A. *Expansion*

Vietnamese higher education has expanded rapidly over the past two decades. In 1987, there were 101 universities and colleges, all of which were public. By September 2009 there were 376 universities and colleges, of which just over twenty percent were "non public" (i.e., private).⁶⁷ Geographically, around 50% of these institutions are located in the five centrally administered cities of Hà Nội, Hải Phòng, Đà Nẵng, Hồ Chí Minh City, and Cần Thơ. Hà Nội and Hồ Chí Minh City alone account for 40% of all universities and colleges, and around 70% of student enrollment.⁶⁸ Currently, all but one of Vietnam's 63 provinces and province equivalents possess at least one tertiary education institution. Increasing the number of students has been a major focus of the government, and over the same period enrollment increased from about 130,000 to over 1.7 million. Up to one-half of these students are enrolled in "non-standard" programs (*không chính quy*).⁶⁹ Vietnam's gross enrollment rate in 2005 was fifteen percent – an impressive increase from only two percent in the early 1990s.

Despite this growth in student enrollment, since 1987 the number of instructors has only increased by a factor of three. The student/faculty ratio grew from 6 in 1990 to 13 in 1995 and 29 in 2000. The faculty body has grown faster over the past decade; yet in 2009 the student/faculty ratio remained at 28 students per lecturer. Faculty holding master degrees

⁶⁷ According to the National Assembly Report No. 329, there were actually 412 universities and colleges as of September 2009. Here we will use official data provided by MOET.

⁶⁸ Number of institutions is as of 2009, MOET Report No. 760 p. 17. Enrollment is based on 2004 VHLSS, cited World Bank 64.

⁶⁹ This category refers to academic programs at colleges and universities that are *not* full-time undergraduate programs accessed through the university entrance exam. Categories of non-standard programs include in-service, alliance, joint degree, distance learning, transfer, and short courses.

now account for 37% of total college and university faculty, and faculty holding PhDs account for 10%.⁷⁰

Table 1. Increases in faculty, students, higher education institutions⁷¹

	1990	1995	2000	2005	2006	2007	2008
Faculty number in colleges and universities	21,900	22,800	32,205	48,579	53,518	56,120	61,190
- public	21,900	22,800	27,689	41,915	45,800	51,287	54,904
- non-public			4,516	6,664	7,718	4,833	6,286
Student enrollments in colleges and universities	129,600	297,900	918,228	1,363,167	1,540,201	1,603,484	1,719,499
- public	129,600	297,900	813,963	1,226,687	1,346,730	1,414,646	1,501,310
- non-public	-	-	104,265	136,480	193,471	188,838	218,189
Colleges and universities	106	109	178	255	299	346	369
- public	106	109	148	220	253	282	305
- non-public	-	-	30	35	46	64	64
Student/faculty ratio	6	13.07	28.51	28.06	28.78	28.57	28.10
- public	6	13.07	29.40	29.27	29.40	27.58	27.34
- non-public	-	-	23.09	20.48	25.07	39.07	34.71

Leading policymakers doubt whether the rapid proliferation of new higher education institutions has been guided by a rigorous assessment of demand. Says Professor Đào Trọng Thi, chairman of the Committee on Culture, Education, and Youth of the National Assembly: “The scale and structure of training programs offered by virtually all recently established universities is determined by the universities, without any consideration of actual need.”⁷²

B. Institutional Types

There is some differentiation among Vietnam’s nearly 400 colleges and universities. The Vietnam National Universities and a number of professional training institutes stand at

⁷⁰ The absolute number of faculty holding PhD degrees has improved, from 4,471 in 1999 to 6,217 in 2008; but the overall proportion of university instructors holding PhDs actually declined from 14.75% in 1999 to 10.16% in 2008.

⁷¹ MOET, “Proposal to reform education finance 2009-2014” [Đề án “Đổi mới cơ chế tài chính giáo dục 2009-2014”], 2009, <http://moet.gov.vn/?page=1.24&view=1242> and authors’ calculations..

⁷² Lê Nhung, “Opening universities too easily: we shouldn’t ‘love’ provinces that way” [“Mở trường dễ dãi: Không nên thương địa phương kiểu đó”] 16/04/2010. <http://vietnamnet.vn/chinhtri/201004/Mo-truong-de-dai-Khong-nen-thuong-dia-phuong-kieu-do-904777/>.

the top of the system. There are a handful of large, multidisciplinary regional universities. The great majority of universities and colleges, including private and newly upgraded or established universities, are vocationally-oriented. Alongside these tiers are the aforementioned non-standard programs which have proliferated in recent years. In this section we review the key institutional classes that comprise the Vietnamese higher education system today.

a. Apex Universities

The Vietnam National Universities in Hà Nội and Hồ Chí Minh City were established in the mid-1990s by pulling existing universities into two new multidisciplinary research institutions. VNU rectors are appointed directly by the Prime Minister, and they have higher budget allocations than other universities. Some of the VNU member schools are highly prestigious within Vietnam, such as University of Technology in Hồ Chí Minh City (VNU-HCMC). Alongside the VNUs are a number of specialized training institutions belonging to line ministries, including the Foreign Trade University in Hà Nội, the Diplomatic Academy of Vietnam and the Army Medical Institute. These institutions attract high caliber students by virtue of the extremely competitive national examination.

Vietnam's top universities have weak scientific research performance and tend to be disconnected from global currents of knowledge. By comparison with other countries in the region, Vietnam lacks even a single institution of internationally recognized quality.⁷³ In a 2010 article, nuclear physicist Professor Phạm Duy Hiền found that the whole of Vietnam's R&D apparatus, including universities and research institutes (which receive the bulk of public R&D financing), published fewer articles in international peer-reviewed journals than a single leading Thai university.⁷⁴ Professor Hiền finds that Vietnamese universities' research strength is primarily in math and theoretical physics—fields that he argues are of limited relevance for the human, economic and environmental challenges facing Vietnam in its development. Domestic capacity for research in fields related to Vietnam's primary exports—agriculture, food processing, natural resources—as well as in medicine and oceanic and atmospheric sciences is weak.⁷⁵

We have written elsewhere at length about the deplorable state of institutional governance at Vietnamese research universities, but one issue that deserves particular attention with regards to Vietnamese apex universities' poor research performance is faculty policy. Low official salaries encourage faculty to spend excessive amounts of time teaching, often in alliance or part-time programs at rural universities, or at private

⁷³ The issue of apex research universities in Vietnam is discussed extensively in *The Intangibles of Excellence*. <http://ash.harvard.edu/extension/ash/docs/Apex.pdf>

⁷⁴ The Thai universities also had higher average citation rates and, higher proportion of domestic corresponding authorships, indicating that the bulk of the research occurred in Thailand as opposed to at foreign institutions. Phạm Duy Hiền, "A comparative study of research capabilities of East Asian countries and implications for Vietnam", *Higher Education* (forthcoming) 2010, p. 7.

⁷⁵ Phạm Duy Hiền, 8.

universities.⁷⁶ Lecturers are rewarded for teaching as much as possible while they have little or no incentive to do research. This creates what Professor Hong Tụy calls the “salary/income paradox”, wherein formal salaries account for only a small portion of total income.⁷⁷ The perverse influence of salary policies is evidenced throughout the education system, but is particularly detrimental at research universities where light teaching loads are needed to enable scholarly and scientific inquiry.

Weak autonomy and accountability hinder the effectiveness of Vietnamese apex and regional universities. Academic institutions remain subject to a highly centralized system of administrative controls. Many decisions about core university operations, including how many students universities may enroll, how much instructors are paid, academic titles, and curricula, are made by external actors. This system effectively renders universities administrative units of the state. At the same time, institutions are shielded from competition and are not held to minimum performance-based standards or accountability structures. Funding is not meaningfully tied to institutional performance, and university rectors are rarely replaced. Nor do universities feel pressure to compete for students, since university seats are highly coveted.

Inadequate university autonomy and administrative capacity discourages industry from seeking out connections with universities, and universities produce little commercially-relevant innovation. In a paper on the role of universities in Vietnam’s national innovation system, Trần Ngọc Ca and Nguyễn Võ Hùng argue that most firms’ innovation activities are,

...not science-based but rather problem solving in nature... Given [this] type of innovations... the academic sector should be able to support firms’ innovation effectively. The reason that they have not done so, to date, is because of the limited mandate of the academic institutions and their management bodies. As a result of the clear mismatch between the production and S&T sectors with regard to supporting innovation, it is perhaps not surprising that many firms prefer to do their own research, in cooperation with their business partners.⁷⁸

Links between firms and professors tend to be informal and dependent on personal relationships. Equitization of public universities has been proposed as a solution to the weak links between university research and industry.⁷⁹ However, research universities around the world operate as not-for-profit entities, regardless of their ownership status or their focus on basic or commercial research. For-profit universities will not invest in

⁷⁶ University Lecturers living on... extra jobs,” *Vietnam Net*, 04 September 2009,

<http://english.vietnamnet.vn/education/2009/09/866925/>

Giảng viên đại học có sống được bằng lương? 6.9.2009.

<http://www.sgt.com.vn/detail55.aspx?ColumnId=55&newsid=56442&fld=HTMG/2009/0903/56442>

⁷⁷ Hoàng Tụy, “New Year Old Story” [Năm mới chuyện cũ], *Tia Sáng*, February 2007.

⁷⁸ Trần Ngọc Ca and Nguyen Vo Hung, *The Evolving Role of Academic Institutions in the Knowledge Economy: The Case of Vietnam*, Lund University Research Policy Institute, UniDev Discussion Paper Series Paper no. 2, 2008, p.17-18, http://www.fpi.lu.se/_media/en/research/UniDev_DP_Vietnam.pdf.

⁷⁹ MOF, “Draft for changing schools into equitized companies” [Dự thảo thí điểm chuyển trường học thành công ty cổ phần], 04 May 2009, <http://www.vietnamnet.vn/giaoduc/2009/05/845536/>

costly laboratories; their imperative is profit, which can be garnered from student tuitions but, not from capital and time-intensive scientific research.

In summary, while some top Vietnamese universities provide decent training to exceptionally bright undergraduate students, these institutions are not performing the central research-related functions of apex universities, to adapt advancements in global knowledge for Vietnam and to generate new knowledge that contributes to social wellbeing and prosperity.

One problem may be the lack of clarity about which institutions actually stand at the system's apex. Judging by the woeful state of Vietnamese research capacity, the VNU experiment has not been particularly successful.⁸⁰ The state has designated fourteen "national focal universities" to be research institutions, including the VNUs; a few officially recognized "regional universities" including Huế, Cần Thơ and Thái Nguyên; and some specialized national universities like the National Economics University, University of Education of Hồ Chí Minh City, and the University of Agriculture of Hà Nội. Other universities are essentially provincial or vocational universities, but are subject to similar regulations regarding minimum quotas for research hours. Professor Phạm Phú observes that there are wide variations between the types of universities officially designated as research institutions in Vietnam:

VOICES | Professor Phạm Phú

However, at [the research university level] there are universities with per student spending of \$300-350/student, which is only 2/3 of the national average, there are universities with only 26.6% of all students in formal [*chính quy*] programs and with a postgraduate population equal to only 3% of students, there are a lot of universities that also train at the college level, there are universities with a student/faculty ratio of 30/1, there are a few universities where the proportion of faculty with PhDs that is less than 10% of the total...⁸¹

Meanwhile, the government has *also* determined that the existing institutions will not form the foundation for the country's quest for internationally recognized apex research universities, and has plans to develop four to five "new model" research universities with at least \$500 million in multilateral loans. The first of these, the Vietnam-German University in Hồ Chí Minh City, is already operational. One of the new model universities is intended to reach the global top 200 in an unspecified ranking by 2020. Elite apex institutions are very expensive, and most countries have at most a small handful of them. We have argued elsewhere that reforming governance structures will be the key to creating an elite research university in Vietnam. In order to foster favorable

⁸⁰ A number of VNU member schools have withdrawn from the national universities, preferring to be independent.

⁸¹ Phạm Phú, 11.

governance conditions, sufficiently finance research and laboratories, and attract excellent faculty, Vietnam will need to concentrate on building one or two universities.

b. Regional Universities

Vietnam has a number of well-established multidisciplinary regional universities, some of which have reputations for locally-engaged research and education. The University of Cần Thơ has a strong focus on agricultural sciences, befitting its location in the Mekong Delta. The University of Nha Trang leads in aquaculture. The Universities of Đà Nẵng and Huế attract students from around Central Vietnam.

As described above, there is not a well-established and distinctive set of policies that distinguishes apex institutions from teaching-focused, applied regional universities. Regional universities are subject to resource constraints and central controls that hinder their ability to provide quality education to large numbers of students and provide services to local communities. The story of An Giang University, regarded to be one of the most dynamic regional universities in Vietnam, is illustrative. Appendix I of this paper is an essay by founder and rector emeritus of An Giang University, Professor Võ Tòng Xuân. In the essay, Professor Xuân reflects on the impact of central controls on the university's activities and observes that a deficit of interprovincial cooperation can inhibit the development of new, truly regional universities. An Giang University was founded in 2000 with a mandate to be a second regional university for the Mekong Delta;⁸² but by 2003, neighboring provinces had established their own universities, essentially rendering AGU a provincial university.

VOICES | Professor Võ Tòng Xuân

Intrusive external regulations determine how many students AGU can admit annually, decide tuition fees and determine salary scales. We must devote substantial time for Party and military training activities. We are limited in our ability to offer short training courses as a community college would to serve the adult learners. With respect to admissions policies we must follow the rigid and costly national University Entrance Examination (UEE). It is widely recognized that current university admission procedures create large barriers to entry for students; however at the “output” end, when students complete their studies, there is very little quality control....

...Although AGU was originally conceived as a regional university serving several provinces in the Mekong Delta, over the years a significant majority of our students (roughly 80%) have come from An Giang province. During the first four years, students from Đồng Tháp, Kiên Giang increased from about 2% to a peak of 7-11% in 2003 before declining to 2 – 4% in 2009 ... Several factors explain this trend. First, the strongest students probably prefer the University of Cần Thơ's more established programs and reputation. Second, by 2004 most provinces in the Mekong Delta had established their own universities.

⁸² Prime Ministerial Decree 241.

Regional and technical universities should aim to educate large numbers of students in a wide range of fields. In its effort to stimulate clearer differentiation of mission, Vietnam has emphasized professionally-oriented higher education. Resolution 14 drew a distinction between research and professionally oriented education and set a target of having 70-80% of student enrollment in vocational and applied training. However, initiatives to build deeper connections between technical colleges and universities and area businesses have run into many of the same barriers described by Professor Xuân above.

An article by Professor Nguyễn Minh Hồng about the Vietnam-Netherlands Professionally Oriented Higher Education (PROFED) program illustrates the challenges of implementing a professionally oriented program at a recently upgraded technical university in Hưng Yên Province.⁸³ With the aim of building skills-driven undergraduate programs in informational communication technology and electrical engineering, the university's PROFED team carried out extensive surveys of Red River Delta businesses to determine the mix of skills companies wanted from engineers and to incorporate industry input into university curricula. Lecturers were given special freedom to design their own curricula, putting increased emphasis on practical application and problem-based learning, as well as on teamwork and communication skills.

However, institutional barriers to maintaining and spreading these programs remained substantial. Though young teachers were enthusiastic for the new curricula and teaching methods, low base salaries motivated faculty to teach as much as possible to earn supplementary income, rather than invest in curriculum design. Administrative rigidity encouraged passivity and a tendency to adhere to standard MOET curricula. Insufficient funding for new programs made it difficult to sustain innovative initiatives without raising tuition for students in technical or special programs.⁸⁴ Professor Hồng's report determines: "Specifically, we conclude that the reform process in higher education requires a faculty level (bottom-up) change from teacher-centered to learner-centered principles and at the university level, a change from commanding administration to supportive and quality-responsive management, but such reforms can only be successful in concurrence with changes at the system level."⁸⁵

c. Part-time and graduate programs

Apex universities and regional universities have seen explosive growth of their non-formal and graduate training programs. In the early 1990s, Vietnam began to scale up graduate training. Between 2000 and 2008, the number of masters trainees grew nearly

⁸³ Nguyễn Minh Hồng, "Challenges to Higher Education Reform: A University Management Perspective" (paper presented at conference at Australian National University, Australia, November, 2007), 1

⁸⁴ It appears that many of the same barriers have held back the Advanced Programs implemented by Vietnamese university departments and their US counterparts. US-Vietnam Task Force Report, January 2009.

⁸⁵ Nguyễn Minh Hồng, 1.

fourfold, reaching 47,000; and enrollment of PhD students more than doubled, from 2,581 to 5,900. Part-time programs and alliance degree and certificate programs have also burgeoned. The National Assembly found that in the 2008-2009 academic year, half of all students, or 900,000 students, were enrolled in part-time programs.⁸⁶ Access to formal degree programs is still restrictive, so less competitive routes to university degrees, with lower entrance standards, attract many students. These in-service, alliance and distance programs are ordinarily organized by an urban university, either for onsite students or for students in other provinces through partnership with a local training center. Some large universities, including members schools of VNU and institutions counted among the 14 focal schools, operate dozens of alliance programs around the country.⁸⁷

Universities are financially reliant on these part-time programs, particularly to supplement salaries for lecturers and staff—one reason that MOET has had difficulty imposing quality controls.⁸⁸ While tuition caps and student quotas for full-time courses are strictly regulated, even for institutions with special “financial autonomy,”⁸⁹ part-time programs are largely left to universities’ discretion, allowing institutions to determine how many students they recruit and how much they charge.⁹⁰ Enrollment in in-service, distance and alliance programs at some universities is higher than in the fulltime programs (See Table 2).

Table 2: Student enrollment by program type, Universities of Huế and Đà Nẵng⁹¹

	Standard	Non-standard	Distance
U. of Huế	26.6%	19%	51.5%
U. of Đà Nẵng	39.2%	41.8%	13.1%

⁸⁶ *Tuổi Trẻ*, “Universities are chaotic, nobody is responsible”, “Đại học lộn xộn, không ai chịu trách nhiệm” 8/6/2010. National Assembly Report No. 329.

⁸⁷ Phúc Điền and Công Nhật, “Chaotic alliance training: section 1: Every size does it” [Loạn liên kết đào tạo: Bài 1: Cỡ nào cũng liên kết], *Tuổi Trẻ*, 23 February 2007, <http://tuoitre.vn/Giao-duc/188145/Loan-Lien-ket-dao-tao---Bai-1-Co-nao-cung-lien-ket.html>.

⁸⁸ Responding to a question from a National Assembly delegate in 2006, former Minister of Education and Training Nguyễn Thiện Nhân conceded that “In-service training programs are the primary revenue source of universities today. We recognize the shortcomings in the training, but solutions must follow a road map. Moving too rapidly to clamp down will affect their ‘rice pot.’” See Việt Anh, “In-service universities are ‘the rice pot’ of schools” [Đại học tại chức là “nồi cơm” của các trường], *VnExpress*, 26 November 2006, <http://www.vnexpress.net/GL/Xa-hoi/2006/11/3B9F0C55/>.

⁸⁹ Hoàng Văn Châu, ‘The Harvard of Vietnam’ does not want to become an equitized company” [‘Harvard Việt Nam’ chưa muốn chuyển thành công ty cổ phần], *VietnamNet*, 06 May 2009, <http://vietnamnet.vn/giaoduc/2009/05/845958/> (Accessed 10/3/2010).

⁹⁰ There is a further distinction between types of student enrollment in regular programs: MOET has officially permitted some schools to recruit over their state-granted quota. This extra allocation of spots is called “non-state budget quota.” Vũ Thơ, “Extra-budgetary enrollment lacks transparency” [Tuyển sinh ngoài ngân sách thiếu công khai], *Thanh Niên*, 24 August 2009, <http://www.thanhnien.com.vn/News/Pages/200935/20090824232441.aspx>.

⁹¹ From Nguyễn Ngọc Trân, “Some issues in higher education in Hue and Da Nang” [Một số vấn đề của GD-ĐH ở Huế-Đà Nẵng], *Báo Đất Việt*, 22 March 2010, <http://www.baodatviet.vn/Home/chinhtrixahoi/Mot-so-van-de-cua-GDDH-o-Hue--Da-Nang/20103/85220.datviet>.

BOX | Part-time legal training programs⁹²

Legal education is one example of a field that has seen enormous growth of part-time degree programs. Vietnam has 25 legal training schools and institutions, including major universities in Cần Thơ, Hồ Chí Minh City, Huế, Đà Nẵng and Vinh, as well as at alliance training centers. Approximately 20,000 students are admitted annually to law programs. Of these, 5,600 are regular students; 14,000 are in-service, distance learning, and joint-degree students (10,000 in-service, 3,000 distance, 1,000 joint-degree); and 540 are LLM and PhD candidates. In other words, around 70% of all students are in classes organized on weekends and evenings or through correspondence. Of the 10,000 students in in-service courses, many are students who failed the university entrance exam; the remainder are provincial officials. Tuition for regular law programs was 240,000 VND/month in 2009, equivalent to around 1.2 million VND/semester, while in-service courses cost 2 million VND/semester and distance programs cost 2.5 million VND/semester. The law schools at both VNU Hà Nội and Hồ Chí Minh City recruit an equal number of fulltime and part-time students (1600-1800 students in each).

The situation of non-formal legal training illustrates contradictions in the current direction of differentiation in Vietnam. On the one hand, flexible degree and certificate programs help to provide working professionals and students with second chances to increase their income and skills, critical to a growing economy and dynamic society. For example, many of the students in in-service or joint legal programs are police officers and local officials. On the other hand, the low standards and commercialism associated with many of these programs raises questions as to their overall value added. That Vietnam's top national universities are operating these programs is also worrisome: universities' efforts to adhere to international standards of quality and governance will be rendered meaningless so long as they operate large numbers of in-service programs subject to wildly different standards than fulltime programs.

Academic standards in in-service and distance programs tend to be lower than in the full-time programs operated by the same institutions: programs are characterized by crowded classrooms, poor teaching facilities and limited class time. Some alliance programs, including those conducted with international partners, have little or no relationship to the university's specialization.⁹³

Corruption is widespread in burgeoning graduate and part-time programs, which lack the institutional history and integrity of fulltime undergraduate programs. It is well-documented that in some instances graduate degrees can be purchased.⁹⁴ In-service, alliance and distance programs suffer from the same reputation.

⁹² This data is from a UNDP-funded survey on legal education in Vietnam, carried out in 2009. It was supplied to the authors by Phạm Duy Nghĩa. See also Phù Sa-Kiều Anh, "Nearly 50% of law students are failed university candidates" [Gần 50% SV luật là thí sinh trượt ĐH chính quy], *VietnamNet*, 18 March 2010, <http://vietnamnet.vn/giaoduc/201003/Gan-50-SV-luat-la-thi-sinh-truot-DH-chinh-quy-899425>

⁹³ In January 2010 *Pháp Luật* [Law] newspaper ran a story about an alliance training center in Hồ Chí Minh City with over 600 students that seemed to have no actual linkage with any academic institution. See *Tuoi Tre*, "Loạn liên kết đào tạo: Bài 1: Cỡ nào cũng liên kết", 23.2.2007. and "Profuse blossoming" of "fence-breaking" university alliance programs" ["Nở rộ" đại học "xé rào" liên kết đào tạo] *VietnamNet* 25/8/2009

⁹⁴ On academic corruption, Professor Võ Tòng Xuân writes "When finalizing a dissertation, every graduate

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There is a phenomenon that I have witnessed with my own eyes: in the examination room for a postgraduate in-service program, someone stood up to collect money from the exam-takers to take to the proctor's tables.

In an exchange with students, I told them: when grading a PhD candidate, the majority of students deliver their dissertations [to committee members] along with an envelope... This phenomenon is widespread.⁹⁵

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d. Colleges, vocational training, and upgrading

Vietnam has a network three-year colleges that include mono-disciplinary colleges belonging to particular ministries, teaching colleges, and vocational colleges (a total of 226 colleges, as of 2009). Since 2000, Vietnam has also established fifteen community colleges, which now educate around 50,000 students. Some are providing affordable, community-relevant and continuing professional education at the vocational and college levels, as well as offering short-term training and applied research for local industry, agriculture and seafood.⁹⁶ Resolution 14 explicitly set the goal of expanding the community college network and facilitating transfer from these institutions to universities.

There are other encouraging examples of cooperation between local governments, enterprises and vocational training institutes. Provincial governments' role in vocational and technical training has grown in recent years, particularly in industrial centers. The Bình Dương People's Committee has worked with Singapore to support and expand the Vietnam-Singapore Vocational College, which trains mechanical and electronics technicians to work in the Vietnam-Singapore Industrial Park. The college has upgraded and expanded its offerings, and the Bình Dương People's Committee pays 80% of tuition

student must spend a lot of money in order to assemble the entire dissertation committee to approve it." Võ Tông Xuân, "Vietnam: Higher Education and Skills for Growth" [Việt Nam: Giáo dục đại học và kỹ năng cho tăng trưởng], *Thời Đại Mới*, March 2008, http://www.tapchithoidai.org/ThoiDai13/200813_VoTongXuan.htm.

⁹⁵ Nguyễn Minh Thuyết et al., "Symbol of teachers cut down by society?" [Biểu tượng người thầy bị xã hội đốn ngã?], *Tuần Việt Nam*, 23 September 2009, <http://www.tuanvietnam.net/bieu-tuong-nguoi-thay-bi-xa-hoi-don-nga>

⁹⁶ Đỗ Quốc Trung and Hải Quang, "Vietnam Community College Association: Achievements, problems, development solutions [Hiệp hội Cao đẳng Cộng đồng Việt Nam: Thành tựu, khó khăn và giải pháp phát triển], *Tạp chí Cộng Sản*, 19 November 2008, http://www.tapchicongsan.org.vn/details.asp?Object=14331554&news_ID=101035521. Also see D.B. Lam and N.H. Vi, "The Development of the Community College Model in Vietnam," in *Community College Models*, 105. Mary Beth Marklein, "Vietnam, other nations look to US-style community colleges," *USA Today*, 24 September 2009, http://www.usatoday.com/news/education/2009-09-23-vietnam-community-college_N.htm

costs.⁹⁷ The Hồ Chí Minh City People's Committee supports cooperation between technical and vocational colleges and firms.

However, the profusion of junior colleges, limited autonomy to train according to local needs, and resource constraints restrict the impact and spread of dynamic community colleges and vocational institutions. The state does not differentiate between community colleges and other types of three-year colleges in specialized fields like transportation, construction and teaching. These colleges are often redundant, with high unit costs, poor quality instruction, and insufficient funding.⁹⁸ Enrollment in the college sector is low—as of 2008, only 27% of Vietnam's higher education students were enrolled at colleges, with the remainder at universities. Curricula are rigid: community colleges are only allowed to adjust about a quarter of their academic content based on local needs.⁹⁹ Likewise at the vocational college in Bình Dương, administrators need permission from the Ministry of Labor, Invalids and Social Affairs (MOLISA) to establish a new course or add a new field, and only 20% of the curriculum reflects enterprise demands.¹⁰⁰

Three-year colleges such as these are chronically subject to the pull of mission drift. Between 1998 and 2008, 54 colleges (51 public and 3 non-public) were upgraded to universities.¹⁰¹ Three of the original community colleges founded in 2000 upgraded to university status after a few years of operation. Government policy creates a strong incentive for them to do so. Universities receive higher student quotas than colleges and so can draw more income from tuition; because tuition caps are tightly controlled for regular programs, student quotas are the primary source of external revenue for universities. Upgraded colleges do not often have the facilities or the staff to become truly multidisciplinary universities, but university status allows them to recruit more students and bring in more tuition revenue.

⁹⁷ Mori 2009, 20.

⁹⁸ These colleges were designed during the central planning period to train employees for line ministries. The World Bank, 2008, p.25. Diane E. Oliver et al, "Globalization of Higher Education and Community Colleges in Vietnam" in *Community College Models*, ed. Raby and Valeau (Netherlands: Springer Netherlands, 2009)..

⁹⁹ Oliver et al., 205.

¹⁰⁰ At the Vietnam-Singapore Technical Training Center in Binh Duong, administrators need MOLISA permission to establish a new course or add a new field, and only 20% of the curriculum is permitted to reflect enterprise demands. Mori 2009, p.21.

¹⁰¹ Minh Luận-Mai Lâm, "Upgrading colleges to universities is like 'Old wine in a new bottle'" [Nâng cấp Cao đẳng lên ĐH như 'bình mới rượu cũ'], *Báo Đất Việt*, 21 September 2009, <http://www.baodatviet.vn/Home/chinhtrixahoi/Nang-cap-Cao-dang-len-DH-nhu-binh-moi-ruou-cu/200911/68842.datviet>.

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Between 2006 and 2009, 78 mid-level vocational schools upgraded to colleges and 28 colleges (including community colleges) upgraded to universities. Please note, the setting in 2006 was: 516,000 vocational training students, 367,000 college students, and 1,516,000 university students. So, when we upgrade schools, are we turning the human resources pyramid upside-down? The logic of upgrading is: “they have the infrastructure, they have the faculty, the teaching environment and the management.” Maybe this logic should not be enough to convince us.¹⁰²

The movement to upgrade also manifests the fact that Vietnam’s network of specialized, mono-disciplinary three-year colleges and teacher training colleges has grown obsolete for the changing labor market.¹⁰³ While higher education institutions are heavily concentrated in cities, regions outside of large cities have a disproportionately high concentration of education colleges. Regions including the Mekong Delta and the North Central Coast are experiencing a glut of teachers trained by education colleges and universities unable to gauge regional demand.¹⁰⁴ In response, many of the teacher training colleges have upgraded to become multidisciplinary colleges or universities.¹⁰⁵ Upgrading is a matter of survival for these schools, which cannot recruit enough students and have insufficient public budgets. The trend, however, has contributed to a growth of universities beyond need and capacity in regions including Central Vietnam and the Mekong Delta.¹⁰⁶

A further complication is that MOLISA has created a parallel network of professional high schools (*trung cấp nghề*) and vocational colleges (*cao đẳng nghề*) separate from MOET. Articulation between the two systems is weak.¹⁰⁷ To remedy this, MOLISA is seeking permission for its vocational colleges to be able to upgrade to “vocational universities.”¹⁰⁸

e. Private schools

¹⁰² Phạm Phú, 12.

¹⁰³ The World Bank, 2008, 65.

¹⁰⁴ Đ. Vĩnh-H. Ánh-V. Hà, “teacher lacking-excessing pandarox” [Nghịch lý thiếu - thừa giáo viên], *Tuổi Trẻ*, 25 December 2009,

<http://www.tuoiitre.com.vn/Tianyon/Index.aspx?ArticleID=355100&ChannelID=13>

¹⁰⁵ Minh Giảng, “Education colleges training in multiple disciplines” [Trường cao đẳng sư phạm đào tạo đa ngành], *Tuổi Trẻ*, 09 November 2009,

<http://www.tuoiitre.com.vn/Tianyon/Index.aspx?ArticleID=346828&ChannelID=13> (Accessed 9/3/2010).

¹⁰⁶ See Trà Sơn, “Central Provinces Wasting Money in University Rush”, *Thanh Niên*, 21 August 2009, <http://www.thanhniennews.com/2009/Pages/2009821164054051959.aspx>.

¹⁰⁷ Minh Giảng, “Vocational college hardship” [Lao đao trường cao đẳng nghề], *Tuổi Trẻ*, 11 November 2009, <http://tuoiitre.vn/Giao-duc/347180/Lao-dao-truong-cao-dang-nghe.html>.

¹⁰⁸ “Vũ Thơ, “Vocational training will also have a university degree” [Học nghề cũng sẽ có bằng đại học], *Thanh Niên*, 2 October 2009, <http://www.thanhnien.com.vn/news/Pages/200940/20091002015551.aspx>

Private universities and colleges have expanded steadily over the past decade. The private sector accounts for about 12% of student enrollment and encompasses both well-established institutions like Thăng Long and Hoa Sen Universities, viewed as competitors with public institutions in some fields, and a plethora of new universities and colleges that primarily serve a “demand absorption” function, teaching primarily popular, low-cost subjects. Alongside private universities, there is also a wide range of private vocationally oriented centers for foreign languages and information technology, as well as corporate universities such as FPT University. Vietnam has one private, foreign invested university, the Royal Melbourne Institute of Technology and more are expected to open in the next few years.

At the vocational and continuing education levels, Vietnamese students rely on private training centers (particularly for computer skills and foreign language training) to supplement their public university education, which they view as lacking professional and practical orientation.¹⁰⁹ Some of these centers have an excellent reputation with employers. There is also vigorous competition between IT and English language centers to attract students; student fees can cover the entire cost of education because full-time faculty and high-end equipment are not necessary.

Most Vietnamese private universities operate as for-profit businesses. They are almost entirely dependent on tuition revenues. At the newer institutions, capacity tends to be severely limited, so much that some private universities have no full-time teaching faculty. Deputy Nguyễn Minh Thuyết observes that “most of these schools start from nothing: all they need is [government] permission to establish the school, then they recruit students, receive tuition fees, even ten billion, a hundred billion dong, while they are renting lecture halls, and also renting lecturers.”¹¹⁰

The lack of enforceable standards has provided fertile ground for scams. To take just one example, in October 2009 the press uncovered the story of “Phan Thiết University,” a start-up private university that had received MOET’s permission to operate, but had forged its list of lecturers and planned to operate the school out of a tourism site and restaurant.¹¹¹ After a public outcry, the university was fined several thousand dollars and allowed to continue to operate.

¹⁰⁹ Information technology training centers such as Aptech report that around half of their students are continuing university students. Vũ Thơ-Hà Vi, “Bachelor studies...again” [Cứ nhân đi...học lại], *Thanh niên*, 24 November 2009, <http://www.thanhvien.com.vn/News/Pages/200948/20091123225925.aspx>. See also “‘Hunting’ helter-skelter for a foreign-language certification” [Nhón náo ‘săn’ chứng chỉ ngoại ngữ], *Tuổi Trẻ*, 29-6-2010.

¹¹⁰ Minh Giảng, “We shouldn’t yet increase public universities,” [*Chưa nên tăng trường ĐH công lập*], *Tuổi Trẻ*, 01 February 2010. <http://www.tuoitre.com.vn/tianyong/Index.aspx?ArticleID=361781&ChannelID=3>

¹¹¹ See “Forged proposal, real university,” [“Đề án ‘giả,’ đại học thật”] *Tuổi Trẻ*, 14/10/2009. <http://tuoitre.vn/Giao-duc/342268/De-an-“gia”-dai-hoc-that.html>

II. The evolving policy framework

As seen above, Vietnam has been relatively successful in expanding the higher education system, but rapid expansion has weakened quality and accountability. In an October 2009 report to the National Assembly, the Ministry of Education and Training acknowledged that the system's expansion has proceeded in a haphazard manner for much of the *đổi mới* period:

The development in scale of higher education in recent years has responded better to the demand of the people and [addressed] human capital for economic and social development, but the fundamental limitation is that for a long time, from 1975 to 2004, the state was complacent in managing quality. For this reason the expansion of higher education, of universities and colleges in many cases increased the threat of a drop in quality.¹¹²

Higher education policy began to react to these transformations in the mid-2000s. The milestone was the government's promulgation in November 2005 of Resolution 14. This decree called for the "fundamental and comprehensive renovation of Vietnamese higher education from 2006 to 2020."¹¹³ Resolution 14 is notable both for its frank acknowledgement of problems and for the breadth of its mandate. Resolution 14 embraces the development of a rationally differentiated system, setting a target to

Perfect a network of higher education institutions on a national scale, with a differentiation by function and educational mission, ensuring a structure that is logical in level, discipline and profession, regional and appropriate to the policy of socialization of education and general socioeconomic development plans at the national and provincial level."

Despite its ambitions, Resolution 14 does not provide specific guidance for the policies needed to bring about this vision, instead calling for "renovation" in a number of areas including curriculum, faculty and administrator development, technology, research, finances, and management.

In 2005, the National Assembly passed the Law on Education (38/2005/QH11), superseding an earlier law adopted in 1998. The law provides an overarching framework for the development of legally binding policies in the education sphere. The law itself is very general, and focuses on laying out the roles, rights, and responsibilities of key actors including academic institutions, students, teachers, families, rectors/principals, and educational managers. With respect to higher education, the law envisions a differentiated system of institutions that is held accountable through quality assessments. Authority to

¹¹² MOET, Report on the Development of the Higher Education System, Solutions to Ensure quality assurance and improve of education quality, *Ministry of Education and Training*, 29 October 2009, p.4, <http://en.moet.gov.vn/?page=6.7&view=19831>, Hereafter Report No. 760/BC-BGDDT..

¹¹³ Resolution 14 was signed by Prime Minister Phan Văn Khải who, in his final appearance before the National Assembly lamented that he had not achieved more in the area of higher education and science.

implement the specific policies needed to turn this vision into reality is delegated to the Minister of Education and Training. The Law on Education was amended most recently in December 2009 and major additional amendments are planned in 2010.

The following discussion presents an analysis of recent developments in the policy framework on system-level planning issues including access, quality, management and differentiation. This is not an exhaustive cataloging of current policies and priorities but instead identifies those planning and regulatory milestones of particular relevance to the focus of this paper.

A. Differentiation

In 2007 the Prime Minister issued Decision 121, approving the “master plan for the university and college network” and offering a much more detailed picture of the kind of higher education system Vietnam seeks to create. It states that,

The development of a network of universities and colleges must be appropriate for the development strategy, socioeconomic conditions, and scientific potential of the country, tied to each region, each province; construct a disciplinary and professional structure, levels of training, logically distributed across the regions; build a few high-level human resource training centers, tied to focal economic regions and dynamic economic regions; create several human resource training centers concentrated by region, several university zones to meet the need to relocate universities in the city centers of Hà Nội and Hồ Chí Minh City and the need for new investment...

Decision 121 lays out the skeleton of a differentiated system. Institutions are defined by ownership and function. Three forms of ownership are recognized: public (*công lập*), private (*trí thực* or *dân lập*), and foreign invested (either 100 percent foreign owned, cooperation, or joint venture). In the case of private and foreign invested universities, the decision does not distinguish between for-profit and not-for-profit institutions (the for-profit, not-for-profit issue is discussed further in Part 3). At the top of the institutional hierarchy described in Decision 121 are apex universities ranked within an (unspecified) league table of the top 200 universities in the world. The remaining institutional types are research-oriented universities and vocationally oriented universities and colleges.

While it describes the structure of the system and the missions and functions of the institutions that compose it, Decision 121 is primarily a planning document for the period through 2020 rather than a regulatory tool. It sets a number of specific targets, including an optimal number of institutions and distribution of students by region. As in other planning documents analyzed below, Decision 121 set targets for dramatic increases in enrollments at private institutions and calls for a steady rise in the proportion of faculty members with advanced degrees.

Writing two years after the promulgation of Decision 121 in its report to the National Assembly, MOET conceded that Decision 121’s implementation has encountered difficulties.

B. Quality and Accountability

An important recent policy priority has been the deployment of mechanisms to ensure quality. MOET attributes the problems with quality to weak and ineffective management:

State management of higher education remains weak and stagnant and is the fundamental reason why the quality of higher education has not been measurably improved on a large scale. Without resolute, path-breaking solutions, the quality of higher education will continue to fall behind in the face of the development demands of the country.

While noting the contributions that the education system has made to national development, the Minister of Education and Training states that “higher education...is beset with contradictions and weaknesses. In general the quality of human resources remains low, and is not yet meeting the ever increasing demands of industrialization, modernization, and international integration.”¹¹⁴ A central focus of the reform effort is to balance the expansion and diversification of the system against the need to increase quality. In a recent directive the Prime Minister asserted, “We must thoroughly realize: expanding the scope of higher education must go along with ensuring and raising the quality of training.”¹¹⁵

An important thrust of the government’s reform efforts has been to impose greater accountability on individual institutions and to promote more competition among them by requiring institutions to become more transparent. As an initial step towards greater transparency, MOET has required universities to conduct self assessments by answering a number of questions regarding their material and human resources. Higher education institutions are now required to comply with the government’s “Three Disclosures” campaign, which requires them to make basic information available about students, faculty, resources, and finances.¹¹⁶ This is intended to enable students and families to make more informed choices about universities. Universities that do not comply with this directive will be barred from recruiting students. Also for the first time, universities are unveiling student assessments of teachers. While the government recognizes the importance of promoting “healthy” competition among universities, MOET states that “Universities are not yet subject to the pressure of societal oversight, and the pressure of healthy competition for social, collective, and individual benefit.”¹¹⁷

C. Management and Decentralization

¹¹⁴ “Renovating state management is the key to lifting the quality of higher education,” {Đổi mới quản lý nhà nước là khâu đột phá nâng cao chất lượng giáo dục đại học} *Nhân dân*, 11 September 2009. Available at: <http://www.nhandan.com.vn/tinbai/?top=41c=74&article=156602>.

¹¹⁵ Directive No. 296/CT-TTg, 27/2/2010.

¹¹⁶ The “three disclosures” policy was enacted with circular 09/2009/TT-BGDĐT on May 2, 2009. The information that institutions are required to release is detailed in the implementing guidelines released with the circular.

¹¹⁷ Report 760/BC-BGDĐT, 11.

The Vietnamese government has concluded that poor “educational management” is the chief cause of current problems and has made efforts to make management capacity a central pillar of the reform process. In April 2009 the Politburo found that “educational management retains many weaknesses and is the principal cause of many other weaknesses.”¹¹⁸ In January 2010 the Party commission of the Ministry of Education and Training adopted a resolution on the “renovation of higher education management” for the period 2010-2013. This document made the connection between management and quality even more explicit: “In the time to come, in the face of rapidly rising social demand for education, the continued increase in the number of universities, without sweeping, vigorous, and path-breaking responses it will be impossible to improve the quality of education and training...”¹¹⁹

In February 2010, the Prime Minister issued a directive echoing this connection between weak management and poor quality, and instructing MOET to proceed immediately with a dozen tasks to renovate education management, including improving and adding to the legal framework; developing the strategy to develop education 2011-2020 with “feasible targets and indicators to develop higher education”; and improving the state’s oversight of quality, particularly in part-time programs; and continuing to grant schools more autonomy while developing institutional capacity.¹²⁰ As this resolution and other policy statements make clear, “management” (*quản lý*) is to be understood in the broadest possible terms to encompass human capital and policy interventions intended to enforce standards, ensure transparency and accountability, improve quality, increase efficiency and achieve other desirable goals.

Decentralization is a cornerstone of Vietnam’s new, system-level governance regime. Resolution 14 embraced increased decentralization to the provincial and institutional level. In 2009 MOET conceded that the process of granting more autonomy remained limited. It attributed the slow pace of decentralization to an incomplete policy framework as well as to a lack of coordination between MOET, other line ministries, and provincial government. Poor coordination among government agencies is cited in the MOET Party commission’s January 2010 resolution: “the division of responsibility between [MOET] and other ministries and agencies and local people’s committees in the management of universities and colleges is unclear.”¹²¹ The resolution calls for more rapid decentralization of university management to the provinces.

A recurrent theme in MOET’s policy statements is its limited capacity to oversee the system. MOET attributes this situation to internal capacity constraints as well as to the fragmented nature of the system as it has evolved over decades, including the fact that a large number of higher education institutions are not directly under MOET’s

¹¹⁸ Conclusion No. 242-TB/TU, 15/4/2009.

¹¹⁹ Resolution No. 5-NQ/BCSD, 6/1/2010.

¹²⁰ Directive No. 296/CT-TTg, 27/2/2010.

¹²¹ *Ibid.*, 2.

supervision.¹²² The result, according to MOET's report to the National Assembly, is that "The Ministry of Education and Training cannot yet answer three questions: 1) What is the quality of training being offered at universities? 2) How do universities follow regulations related to training? 3) How efficiently do universities and colleges invest their budgets?"¹²³ The implication of this surprisingly frank admission is that at present there is no effective oversight of the higher education system.¹²⁴ During 2010 additional pieces of the policy framework will be put into place, including a prime ministerial decree regarding coordination between central and local government agencies.

D. Institution level reforms

The raft of policy innovations related to quality assessment and accountability are intended to improve the quality and responsiveness of individual institutions. MOET admits that the slow pace of regulatory and financial reform has "limited schools' dynamism and creativity." Although MOET concedes that steps towards greater autonomy have been limited, central authorities also voice frustration with the indifference of institutions to their directives. MOET observes in its report to the National Assembly that slightly more than fifty percent of all universities and colleges complied with their reporting requirements during the 2008-2009 academic year. The establishment of "university councils," provided for in the 2005 Law on Education, was intended to be an important step towards greater accountability. However, according to MOET, "In reality regulations regarding university councils are inappropriate in many respects, and the overwhelming majority of school have not implemented [the councils]."

MOET attributes weaknesses at the institutional level in part to leadership: "The selection and evaluation of university and college rectors remains limited, and [is] insufficient to ensure a corps of skilled lecturers, with management capacity, [that is] prepared to participate in university leadership that is increasingly demanding."¹²⁵

VOICES | Deputy Prime Minister Nguyễn Thiện Nhân*

¹²² According to MOET, of 376 universities, only 54 of 376 higher education institutions are under its management. Of the remainder, roughly 30 percent are under the control of other line ministries, 33 percent are controlled by provincial government, and 20 percent are privately owned.

¹²³ Report 760/BC-BGDDT, 10-11.

¹²⁴ Indeed, the press has provided prolific reports of incidents in which state standards for inputs are not enforced. Examples include: faculty being listed as full-time teachers several different schools, institutions having insufficient infrastructure to teach subjects they have been authorized to offer (e.g. private universities with permission to teach technology but without lack the necessary laboratories or expertise), and universities routinely recruiting in excess of their state delivered student quotas. Hà Vi, "10 years, 208 more universities and colleges: 'Enrollment rises, quality falls'" [10 năm, thêm 208 trường ĐH, CĐ: "Quy mô tăng, chất lượng thấp"], *Sinh viên Việt Nam*, 5 September 2008, <http://www.svvn.vn/vn/news/giaoduc/869.svvn>. Song Nguyễn, "Cutting off student recruiting at universities that make false declarations about quality" [Cắt tuyển sinh với trường đại học khai man chất lượng], *Vietnam Net*, 20 February 2010, <http://vietnamnet.vn/giaoduc/201002/Cat-tuyen-sinh-voi-truong-dai-hoc-khai-man-chat-luong-895202/>

¹²⁵ Ibid.

The sense of responsibility of many universities and colleges is poor...In many cases faculty and students lack adequate information about their school's operations and finances, making it impossible for them to exercise their power of oversight and ownership over the school's activities, making it possible for the school's leadership to break the law and violate regulations regarding training and financial regulations; [this] frequently results in protracted incidents of internal disunity.¹²⁶

*Minister of Education and Training, 2006-2010

As we have argued elsewhere, fundamental reform of the personnel systems governing higher education institutions is critical to institutional reform efforts. The government concedes that it has not done enough to provide an incentive system that encourages individual initiative and creativity. In assessing the reasons for poor quality and management, MOET's Party committee observes that the government "has not yet decisively moved from the state personnel system to a system of fixed-length contracts for faculty at public universities in accordance with government regulations; the mechanism of rectors setting salary levels in accordance with the value of the faculty member's contribution to the school has yet to be implemented; the annual evaluation of faculty members remains heavily formalistic and deferential, and lacking in substance..."¹²⁷ The Party's emphasis on incentives and merit-based promotion and remuneration indicates that meaningful personnel system reform is being considered.

E. Expanding access and faculty

Resolution 14 and subsequent policy documents also set quantitative targets for further expanding student access and training more faculty. At the end of 2008, the fourteenth draft of the "strategy for education development 2009 – 2020" was released by MOET. The objectives set out in this draft are not substantially different from the content of Resolution 14, except for some adjustments to expectations.

BOX | MOET's key targets, 2010-2020

- Expand the scale of training to 200 students per 10,000 people by 2010 and 450 by 2020 (MOET's draft strategy for 2009-2020 set a revised target of ensuring that by 2020 40% of young people aged 18-24 will be enrolled in tertiary education institutions).
- By 2020, 70 - 80% of tertiary education students will be enrolled in vocational and applied training programs (MOET's draft strategy set a revised target that by 2020 60% of students enrolled in short and long term vocational programs will attend non-state training institutions).

¹²⁶ "Renovating state management is the key to lifting the quality of higher education," op.cit.

¹²⁷ Resolution No. 5-NQ/BCSD, 6/1/2010 6.

- By 2020, about 40% of students will be attend non-state higher education institutions.
 - Ensure that the student/teacher ratio across the entire system does not exceed 20.
 - By 2020 at least 60% of university instructors will hold masters degrees and 35% will hold PhDs (MOET’s draft strategy set a revised target that 80% of college teachers will hold advanced degrees and 100% of university instructors will hold advanced degrees, with 30% holding PhDs).
- Source: Resolution 14 and Draft Strategy for Education Development 2009 – 2010*

In 2009 the ratio of students in Vietnam reached 198 per 10,000 people.¹²⁸ Reaching 450 students per 10,000 people in a decade, however, seems unfeasible. Calculating the implications of this target (Table 2), we see that the number of students in higher education would need to rise from 1.7 million in 2009 to 4.4 million in 2020. The number of students enrolled in private institutions would increase fivefold over ten years. To reach the student/faculty ratio target of 20 or less, the number of university and college faculty will more than triple over the next ten years. To achieve the target of 20 students per faculty member, an average of more than *12,000 new faculty must be added every year* (based the target of 450 students per 10,000 people).¹²⁹

Table 3: Actual and projected growth in student enrollment, faculty, higher education institutions and student/faculty ratio based on targets for enrollment growth, 1990-2020^{130}*

	1990	1995	2000	2005	2009	2010	2014	2020
Student enrollment in colleges and universities	129,600	297,900	918,228	1,387,107	1,714,200	1,799,920	2,750,000	4,374,372
-public	129,600	297,900	813,963	1,226,687	1,388,600	1,439,720	2,068,000	2,843,342
-private	-	-	104,265	160,420	325,600	360,200	682,000	1,531,030
Faculty number in colleges and universities	21,900	22,800	32,205	48,579	61,190	96,250	132,515	218,719
-public	21,900	22,800	27,689	41,915	-	81,825	98,415	-
-private	-	-	4,516	6,664	-	14,425	34,100	-

¹²⁸ Vietnamese policy planning documents often use this indicator to measure enrollment. Vietnam’s ratio has improved significantly (from 118 in 2000-2001 to 198 in 2008-2009). However, for countries with low tertiary enrollment levels, this ratio can be misleading. For instance, according to World Bank data in 2005-2006, the number of students per ten thousand people in Germany (277), Japan (316), and the United Kingdom (380) were lower than those in Thailand (374) and Chile (407), yet no one would argue that the education systems in the latter two countries are more advanced than those in Germany, Japan, and the UK.

¹²⁹ It must be remembered that during 1990-1995, the average annual increase of faculty was only 180 faculty; from 1995-2000, it was 1881 faculty; and from 2000-2009 the average increase was over 3,000 faculty.

¹³⁰ Source: Proposal to reform education finance, MOET 2009, Report 760, population forecasts to 2030 from Vũ Quang Việt, “Chiều hướng phát triển dân số và học sinh, hiện tại and author’s calculations.

Number of colleges and universities	106	109	178	255	376	395	603	959
-public	106	109	148	220	295	306	439	604
-private	-	-	30	35	81	90	170	381
Students per university or college	1223	2733	5159	5440	4559	4,559	4,559	4,559
-public	1223	2733	5500	5576	4707	4,707	4,707	4,707
-private	-	-	3476	4583	4020	4,020	4,020	4,020

**Italics are author's calculations based on targets.*

Another target worth examining is the proportion of faculty with advanced degrees. According to Resolution 14, by 2020 at least 60% of faculty will have masters degrees (131,200 faculty) and 35% will have PhDs (76,5000 faculty). This is a twelvefold increase from current levels for PhDs and six-fold increase for masters. Achieving the desired percentage of faculty holding master degrees should be possible but it is questionable whether the PhD target can be achieved. Moreover, expanding the scope of graduate training runs the risk of diluting quality still further.

Table 4: Anticipated growth of faculty with higher qualifications¹³¹

Unity: faculty members	1997	2000	2005	2,009	2020
PhD faculty	3,908	4,471	6,223	6,217	76,552
MA faculty	3,802	6,802	14,539	22,831	131,231

The academic profession stands at the center of any academic institution. Without well-educated and committed professors, universities and colleges cannot be academically successful. Over the long term, Vietnam certainly needs to develop graduate training programs. However, as demonstrated above, providing quality graduate training for such a large number of people will be difficult over the short term. We wish to emphasize two points. First, as argued above, without sweeping reform to its personnel policies, Vietnam is unlikely to realize marked improvement in its higher education system. The most talented individuals will only enter the teaching profession in large numbers when universities and colleges implement a merit-based personnel system. Making professional skill and academic achievement the basis for promotion and compensation will have a more meaningful long-term impact on the academic profession in Vietnam than rapidly expanding graduate programs of low quality.

Second, in a differentiated higher education system, the faculty body also needs to be differentiated. Research universities need a high concentration of faculty with doctoral

¹³¹ Report No. 760 and author's calculations.

qualifications to teach and research at the highest international standards. At professionally-oriented institutions, however, including provincial universities and colleges, research qualifications are less important. Teachers' professional experience in agriculture or industry may be more directly relevant. The same is true at private universities. Rural universities and private universities in Vietnam currently have difficulty building full-time faculty bodies, and rely heavily on part-time lecturers from urban, public universities. Therefore, the government's faculty development efforts should not focus exclusively on rapid expansion of graduate training, but more broadly on helping different kinds of institutions, including universities and colleges outside of major cities, to build the strong, committed faculty bodies they need to fulfill their missions.

This brief review of the evolving policy framework suggests that, while the government has adopted an ambitious goal of fundamentally reshaping the higher education system, it has thus far placed greater emphasis on planning (often entailing quantitative targets of questionable feasibility) than on creating the regulatory framework that will guide the development of the system.

III. Education Financing

One of the Vietnamese government's core reform objectives is to transform higher education financing so as to increase overall revenue and to "socialize" (*xã hội hóa*) education financing, a euphemistic term used to refer to increasing non-state spending over and above resources generated directly through taxation. At the same time, government policy also acknowledges that the state budget will remain the greatest source of financing, and that education has high priority for state investment relative to other sectors.¹³² This section will analyze the current situation of education finance in general, and higher education finance in particular. Data on Vietnam is from the Ministries of Education and Training and Finance and international data is from UNESCO.¹³³

Studies on Vietnamese education often identify the need for more resources as the top priority. Indeed, infrastructure in many of Vietnam's colleges and universities is poor, and teachers' official salaries are low. Vietnam cannot create a high quality education system without modern laboratories and a quality faculty. However, we argue here that the quantity of resources is neither the sole nor even the primary reason for poor quality universities. The analysis in this section will demonstrate that Vietnam is already spending generously on education by comparison with other countries. However, spending on education is highly inefficient and is beset with structural imbalances,

¹³² See Law on Education, 2005. Also, Excerpt "5.5. Strengthening the financial resources, facilities for education", Education Development Strategy 2001-2010, issued together with Decision No. 201/2001/QĐ-TTg, 28 December 2001

¹³³ We look at general education financing in addition to higher education financing because of a scarcity of Vietnamese data on higher education. This section indicates where data are for all education levels and where they address higher education in particular.

including bias in favor of capital investment (buildings and infrastructure) over current expenditures and a problematic division of funds between different levels of the education system. We illustrate this point by looking at tuition and faculty salary policies. The implication of this analysis is that the most urgent need is not to increase resource levels but to change the structure and increase the efficiency of how resources are used.¹³⁴ A final problem we address is unrealistic expectations regarding the level of revenue that science and technological innovation is likely to generate over the next decade.

A. Public spending for education

Over the past twenty years, and particularly the past five, public spending on all levels of education has increased significantly and now constitutes a major share of the state budget. Spending on education as a percentage of the total budget grew from 8% in 1990 to 15% in 2000, reaching of 20% by 2008 (Figure 1).¹³⁵ This puts Vietnam's current spending level in the middle to high range by comparison with other countries in the region.

As a percentage of GDP, Vietnam's spending on education is also high (Table 3). From 2006 to present, state spending on education has stayed at 5.6% GDP. If ones takes into consideration proceeds from the treasury and lottery sales used to finance education, public spending on education increases to 6.1% GDP. Looking only at higher education, we see again that Vietnam's per student expenditure relative to GDP per capita is on par with other countries in the region (Table 2).¹³⁶

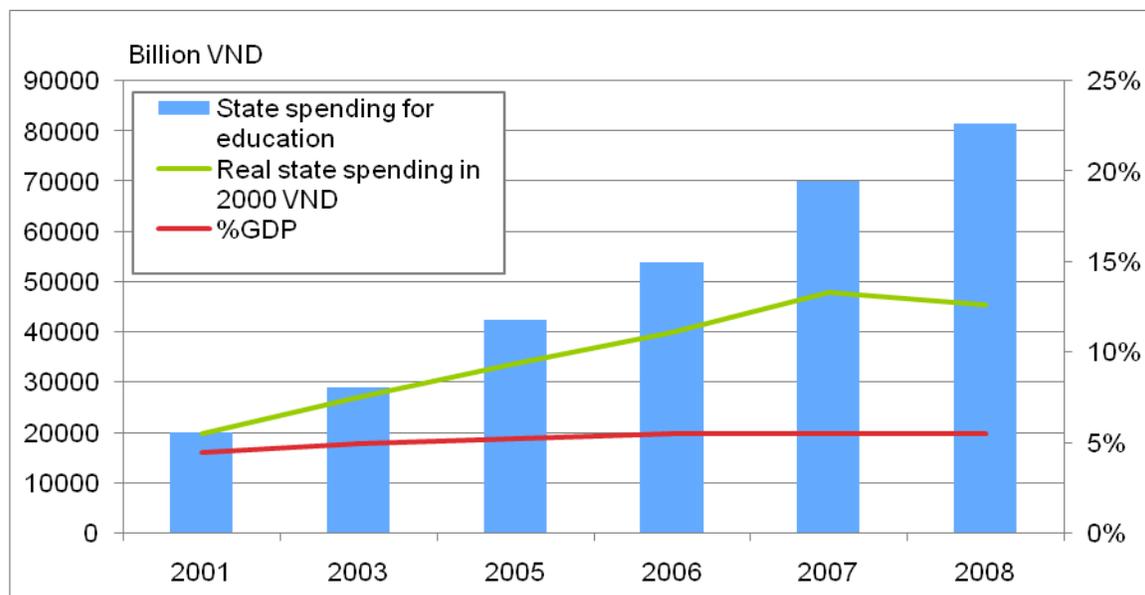
These numbers demonstrate that Vietnam is already spending a lot on education by comparison with its middle-income neighbors, and reflect the high priority that the government has attached to educational development in recent years.

Figure 1. Vietnamese state spending on education (all levels)

¹³⁴ The government has recognized the need to improve the efficiency of higher education spending. At a conference organized by MOET in August 2009, Prime Minister Nguyễn Tấn Dũng observed that ineffective state management and a weak policy environment have prevented more efficient mobilization and use of resources. In *Tuoi Tre*, "University education: management can't keep up with enrollment" "Giáo dục ĐH: quản lý "chạy" không kịp quy mô!" 25.8.2009. [http://tuoitre.vn/Giao-duc/333470/Giao-duc-DH-quan-ly-"chay"-khong-kip-quy-mo.html](http://tuoitre.vn/Giao-duc/333470/Giao-duc-DH-quan-ly-)

¹³⁵ In real terms, total state spending on education increased 125% between 2001 and 2008, indicated in last row of Table 3.

¹³⁶ However, actual state budget spending per student is not as high as the numbers suggest, because the state budget only covers quota (*chi tiêu*) students, whereas in fact many universities recruit over their state-allotted quota. Official per student spending is 6 million VND/student/year, but actually spending for all students amounts to only 2.5 – 3 million VND/student/year. Standing Committee of the National Assembly, Report 329/BC-UBTVQH12.



B. Table 4: State spending on education in the region (all levels) ¹³⁷

	Vietnam	Korea	Thailand	Malaysia	Philippines	Indonesia	East Asia-Pacific
Public spending on education as % of state budget	20	16.5	25	25.2	16.4	--	16.3
Spending on education as % of GDP	6.1	4.6	4.2	6.2	2.7	0.9	5.2

Table 5: State spending on higher education / GDP per capita ¹³⁸

	Vietnam	Korea	Indonesia	Thailand	Malaysia	Philippines
State spending per tertiary student as % of GDP per capita	34	9	13.3	24.9	71.1	12.4

Yet, the effects of this increased level of expenditure are, at best, unclear. Despite the growth in public spending in recent years, it is well documented that schools, particularly universities and colleges, face significant resource constraints. This is evidenced by low formal wage levels for faculty and the many fees and charges levied by public and private schools on students and their families.

¹³⁷ UNESCO Global Education Digest, 2007, http://www.uis.unesco.org/template/pdf/ged/2007/EN_web2.pdf. Tables 13 and 14.

¹³⁸ Vietnam data is based on 2008 level of spending 5.83 million VND/student/year. Other data is from UNESCO Global Education Digest, 2007, http://www.uis.unesco.org/template/pdf/ged/2007/EN_web2.pdf. Tables 13 and 14.

B. Structure and efficiency of education expenditure

The persistence of low official salaries for teachers despite growing expenditure can be directly attributed to the problematic structure of public spending. We see three salient problems in the structure and efficiency of public expenditure. First, the portion of the total education budget devoted to higher education is too small. Second, the ratio of current expenditures to investment is too low, and falling, reflecting excessive emphasis on the “hardware” of higher education at the expense of the “software.” Third, spending outcomes are poor.

Our first finding is that spending on higher education accounts for only a small share of the total state education budget, and is less than in comparable countries.

According to Ministry of Finance data, until 2007 the budget for higher education accounted for less than 10% of the total state budget for education and training (this increases to around 18% if all levels of vocational training are included). Globally, spending on tertiary education often accounts for between one-quarter and one-third of public expenditure for education. Meanwhile, in Vietnam, a category dubbed “other spending” occupies a substantial portion of the total education budget, and exceeded higher education spending until 2007. MOET data indicates that in 2006, spending on “other” training activities accounted for 11.2% of the total education budget, or 1.2 times more than higher education spending.¹³⁹

MOET and MOF both realized the problematic nature of this spending structure, and since 2008 responsibility for continuing education and training for ministry staff has been transferred to the college and university budget. Thus, in 2008, spending for other training dropped to 4% of the total budget and spending for vocational schools, colleges and universities increased from 18.22% in 2006 to 24.3% in 2008. However, it seems that this was only an accounting adjustment meant to demonstrate a reasonable balance between spending on higher education and other training, and that in reality the content of these expenditures has not changed.¹⁴⁰ According to MOET’s data, in 2006, spending on the training and retraining of officials amounted to VND2,755 billion, equivalent to over half of the state budget for spending on colleges and universities.

¹³⁹ In 2006, the breakdown of the “other expenditures” category included: ministry expenditures, staff training for central agencies (45%), spending on special tasks (11.2%), continuing education (10.7%), training for technical staff and specialists abroad (9.7%), education spending from the national security budget (9%), project borrowing costs (7.6%), training of Lao and Cambodian students (2%), training for collectives’ cadres, business support (2.6%), training for village and commune administrative staff, placement, poverty reduction (1.7%). MOET, “2009-2014 Proposal to reform education finance” [Đề án “Đổi mới cơ chế tài chính giáo dục 2009-2014”], 2009, <http://moet.gov.vn/?page=1.24&view=1242>.

¹⁴⁰ MOET indicates that “From 2008, ‘other spending’ for education was adjusted fundamentally. Several spending items were transferred [from “other spending”] to other educational levels. This includes expenditure for continuing education [*giao duc thuong xuyen*] and for training of ministry officials, both of which were transferred to ‘university and college education’ expenditure.” MOET 2009, p.43.

Figure 2. Post-secondary education vs. other spending

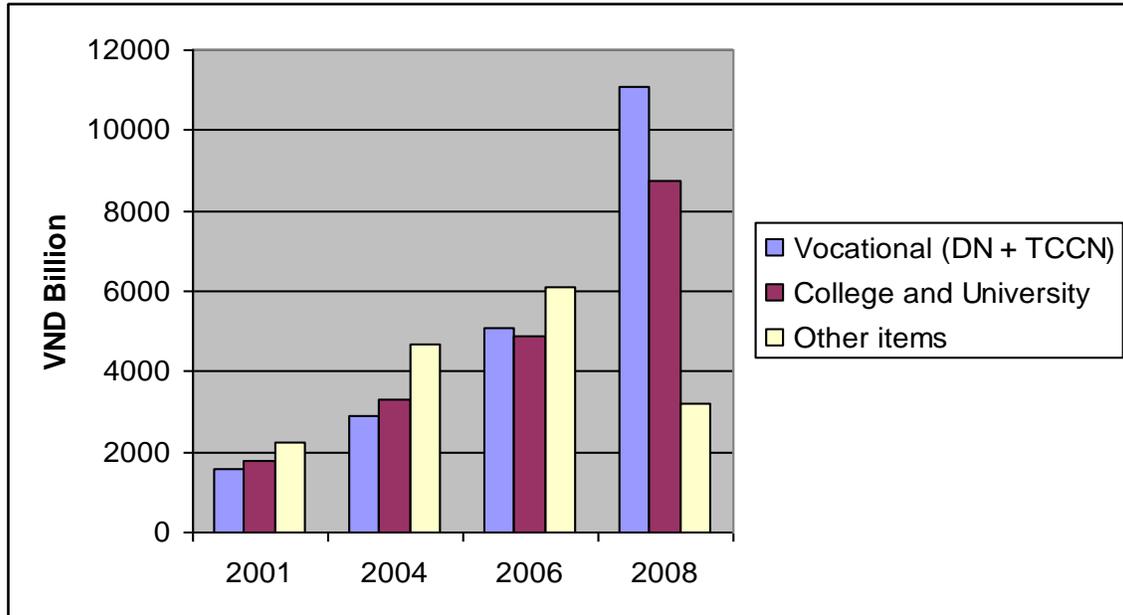


Table 6. Breakdown of state spending by educational level

State budget spending (VND billion)	2001	2004	2006	2008
Kindergarten through high school total	14,093	23,990	38,698	58,376
% total State budget for education and training	71.37 %	68.79 %	70.62 %	71.70 %
Vocational training total	1,595	2,914	5,105	11,072
% total State budget for education and training	8.08%	8.36 %	9.32%	13.6%
Colleges and universities total	1,798	3,294	4,881	8,752
% total State budget for education and training	9.11%	9.45%	8.91%	10.75 %
Vocational, college and university total	3,393	6,208	9,986	19,824
% total State budget for education and training	17.18 %	17.80 %	18.22 %	24.35 %
Other spending total	2,262	4,675	6,115	3,220
% total State budget for education and training	11.45 %	13.41 %	11.16 %	3.95%

Total State budget for education and training	19,747	34,872	54,798	81,419
<i>Real total state budget for education and training in 2001 VND</i>	<i>19,747</i>	<i>29,060</i>	<i>39,423</i>	<i>44,491</i>

A second concern in the expenditure structure is that insufficient funds are devoted to current expenditures,¹⁴¹ especially teacher salaries. According to UNESCO, in most countries current expenditures account for 82% to 93% of total spending on education. In Vietnam, current expenditures on education have fallen compared to capital investment spending; by 2008, current expenditures accounted for only 72% of total spending (state and household) on education.¹⁴² Within the category of current expenditures, salary payments have increased gradually since 2001, but by 2008 still accounted for only 58% of total current expenditures (see Tables B and C, appendix IV).¹⁴³

Salary budgets include payments to teachers, lecturers and management staff. This suggests that management redundancy is a problem in the Vietnamese higher education system. Despite a slight decline since 2000, the management personnel/total personnel ratio remained at 33% in 2008. In other words, on average there is one administrator for every two lecturers at Vietnamese higher education institutions (see Table D, appendix IV). Moreover, as universities have been forced to disclose more information about compensation in order to comply with MOET’s “Three Disclosures” policy, reports have emerged that payments to management staff are much higher than to faculty.¹⁴⁴

MOET’s roadmap for salary reform in public education institutions plans for the average monthly salary of college and university instructors to increase by 1.6 times between 2009 and 2014. As discussed in the next section, according to MOET, achieving this target will require more than doubling tuition rates for most fields of study during this time period.

¹⁴¹ UNESCO defines current expenditures as follows: “Expenditure for goods and services consumed within the current year and which would be renewed if needed in the following year. It includes expenditure on: staff salaries, pensions and benefits; contracted or purchased services; other resources including books and teaching materials; welfare services; and other current expenditure, such as subsidies to students and households, furniture and minor equipment, minor repairs, fuel, telecommunications, travel, insurance and rents.”

¹⁴² Here we adjust state budget for education, adding the proceeds from educational treasuries, lottery which are classified as public finance for education.

¹⁴³ Current budget expenditures include items for implementing ODA projects, spending on national target programs on education and training, salary and salary-equivalents (wage, allowances, social and health insurance, fixed cost), policy scholarships, and learning and teaching practices. There is no data available for current expenditures at the college and university level. An analysis of university financial statements can be used to indicate the structure of current expenditures; these data show that salary spending is lower than both personal payments (allowances) and many other expense categories.

¹⁴⁴ Hạ Anh, “Lecturers in which school have the highest income?” [Giảng viên trường nào thu nhập cao nhất?], *Vietnamnet*, 28 December 2009, <http://vietnamnet.vn/giaoduc/200912/Giang-vien-truong-nao-thu-nhap-cao-nhat-886587/>

Table 7. Projected average monthly payments for teachers in colleges and universities (2009-2014)

VND Million/month	2009	2010	2011	2012	2013	2014
Salary of teachers in colleges and universities	4,463	5,013	5,837	6,798	6,968	7,142 ¹⁴⁵

However, improving the efficiency of higher education spending would negate the need to increase tuitions. Faculty salaries at higher education institutions could be significantly higher today than MOET forecasts for 2014. We arrive at this conclusion through the following calculation. An analysis of official MOF and MOET data shows that the state budget's annual per student spending was VND5.83 million in 2008; combined with 1.8 million in per student tuition revenue,¹⁴⁶ the total per student financing was 7.63 million/year. With the current student-faculty ratio of 28, total financing for 28 students would amount to VND213.63 million/year. If 80% of this amount were allocated to current expenditures, of which 60% is spent on faculty salaries, then in 2008, monthly faculty payments should have averaged VND8.55 million.¹⁴⁷

Table 8. Calculating potential faculty salaries

	Unit	2001	2004	2006	2008
State spending on colleges and universities	VND mil.	1,798	3,294	4,881	8,752
Public colleges and universities students	Person, thousands	873	1,182	1,347	1,501
State spending/student	VND million	2.06	2.79	3.62	5.83
Tuition/year	VND million	1.80	1.80	1.80	1.80
Total financing/student/year	VND million	3.86	4.59	5.42	7.63
<i>Real total financing/student/year</i>	<i>2001 VND million</i>	<i>3.86</i>	<i>3.82</i>	<i>3.90</i>	<i>4.17</i>

¹⁴⁵ Calculating the real value of projected salary increases in 2009 VND with an 8% inflation rate over the next five years, the real value of the 2014 salary would be 4,859,000 VND, or a 9% increase over five years.

¹⁴⁶ Based on the 2008 average tuition rate of VND180000/month and a 10 month academic year.

¹⁴⁷ Even when current expense is 60%, of which salary is 60%, then in 2008 salary of college and university faculty was VND6.41 million /month.

Total revenue based on student/faculty ratio	28	108.06	128.43	151.88	213.63
Current expenditures	80%	86.45	102.74	121.51	170.90
Salary	60%	51.87	61.65	72.90	102.54
Potential Monthly payment	VND million	4.32	5.14	6.08	8.55

The above calculation does not consider the possibility that actual student-teacher ratios are higher than 28 (some schools reported up to 50).¹⁴⁸ Nor does it account for college and university financing that is not included in the state budget (such as revenue from treasuries, lotteries, etc.), or the higher tuition paid by students in alliance, in-service, and distance training programs.

The third problem in the structure of expenditure is capital investment: Vietnam’s share of investment (as opposed to current expenditures) is already high, but MOET has determined that too much of the state budget is devoted to current expenditures and not enough for investment.¹⁴⁹ In 2008, investment accounted for 23% of the state education budget and 28% of total state and household spending on education and training. Meanwhile, UNESCO statistics indicate that the average for investment as a share of education spending was 10% internationally and 14% in the East Asia Pacific region. Investment efficiency in Vietnamese education is low: leakages and corruption in basic infrastructure investment are high while impact of improved physical facilities on education quality is unclear.¹⁵⁰ ODA tends to tilt spending toward investment in buildings, especially projects requiring large investments.

Table 9: Education financing structure (all levels)¹⁵¹

	Vietnam*	Australia	Philippines	Korea	East Asia-Pacific average
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¹⁴⁸ HP, “Lack of nearly 22,000 university and college teachers” [Thiếu gần 22,000 giáo viên đại học, cao đẳng], *Báo điện tử Đảng Cộng Sản Việt Nam*, 12 May 2009.

¹⁴⁹ MOET has estimated that, out of a total \$20 billion needed to implement Resolution 14, an astonishing \$18 billion should be devoted to development of higher education infrastructure. This leaves \$110 million for development of teaching and management staff, and \$50 million for development of teaching materials and curricula and assessment procedures. Background document for Higher Education Reform Agenda 2006-2020. Cited in World Bank Program document no. 47492-VN, p.13. http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2009/06/26/000350881_20090626113049/Rendered/PDF/474920CORRIGENDUM0IDA1R20091016012.pdf

¹⁵⁰ For example, *TTXVN*, “State auditor: Education sector spending incorrectly” [Kiểm toán nhà nước: Ngành giáo dục chi sai], *Thời Báo Việt*, 30 May 2009, <http://thoibaoviet.com/tintuc.psk.34984.tbv>

¹⁵¹ UNESCO, “Table 19: Finance Indicators by ISCED level,” <http://stats.uis.unesco.org/unesco/TableViewer/tableView.aspx?ReportId=172>

Current expenditures as % of total expenditure	72	94.1	96.2	82	86
Capital investment expenditures as % of total expenditure	28	5.9	3.8	18	14

**Vietnam figures: data for current expenditures include state budget, tuition, S&T revenues, and other revenue. Investment includes state budget, treasuries and lottery sales.*

C. Financial burden sharing between the State and citizens

Non-state spending is also on the rise. State financing for education accounts for approximately 63% of total expenditure, and the non-state contribution (consisting almost entirely of household spending, including tuition and other fees) accounts for 37%. This figure does not account for private family expenditures on overseas study, which were estimated at \$1 billion in 2007. Compared to other countries, the share of state spending is reasonably large.

In both developed and developing countries, the state plays a central role in financing and regulating higher education. In countries with robust social security networks and higher levels of public support for education, the share of educational financing provided by households is smaller. In Northern and Western Europe, the state provides 80-90% of the budget for education. In countries where the state has a more limited role, such as Japan or Korea, the state furnishes less than 50% of total education spending. Of course, national education budgets are not limitless. Even in countries that have until recently provided tertiary education for free or at nominal expense to students, the social contribution has been growing.¹⁵² However, effective higher education systems require diversified private funding sources beyond tuition payments, including contributions from the private sector, philanthropic foundations, alumni, etc.¹⁵³

Vietnam has adopted a policy of supplementing state spending on higher education by raising tuition levels. MOET proposed the following policy: “reasonable sharing between the state, learners and others in society...in terms of vocational and university education at public institutions, learners should share an important part of the training cost.”¹⁵⁴ “Reasonable” cost sharing is defined as tuition payments at public institutions covering salaries and, to some extent, other current expenditures. This policy accounts for the rising household share of higher education financing. In 2009, tuition increased by 41.7% from 2008. Between 2009 and 2014, tuition levels are projected to grow by an annual

¹⁵² Even in Europe where higher education has long been considered a right, user fees are taking hold. The UK was the first to introduce user fees, and France and Germany are now following suit. See D. Bruce Jonhstone, “Worldwide Trends in Financing Higher Education: A Conceptual Framework,” *Financing Higher Education: Access and Equity*, ed. Jane Knight (forthcoming, 2009).

¹⁵³ The Task Force, 57.

¹⁵⁴ MOET, “Proposal to reform educational financing structure for 2009-2014.”

average 17 % to 27%, significantly faster than Vietnam’s anticipated nominal GDP per capita growth.¹⁵⁵

Figure 3. Tuition revenue, state budget spending on higher education

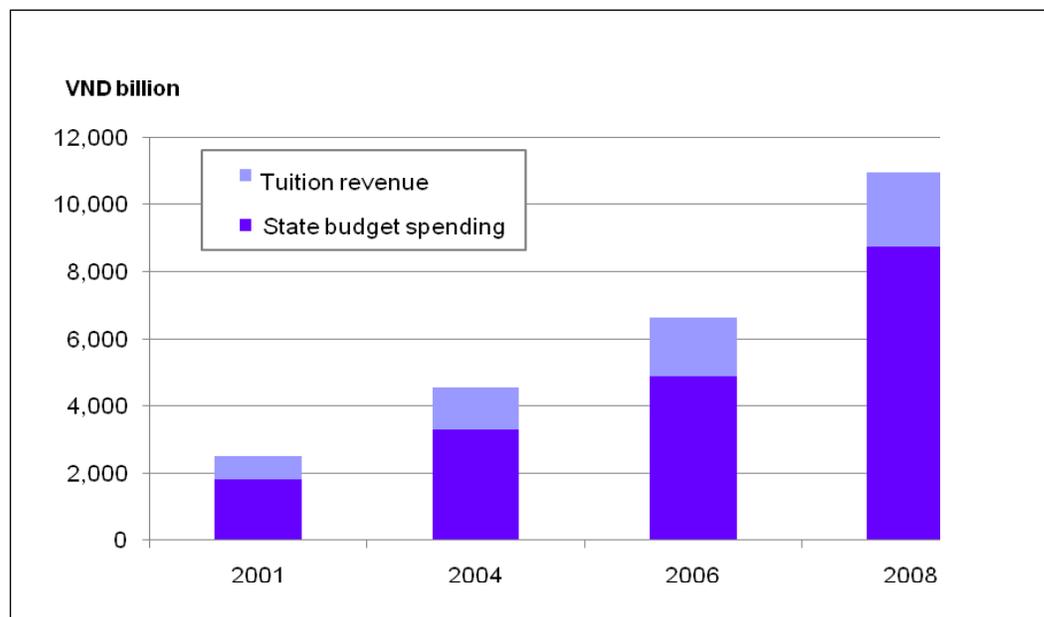


Table 10. Tuition ranges for fields of study at public institutions, 2009 – 2014
 (VND thousand/month/student)*

Field	2008	2009	2010	2011	2012	2013	2014
1. Social science, economics, law	180	255	290	350	410	480	550
2. Engineering, technology	180	255	310	390	480	560	650
3. Natural sciences	180	255	310	390	480	560	650
4. Agro-forestry-fisheries	180	255	290	350	410	480	550
5. Pharmacy-medicine	180	255	340	450	560	680	800
6. Sport, art, performance	180	255	310	390	480	560	650

¹⁵⁵ Tuition levels at private universities tend to be much higher than at public universities, ranging from 7 to 20 million VND per year, or 700,000VND to 2 million VND per month. Kiều Oanh, “The highest publicly disclosed tuition fee is 15 million dong per month” [Học phí ĐH công khai cao nhất 15 triệu đồng/ tháng]. <http://vietnamnet.vn/giaoduc/201003/Hoc-phi-DH-cong-khai-cao-nhat-15-trieu-dong/-thang-898506/>

7. Pedagogy			280	330	380	440	500
Average real tuition at 7% inflation in VND 2008	180	238	266	309	349	383	414

*The academic year is 10 months.

Undergraduate education is, to some extent, a private good with significant private returns, and middle-class Vietnamese families have clearly demonstrated that they are willing to spend heavily for their children’s education (evidenced by enormous and growing levels of borrowing and spending on overseas education). If financial management becomes more transparent and the efficiency of investment improves, families will more readily pay higher tuition fees in order to improve the quality of education.¹⁵⁶ However, the primary justification for the recent increase in tuition fees is the need to improve teacher salaries. We have pointed out that, if spending on higher education were more efficient, salaries could be increased without raising tuition, or salaries could be raised enough to curtail faculty moonlighting.

Rising tuition makes equity policies all the more important. As the education financing structure becomes more reliant on tuition payments, the gap between the poor and the rich in access to higher education will grow. Policies should aim to ensure that students with equivalent abilities have equal access to high quality education. Therefore, alongside implementing higher tuition fees and pursuing costly “world-class university” projects, the state needs to enhance scholarship, aid and loan programs in cooperation with banks, industry and schools.

VOICES | Former National Assembly Deputy Nguyen Ngoc Tran¹⁵⁷

Tuition is a difficult and sensitive problem, and needs to be examined from many sides, especially when our country is poor and has a clear gap between the rich and the poor... Given the importance of the tuition question, I believe that if the Government presented to the National Assembly, and to the people, explaining clearly all the angles, putting forward a good solution, including credit policies for students and scholarship policies, then it will have the agreement of society.

D. Other private revenue sources

To date the government’s efforts to supplement state financing have focused above all else on raising tuition levels as well as utilizing ODA and preferential loans from multilateral lending agencies. It is a MOET priority to mobilize resources from industry

¹⁵⁶ See interview with Deputy Nguyễn Minh Thuyết in Tuệ Nguyên, “Tuition and quality” (“Học phí và chất lượng”) *Tuổi Trẻ*, 21/5/2010/

¹⁵⁷ Nguyen Ngoc Tran, “Hai vấn đề cấp bách trong giáo dục đại học” 404/02/2010.
<http://www.baodatviet.vn/Home/KHCN/Hai-van-de-cap-bach-trong-giao-duc-dai-hoc-1/20102/80115.datviet>

and other sources, particularly through university-based scientific research and services, but these activities have yet to produce significant revenue.

MOET's draft Education Development Strategy 2009-2020 set the goal that "university revenue from technological and scientific activities [services, funded research, patents, etc.] will play an important part in total revenue of a higher education institution, at 5% in 2010, 15% in 2015 and 20% in 2020." This target is adjusted from the target set in Resolution 14 for S&T revenues to reach 25% by 2020. However, in 2008-2009, universities' total revenue from science and technology accounted for only 3.4% of all non-state spending. It is difficult to imagine how revenue from science and technology services could increase six-fold in ten years. On the demand side, Vietnamese companies do not generate significant demand for science and technology. Vietnamese businesses compete mostly on cheap labor and resource exploitation. On the supply side, universities are not a source of innovation, as indicated by Vietnam's poor patent and international publication record.

Increase in other revenue streams will depend on the ability to compete for projects, quality of research, and an institutional environment that enables collaboration in science and technology services between schools and potential clients. University-industry collaboration in developed countries is based on strong intellectual property rights and highly developed research capacities (often in the medical sciences). Universities need significant administrative capacity and autonomy, as well as strong internal organizational structures (e.g. technology transfer offices), to manage and support relationships with industry.¹⁵⁸ In Vietnam, much of the university-industry collaboration that does take place is informal, with academics consulting externally with businesses. This means that increasing universities' revenues from industry will also depend on establishing rules and processes to govern faculty's external consulting and contracting activities.¹⁵⁹ The government may need to adjust its expectations for different kinds of universities: apex and regional universities may play a major role in technological innovation in the future, but provincial universities will most likely not.

In summary, state spending on education relative to GDP in Vietnam is already high. Household spending on education is also growing, even without counting household expenses for overseas study. The share of current expenditures in education is lower than the world average and falling, while capital investment continues to grow. These structural problems in education financing are hindering the government's financial strategy to mobilize further resources from society. The structural problems in public expenditure have implications for tuition policy. An important part of college and

¹⁵⁸ In Thailand, limited university autonomy and administrative capacity has hindered the development of research-based university-industry linkages. See Peter Brimble and Richard F. Doner, "University-Industry Linkages in Economic Development: The Case of Thailand," *World Development* vol 35, issue 6, 2007, 1021-1036.

¹⁵⁹ Discussion is from Philip Altbach et al., "University-Industry Linkages" in *Trends in Global Higher Education: Tracking an Academic Revolution*, (Boston, MA: Center for International Higher Education, 2009), p. 145-154.

university cost is being transferred to students. If tuition rates rise as planned, vigorous equity intervention will be necessary to ensure that poor students are not disproportionately affected.

Part two has examined recent developments in Vietnam's higher education system and analyzed major policy planning initiatives for developing the system over the next decade. We have pointed out a number of inconsistencies in these plans and observed that a coherent and unified regulatory framework will be needed to support the system Vietnam seeks to build. In part three we will suggest some key concepts derived from international experience that could guide the policy reform process.

Part Three: Key Policy Areas and Lessons From International Experience

The Vietnamese government has outlined a vision an expanded, modern ecosystem of higher education institutions differentiated by function, mission, and ownership. This system would teach the mix of skills to support rapid socioeconomic development, and provide both excellence and access. However, government policy pronouncements have tended to emphasize quantitative targets while remaining vague on matters of execution. What policies form the “rational and coordinated architecture” for a differentiated system of higher education?

This section examines the appropriate “domains of government intervention” in a state supervised system of autonomous higher education institutions.¹⁶⁰ Because direct central control over hundreds of universities and colleges is impossible, the state will need to reorient its role to providing strategic direction, public goods, and oversight that combines mechanisms for accountability with positive incentives for institutions to excel and compete. In Vietnam, policies that form this steering and oversight framework— institutional accreditation and audits, financing that follows performance, public support for private institutions—are in the very early stages of development. This section draws selectively on relevant international experiences, based on the government’s chief goals of differentiation, quality, access, and responsiveness enumerated above, to suggest specific policies to guide Vietnam’s systemic reforms.

I. Stratified structure to prevent mission drift

A differentiated system has an explicitly stratified structure. Policies to maintain a rational diversity of institutions and discourage mission drift will be a vital feature of successful reform in Vietnam. As the system expands, lower tier institutions seek to improve their own status by imitating higher tier institutions. If the upgraded institutions are not adequately replaced, they leave behind an instructional and service gap: when a community college becomes a university, the students who would attend community colleges lose out. Those students are generally poorer and often bound to local colleges for financial, familial or academic reasons.

The California example is often invoked as an illustration of a well-planned differentiated system. At its genesis half a century ago, the California Master Plan explicitly “pigeonholed” public institutions into three tiers, each tier differentiated by mission, structure, and patterns of funding.¹⁶¹ The University of California is the selective, research-oriented tier; the California State University system focuses on teaching; and the highly accessible community colleges, enrolling 70% of all tertiary students, provide vocational training and a bridge to higher degrees.¹⁶² The research tier has 10 campuses,

¹⁶⁰ World Bank, 2002, 94.

¹⁶¹ J.A. Douglass, *The California idea and American higher education: 1850 to the 1960 Master Plan*, (Stanford, CA: Stanford University Press, 2000).

¹⁶² As of February 2010. Camille Esch and Christopher Cabaldon, “Community colleges must share in higher education recovery”, *Los Angeles Times*, February 22 2010,

and the middle tier has 23 campuses. California State University describes itself as “California’s key educator,” training the state’s working professionals in fields including business, agriculture, engineering, teaching, life sciences, social work, and public administration.¹⁶³ To integrate private universities into this system, the Master Plan made students at private universities eligible for public scholarships.

While these boundaries can be frustrating to the middle or lower tiers (for example, CSU does not grant PhDs), the philosophy is that mission differentiation best serves the state’s education and R&D needs, while discouraging waste and overlap. According to the World Bank’s Jamil Salmi,

The California Master Plan for Higher Education, which is revised about every 10 years, is not a rigid blueprint to control centrally the development of California’s system of higher education. Rather, it sets some general parameters; focuses primarily on the boundaries among the four sectors of higher education; and strives for a system that balances equity, quality, and efficiency.¹⁶⁴

Most countries do not have a master plan like California, and indeed there is no universally applicable structure for a differentiated system. Education is dynamic by nature. Evolving institutional capacity and changing local needs will dictate gradual institutional transformation. Many countries struggle to develop a respected and competent technical education sector that is not simply seen as a second-choice for students who could not attend university. England and Australia have both merged their polytechnics and universities in the last twenty years, responding to charges of elitism and the large social demand for university degrees.¹⁶⁵ However, a distinction should be drawn between natural evolution of institutional capacity over time, and a politically or revenue-driven decision to upgrade institutions.

In Vietnam, creating a stratified structure will require taking a national or regional perspective on the system’s development. The government has sought to redress regional inequities by establishing universities and upgrading colleges in disadvantaged provinces. Indeed, regional distribution of higher education institutions is an equity issue that determines who benefits from the expansion of access. But, outside of major cities, regions would do better to pool scarce material and intellectual resources across provincial lines to support a few universities with a region-wide mandate. Regional universities would complement a large, dynamic network of vocationally and technically oriented provincial colleges with a mandate for locally responsive education in fields such as agriculture, manufacturing, forestry, seafood processing, and so on. Vietnam has too many provinces, and enrollment is too low, for each Vietnamese province to have its

http://www.latimes.com/news/opinion/commentary/la-oe-esch22-2010feb22_0_2406517.story (Accessed 1.3.2010).

¹⁶³ CSU, “2006 Facts about the 23 campuses of the CSU”, *the California State University*, <http://www.calstate.ca.gov/PA/2006Facts/index.shtml>, (Accessed 3 February 2010)..

¹⁶⁴ Salmi 2009, 37.

¹⁶⁵ Jeroen Huisman et al, “Institutional Diversity in Higher Education: a Cross-National and Longitudinal Analysis” *Higher Education Quarterly* 61.4, 574.

own ecosystem of universities and colleges. National or regional planning bodies will be needed to maintain a rational diversity and distribution of institutions. These bodies will need the authority and political clout to evaluate each request to upgrade or establish an institution based on considerations of regional need and the already existing regional network; rather than on province-by-province political calculations.

BOX | Differentiation and Development in Korea and Singapore

During their periods of rapid growth, Korea and Singapore both aggressively sought to differentiate, expand and articulate their higher education sectors by founding new technical institutions. In the 1960s and 70s Korea created two new research institutes and one new science and technology university (KAIST). It also expanded its two-year junior college system, relying heavily on the private sector. These institutions, which played a significant role in training mid-level professionals in engineering and business, were remodeled in 1995 on the American community college model to increase articulation with the university sector. Singapore's human capital based development strategy has seen several waves of education policy initiatives over the past four decades, establishing not only the apex of the system in the National University of Singapore and Nanyang Technological Institute, but also ten Institutes of Technology to provide mid-level technical skills for new high tech industries, expanding lifelong learning opportunities, and reserving spots at new technical institutes for low performing students to expand tertiary access.¹⁶⁶

II. The second and third tiers

Improving the relevance of higher education for Vietnam's development while expanding enrollment will depend upon building a large, competent and dynamic system of second and third tier institutions. In a mass system of higher education, regional universities and technical colleges educate the great majority of a country's students and open access to the growing numbers of young people demanding tertiary education.

Policies to expand and improve technical colleges and universities have helped many countries upgrade their labor force to advance manufacturing and support emerging high tech sectors. In the 1970s and '80s, Taiwan expanded its vocational sector while constraining the growth of universities in order to train mid-level engineers to staff factories. By the '80s, junior colleges were producing 20,000 engineering graduates per year.¹⁶⁷ A 2002 World Bank study observed that in Taiwan "more than 90 percent of

¹⁶⁶ Discussion from Njuguna Ng'ethe et al, "Differentiation and Articulation in Tertiary Education Systems: A Study of Twelve African Countries", *World Bank*, 2008, 42, http://siteresources.worldbank.org/INTAFRREGTOPEDUCATION/Resources/444659-1212165766431/ED_Tertiary_edu_differentiation_articulation.pdf. On Korea see, Sonu, Jungho, "Imitation to Industrialization: The Case of Korea," in *Development Outreach*. (Washington, D.C.: World Bank Institute).

¹⁶⁷ Robert Wade, *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization* (New Jersey: Princeton University Press, 1990), p. 65.

exports are produced by junior college graduates in small and medium-size enterprises (SMEs), which employ 78 percent of the working population and have played a pivotal role in overall economic development.”¹⁶⁸ Professor C.N.R. Rao of the Jawaharlal Nehru Center for Advanced Scientific Research makes a similar observation about India:

India once thought that major institutions such as the Indian Institutes of Technology would be responsible for major social changes. What has happened is that graduates from small institutions and even unknown colleges have been responsible for the rapid expansion of the information and technology and biotechnology, manufacturing and other sectors of the nation’s rapidly growing economy. A sustained commitment to higher education and scientific research over the past five decades has made all this possible.¹⁶⁹

Though institutions at the second tier (regional university, technology institute) and third tier (junior college, technical college, polytechnic, community college) have different names, they share key qualities. These include a technical and applied orientation, a commitment to opening access to education for large numbers of students, and thick, institutionalized linkages to the local economy. Strong articulation between colleges and universities helps to legitimate the college system and promote social mobility.

This section looks at a few relevant international examples for Vietnam to consider as it considers the future shape and direction of its regional university and college system.

A. Polytechnics and land grant universities: providing technical skills for development

Many countries have found the most effective means of engendering market responsiveness is to establish an entirely new class of institutions with a “founding ethos” for locally relevant education and research in agriculture or industry.¹⁷⁰ Finland and Ireland, both latecomer economies with large and successful high-tech sectors, expanded polytechnic education before their periods of rapid growth. In the early 1990s, faced by a deep recession and saddled with universities seen as insensitive to transforming industrial needs, the Finnish government founded a new polytechnic sector. The sector “is dedicated to the conduct of professionally oriented higher education and applied research supporting regional development and adult education principally in engineering, business and health care.”¹⁷¹ By 2000, after less than a decade of operation, the 29 new institutions encompassed 60% of new incoming students. The polytechnics are viewed as having played a significant role in supporting the emergence of Finland’s vibrant telecom industry.¹⁷²

¹⁶⁸ World Bank 2002, 48 .

¹⁶⁹ C.N.R. Rao, “Basics Matter”, *Nature* 456, 30 October 2008, <http://www.nature.com/nature/journal/v456/n1s/full/twas08.45a.html>.

¹⁷⁰ This discussion comes from Hatatenaka 2008.

¹⁷¹ Organization for Economic Cooperation and Development (OECD), *Reviews of National Policies for Education: Polytechnic Education in Finland, 2003*, p. 13.

¹⁷² Hatatenaka, 2008, p. 9-10.

Ireland also expanded industrially-oriented tertiary education to feed its emergent software industry. The country grew from one of Europe's poorest economies in the 1970s to one of its most dynamic in two decades. Ireland's education strategy was managed by its Industrial Development Authority and linked industrial development with massification of higher education:

In Ireland, the government led expansion of technically trained manpower in the 1970s and 1980s played a key role in attracting MNCs, including in ICT. The starting point was the consensus that emerged early among policy makers that technical education was critically needed, but that universities were overly academic, and that different institutions were needed to provide the critically needed technical manpower. Thirteen Regional Technical Colleges and two National Institutes of Higher Education were established in the 1970s for this purpose, representing the bulk of expansion in the tertiary sector. They were established specifically to be responsive to economic needs, and are today known to have well established practices, for instance, in assessing industrial needs or in obtaining industrial inputs in curricular content.¹⁷³

The state encouraged students to go into technology fields by opening thousands of slots in new institutions dedicated solely to industrially-oriented technical education.¹⁷⁴ For two decades starting in 1980, technical fields consistently accounted for approximately 25% of new enrollment.¹⁷⁵ By the 1990s, Ireland had the highest graduation rate for science and technology fields in Europe. The overall proportion of high school graduates continuing to tertiary education increased from 10% in the 1950s to 50% in the mid-1990s: "Within two generations Ireland went from being the western European country possessing the least-educated workforce to a nation with one of the most highly educated young workforces in the world."¹⁷⁶

The policies paid off in the late 1990s when ICT skills shortages elsewhere led MNCs to Ireland, "citing the availability of a highly educated, technical workforce as a primary driver behind their location decision."¹⁷⁷ Ireland became a major producer of software products and services. The skilled workforce and an increased technical orientation in the university sector produced many domestic academic spinoffs. Though expanding educational access and quality led to a dramatic brain drain in the 1980s, the explosive growth of the 1990s reversed the trend, and by the end of the decade Ireland was experiencing net inward migration.¹⁷⁸ The Irish experience illustrates the power of early investment in technical institutions to contribute to both development of new high-tech sectors and expand access to tertiary education to a broader swath of the population.

¹⁷³ Hatakenaka 2008, 10.

¹⁷⁴ A remarkable aspect of the Irish experience, by comparison with Taiwan or Korea, is that policymakers saw the primary purpose of education to be supplying labor to MNCs, rather than innovation. Ireland did not make significant investments in R&D until the 1990s, decades after it had begun the push to expand technical education. Breznitz, 155-156.

¹⁷⁵ Anita Sands, "The Irish Software Industry," *From Underdogs to Tigers*, ed. Ashish Arora and Alfonso Gambardella (Oxford University Press, 2006) 62.

¹⁷⁶ Breznitz, 154.

¹⁷⁷ Sands, 62, citing Arora et. Al, *In the Footsteps of Silicon Valley? Indian and Irish Software in the International Division of Labour* (Stanford: SIEPR, 2001).

¹⁷⁸ Hatakenaka 2008, 11.

Though from another era, the American land grant universities are also a group of institutions founded with a mission for local responsiveness. The original land grant universities were established under the Morrill Act by the U.S. Congress in 1862 in order to mobilize tertiary education institutions to meet the human resource and scientific needs of an industrializing nation. Congress offered individuals and states a land endowment to expand or found public or private colleges and universities, provided that they were oriented toward research and education in the agricultural and industrial sciences. Public service and applied scientific research were central to the new concept.¹⁷⁹ Clark Kerr, the first chancellor of the University of California, observed that the land grant university,

...was a dramatic break with earlier American traditions in higher education. It created a new social force in world history. Nowhere before had universities been so closely linked with the daily life of so much of their societies. The university campus came to be one of the most heavily traveled crossroads in America—an intersection traversed by farmers, businessmen, politicians, students from almost every corner of every state. The cloister and the ivory tower were destroyed by being thrown open to all qualified corners.¹⁸⁰

Agricultural research stations were later appended to the universities. Cornell, Iowa State University, UC Berkley and Kansas State University are all land grant universities.

In Vietnam, developing a new generation of polytechnics or regional colleges with a mandate for responsive technical education may be necessary. These institutions would have new forms of governance mechanisms that link them directly to industry and the community. As argued in *The Intangibles of Excellence*, there are clear advantages to the “green field” approach, since academic culture is slow to change. However, Vietnam’s recent experience with the establishment of the community colleges has not been particularly successful because the colleges were not supported by favorable system-level policies. The existing infrastructure of regional universities, vocational colleges and agricultural research stations may provide a better base from which to build. In either case, significantly expanding Vietnam’s quantity and quality of engineers and applied scientists will depend on policies to improve and expand the network of science and technical institutions.

B. Community colleges: “Institutions of universal access”¹⁸¹

Community colleges provide another means for opening access to higher education, which has become popular in many countries. A large and dynamic community college system with strong articulation could open access to more Vietnamese students while improving responsiveness to local demand for skilled technicians.¹⁸²

¹⁷⁹ John Aubrey Douglass, *The California Idea and American Higher Education*, (Stanford: Stanford University Press, 2000), 3.

¹⁸⁰ Clark Kerr, *The Uses of the University*, Cambridge, MA: Harvard University Press, 2001, 36.

¹⁸¹ Trow, 27.

¹⁸² A global study on community college models observes: “Community colleges are most successful in countries where (a) market forces create a need for postsecondary institutions whose skilled technicians are

In the United States, community colleges helped to complete the transition to a system of mass higher education after the Second World War.¹⁸³ U.S. community colleges have two primary mandates: expanding academic opportunities and providing locally relevant occupational and technical training. Community colleges open opportunities for students who cannot or do not progress directly to university. The transfer function is a particularly important and unique aspect of US community colleges, which were originally designed to be “gateways” for disadvantaged students to higher education. Many students attend community colleges for the first stage of higher education, and then transfer to university after receiving a two-year associate degree. The second and more recent role for community colleges is to provide access to affordable, quality vocational programs for mid-level technical and occupational skills. Occupational programs focus on marketable skills in fields such as healthcare, computer science, and engineering.¹⁸⁴ Community colleges can play a particularly important role in regional development plans, including in rural or depressed areas. A total of 42% of US tertiary students study at a community college.¹⁸⁵ Educating students at community college for their first two years is also cost-saving: the total cost of two years of community college is equivalent to one third to one half the cost of the first two years of university education.¹⁸⁶

Community colleges are actively engaged with figuring out what the community needs and how to provide it. They do this through community outreach, relationship building and data collection to assess and adapt programs to community workforce needs. Linkages are institutionalized through deep, cross-sectoral ties taking the form of boards, community organizations, and skills panels. These organizations examine educational needs in a range of industries from healthcare to manufacturing to IT and construction.¹⁸⁷ These are ways to stay constantly informed about changing social needs and continually update programs in response. Community colleges also offer training to area businesses and their employees through small business development centers. Community colleges provide the expertise and firms finance the training: “Nearly every community college in the nation offers various services through contracts with specific companies that pay the

in demand to support technological, vocation, and industrial development; (b) adult and continuing education is legitimized as postsecondary education; and (c) post-secondary education is equated with economic and social mobility,” Rosalind Latiner Raby and Edward J. Valeau, *Community College Models, Globalization and Higher education reform*, ed. Rosalind Latiner Raby and Edward J. Valeau, (Springer, 2009) p.8

¹⁸³ James Fairweather, “U.S. Higher Education: Challenges, Options”, in *Structuring Mass Higher Education: The Role of Elite Institutions*, ed. David Palfreyman and Ted Tapper, (New York: Routledge, 2009), 17.

¹⁸⁴ A.M. Cohen, “Community Colleges in the United States”, *Community College Models*, ed. Raby and Valeau, 42-43.

¹⁸⁵ R.L. Raby, “Defining the Community College Model”, *Community College Models*, ed. Raby and Valeau, .6.

¹⁸⁶ Cohen 47.

¹⁸⁷ GAO (2008) *Workforce Development Community Colleges and One-Stop Centers Collaborate to Meet 21st Century Workforce Needs*, United States Government Accountability Office Report to Congressional Requesters, GAO-08-547, Washington D.C., .15.

costs of training their workers in job-specific and computer-related skills, management preparation, and workplace literacy.”¹⁸⁸

Transfer or articulation is a crucial component of a mass or universal higher education system, and is central to the US community college system. Organizing articulation across a higher education ecosystem (in the US case, within each state) is complex, because it requires extensive information sharing and cooperation among institutions. Community colleges need up-to-date information about changing curricula, credits and course content at universities in order to adjust their own courses; universities need to know whether community college students have adequate academic preparation; and students need transfer counselors or databases to determine the exact requirements for them to transfer up. States support articulation through a variety of mechanisms, including requiring colleges and universities to hire a transfer or articulation officer, creating digital databases with transfer information, and forming statewide articulation coordination boards. Articulation is an example of a sector where students benefit from a state-supported “learning commons” to promote cooperation and communication across the system.¹⁸⁹

BOX | Linking vocational education to MNCs in Penang

Innovative and dynamic models of demand-driven vocational training can be developed by the private sector. One example is the Penang Skills Development Center (PSDC) in Malaysia, a collaborative effort by multinational corporations to train engineers for Penang’s highly successful semiconductor industry.¹⁹⁰ In 1989, faced with a skilled labor shortage and rising costs in the electronics industry, MNCs joined with the state government to found the PSDC with two mandates: professional development to upgrade the skills of engineers already employed with MNCs, and basic education in engineering for recent high school graduates. Instructors have private sector experience and curricula are constantly updated with changing market needs. The program offers hard applied skills as well as soft skills including business, IT and foreign language.

The center has trained more than half of Penang’s manufacturing labor force and evidence suggests that it has upgraded skills level and value-added in the industry, by comparison with Malaysia as a whole.¹⁹¹ Direct interaction between the vocational training institutions and FDI enterprises improves educational institutions’ information about employer demand and speeds up technology transfer to local suppliers.¹⁹²

The Penang Center’s owes its dynamism to the bottom-up, industry-driven approach and the central role of the companies in the center’s leadership.

¹⁸⁸ Cohen, 45.

¹⁸⁹ Discussion is from Sue Murphey Barkley, “A Synthesis of Recent Literature on Articulation and Transfer,” in *Community College Review*, vol 20, no.4, Feb 1993, p. 38-50.

¹⁹⁰ This discussion comes from Junichi Mori et al, “Skills Development for Vietnam’s Industrialization: Promotion of Technology Transfer by Partnership between TVET Institutions and FDI Enterprises” January 2009.

¹⁹¹ Mori et al. 2009, p. 51. Manufacturing value-added in Penang grew at 8.7% per year from 1992 to 2000.

¹⁹² Mori et al. 2009, p.13.

“...The bottom-up approach is linked with market demand, [while] most programs based on the top-down approach tend to focus excessively on the supply side. Lack of ‘skilled workers’ is a common problem in developing countries, but the kind of skilled workers needed really depends on regional demand. For example, the government could establish a training center to educate ‘product designers,’ while MNCs really need production engineers. In this case, MNCs would have little incentive to participate in the programs. If MNCs did not participate in it, domestic suppliers would not participate in the programs either, because they could not expect technology transfer from MNCs. If neither MNCs nor domestic suppliers participate, a training center will not pool the precise information of demand and supply through these activities.”¹⁹³

The supporting role played by the government is two-fold. At the state level, the Penang state government facilitated linkages within the region and donated land and infrastructure.

At the national level, successive national industrial plans supported backward linkages, allocated funding for the center and established similar centers in other parts of the country (though the original Penang center remains the most successful).

III. Quality issues and International participation

A. Accreditation and Quality Assurance

Quality is a major dilemma of all emerging mass higher education systems. External and internal evaluation becomes more important as systems grow and institutions gain autonomy. Accreditation and quality assurance are tools that most countries use to enforce and encourage standards for institutional performance.¹⁹⁴ Vietnam has made accreditation and quality assurance central to its plans to improve tertiary education. MOET established a department of accreditation in 2002, many universities have internal quality assurance centers, and, after several years of training and planning, the assessors have completed the first accreditation assessment of the “top 20” schools.

We see two overarching functions for accreditation and quality assurance in Vietnam: first is to assure that institutions at the bottom rungs of the system have credibly met minimum standards; and second is to promote continuous institutional improvement and relevance. External inspection and internal quality improvement are related—absent outside scrutiny, an internal culture of quality will not develop, but “the extent to which internal quality assurance actually contributes to a culture of quality and accountability rather than being superficial compliance” depends on whether external scrutiny mechanisms offer positive incentives, rather than being purely punitive or demanding

¹⁹³ Mori et al. 2009, p. 55.

¹⁹⁴ Accreditation is defined as: “a specific process in which the quality of an institution or study program is evaluated against a predetermined set of criteria by a third party that is (or is connected to) the responsible authority. Successful completion of the accreditation process results in formal approval of the institution or program by the responsible authority, giving the program or institution the right to exist within the higher education system.” Westerheijden et al., 184.

adherence to a simple checklist.¹⁹⁵

Rigorous accreditation procedures are important in periods of rapid expansion,¹⁹⁶ and particularly urgent in the Vietnamese context of proliferating new private universities and diploma mills. Vietnam's accreditation scheme has thus far focused on the top of the system, as opposed to the new providers; but accreditation is most immediately necessary at the bottom of the system to give new providers credibility and protect consumers from fraud. Accreditation is one of the state's few mechanisms to ensure minimal quality standards in the private education sector.¹⁹⁷ A reliable system of accreditation plays an important role in helping students choose between institutions. Fraudulent institutions need be closed as a matter of government responsibility to consumer citizens. Where problems are found, re-accreditation must be contingent on redressing them. To accomplish the task of universal accreditation quickly, it will be necessary to build a large corps of qualified reviewers and evaluators. Indonesia, which has a large private education sector, has mounted an initiative to raise standards and identify subpar programs for closure nationwide by training a corps of 1000 reviewers.¹⁹⁸

After institutions meet the threshold standards, internal and external quality assurance or re-accreditation offers an opportunity for self-improvement through self-evaluation and incorporation of outside views. Regular reassessment and quality assurance should be a learning exercise for institutions. The institutional aim is to build a culture for quality, meaning improving institutional planning, self-reflection, faculty participation, fitness for mission, and so on. This can be a healthy process of self-study and can help to gradually improve standards.

Vietnamese universities do not have a culture of self-evaluation and strategic planning, which were not institutional imperatives under central planning. In a centrally administered system, rectors are protected from oversight and accountability. A system in which rectors have authority to plan for their institutions, but also responsibility for their performance, requires different skills. Institutional capacity takes time to develop and in many cases depends on the entry of a new generation of academic administrators. But, whether they are universities or technical colleges, institutions without the capacity or incentive to plan long-term will not become dynamic institutions offering relevant programs. Conversely, effective quality assurance requires that higher education institutions be autonomous: if universities cannot "control and improve their

¹⁹⁵ Westerheijden, 2.

¹⁹⁶ Martin Hayden and Lam Quang Thiep, "A 2020 Vision for Higher Education in Vietnam," *International Higher Education*, No. 44, 2006, http://www.bc.edu/bc_org/avp/soe/cihe/newsletter/Number44/p11_Hayden_Thiep.htm.

¹⁹⁷ Philip Altbach, *The Private Higher Education Revolution: An Introduction*, in *Private Higher Education*, (Rotterdam, the Netherlands: Sense Publishers, 2005), p.9,

¹⁹⁸ A new policy in Indonesia aims to root out poor quality providers in the private sector through universal accreditation with higher standards between 2010 and 2012. David Jardine, "INDONESIA: Cleaning up higher education," *University World News*, 17 January 2010

performance,” external evaluation serves little purpose.¹⁹⁹ Vietnamese universities have publicly expressed support for a quality assessment system, so long as they are provided with a detailed evaluation of their performance and the academic and managerial autonomy to put the evaluation to constructive use.²⁰⁰ Currently, while over one hundred Vietnamese universities have established quality assurance centers, many are “seriously lacking in resources and expert professional full-time staff.”²⁰¹

VOICES | Standing Committee of the National Assembly*

The quality assurance system for higher education has been slow to take shape, and quality assurance activities are still experimental. Until now, education quality has only been evaluated based on exam grades. In 2004, MOET established the Testing and Accreditation Bureau and issued some regulations on this issue. From 2006, quality assurance of universities and colleges began. Until now, 169/412 schools (including 92 universities and 77 colleges) have completed their self-evaluation reports, but the national council on quality assurance has only examined 20 universities, and the result has not been announced. In general, quality assurance is still very new for universities and colleges; the quality of their self-evaluation reports is not yet good. Very few universities and colleges have registered for an external assessment of their school and programs by an international organization like ABET for technology or AACBS for MBAs. The slowness to form independent accreditation organizations is a problem in guaranteeing the quality of training.

‘ Report 360/BC-UBTVQH12 (26/5/2010) on “Implementing policy and law on establishing schools, investment and quality assurance in higher education”

In accreditation and quality assurance, one size does not fit all. Rather than assuring adherence to a set of universal minimum standards for all colleges and universities, modern institutional accreditation has increasingly emphasized the specific role of institutions within a system.

“By the advent of *mass education* beginning in North America in the late 1960s and in full swing in Europe by the beginning of the 1990s the notion of quality has evolved into ‘fitness for purpose’, allowing the institution to demonstrate the achievement of objectives according to the purpose of its mission. The definition allowed greater diversity in the types of institutions necessary for educating a broader segment of society, as opposed to cloning them to a singular model.”²⁰²

¹⁹⁹ Don Westerheijden et al, “Accreditation in Vietnam’s Higher Education System,” in *Reforming Higher Education in Vietnam*, (the Netherlands: Springer Netherlands, 2010), p. 183.

²⁰⁰ See, for example, Vũ Thơ, “The first tested universities: want to have an independent testing agency” [Các trường ĐH đầu tiên được kiểm định: muốn có cơ quan kiểm định độc lập], *Thanh Niên*, 16 November 2009, <http://www.thanhnien.com.vn/news/Pages/200946/20091115233048.aspx>.

²⁰¹ Grant Harman, 16. See also *Vietnam Net*, 30 December 2008, <http://english.vietnamnet.vn/education/2008/12/821311>

²⁰² Philip Altbach et al., *Trends in Global Higher Education: Tracking an Academic Revolution*, (Boston, MA: Center for International Higher Education, 2009) p. 3.

The trend in quality assessment has increasingly evaluated outputs, based on institutional mission, rather than conformance to a common set of inputs.²⁰³ To take one example, a criterion measuring the postgraduate qualifications of faculty may be appropriate for a research university but not for a vocationally-oriented private university, where a teacher with professional experience might be more valuable than one with a PhD. Dr. Nguyễn Kim Dung of the University of Education, Ho Chi Minh City, argues that Vietnam's differentiated system would be served by an assessment system that encourages universities to "fulfill their missions and not just to meet the minimum accreditation standards."²⁰⁴ Although this concept has been embraced in principle in Vietnam, the view has not been reflected in criteria for accreditation, which largely focus on inputs and relies on quantitative measures. Many Vietnamese academics have suggested that the country will need a strong, independent accreditation agency for the process to be meaningful and effective.

VOICES | Dr. Nguyễn Kim Dung*

It is easy to see that the number of universities is continually rising, the number of students is continually growing, many universities with varied kinds of ownership are appearing, concentrations are more diverse and rich... Meanwhile, the Ministry's management has not been renovated. We also see MOET still using the "asking-giving" framework, while at present schools need autonomy, accountability, and transparency about quality.

In our country, university quality assurance still has many inadequacies and is not yet widespread. Until now, just 40 schools have been accredited. The results of the evaluation, including whether the schools have achieved the minimum standards...has not been announced. Currently, MOET gives permission to establish universities but it also carries out quality assurance of these schools. Moreover, currently most schools teach the standard curriculum of the Ministry, so assessing the quality of the curriculum actually means assessing the Ministry itself. With a system like this, it will be difficult to have transparency and full disclosure because the assessor of quality is also the manager of quality.²⁰⁵

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B. Internationalization as a strategy for improving quality

One way for Vietnam to reach "international standards" is to consider avenues for internationalizing facets of system-level governance of higher education. Vietnam can benefit from deeper international integration of its quality assurance and accreditation systems. Professor Philip Altbach observes,

²⁰³ Altbach et al., 2009 p. 52.

²⁰⁴ Nguyen, Kim D. Diane E. Oliver and Lynn E. Priddy. "Criteria for Accreditation in Vietnam's Higher Education: Focus on Input or Outcome?" *Quality in Higher Education*. Vol. 15 No. 2, July 2009.p. 132

²⁰⁵ Từ Duy and Hoàng Hương, "Universities have to meet minimum standard" [Đại học phải đủ chuẩn tốt nghiệp,] *Tuổi Trẻ*, 26 October 2009, <http://tuoitre.vn/Giao-duc/344361/Dai-hoc-phai-du-chuan-toi-thieu.html>

Increasingly nations are relying on quality assurance schemes used in other nations as guarantees of quality both to validate the domestic higher education system in its own right and to support all kinds of cross-border activity—student mobility, joint-degree programs, validation of professional qualifications and others.²⁰⁶

Vietnam has worked with Dutch and World Bank partners to build its new accreditation system. Vietnam could get even more assistance from overseas organizations to bring domestic standards closer to international standards at all tiers of the system. The American Association of Community Colleges, for example, provides assistance to developing countries in training accreditors and developing community college systems.

For apex institutions, one way for institutions or departments to receive an external quality stamp is to independently seek international accreditation. International accreditation can send a powerful quality signal to students, and prompt other institutions to seek accreditation to stay competitive. For example, in Turkey, the engineering department at the top science university, Middle Eastern Technical University (METU), was the first Turkish university to receive accreditation by the US-based Accreditation Board for Engineering and Technology (ABET). METU was followed by two other top universities, one state and one private (Bilkent and Bosphorus Universities), which set off a rush of interest in accreditation in Turkey. An association of Turkish engineering faculties formed a national engineering accreditation board. Turkish students view international accreditation as a boost toward employment in the US and Europe. For universities, particularly new private universities, international accreditation helps to advertise to students by attaching an American brand name to the institution.²⁰⁷

In Vietnam, at least one university is seeking ABET accreditation, and other institutions have expressed interest in ABET or AACBS (for business programs) accreditation. Regional and international accreditation can help to enhance the prestige of Vietnamese apex institutions, particularly in professional fields.²⁰⁸ The Task Force describes:

International standards of accreditation—for example, those used by external examiners—also promote institutional quality. Internally, they provide a focus for improving standards and help create a sense of institutional pride. Externally, they provide the market information that is vital to competition. Being accredited has great value in attracting students, faculty, and other resources.²⁰⁹

Given the cost of external accreditation, the state may consider subsidizing international visiting committees, or creating competitive incentives for universities to attain external

²⁰⁶ Altbach et al., 2009, p. 51.

²⁰⁷ Halit Hami Oz, “Accreditation Processes in Turkish Higher Education” in *Higher Education in Europe*, Vol.30., No.3-4, October-December 2005, http://www.cepes.ro/publications/pdf/hee_eng_pdf/hee3-4_05.pdf.

²⁰⁸ Grant Harman, “University Quality Assurance for ‘New-Model’ Universities in Hanoi and Danang,” (Paper for ADB: Preparing the Higher Education Sector Development Project, Consultants’ Reports, 3 September 2009), p. 16.

²⁰⁹ The Task Force, 67.

accreditation. International accreditation programs could help train Vietnamese engineers to the standards of international firms like Boeing,²¹⁰ aiding Vietnam's effort to attract foreign firms to invest in manufacturing or R&D facilities in Vietnam. This sort of "outsourced" quality assurance might have the advantage of carrying more credibility with the Vietnamese public.

Another feature of internalization of quality processes is the growth of regional accreditation blocs and quality processes. The Vietnamese government has also made efforts to internationalize its quality assurance system by joining both the ASEAN University Network Quality Assurance Program (ASEAN NU-QA), and the International Network for Quality Assurance Agencies in Higher Education (INQAAHE). However, the ASEAN NU-QA program is limited to two universities per country, limiting its impact on national quality assurance systems.²¹¹ Additionally, the two bodies in Vietnam that are involved in the INQAAHE are research and consulting organizations, rather than enforcement agencies. As a regional process, the Bologna Process (see box below) is unique in its strength and reach; while there is no similarly vigorous regional process for Vietnam to participate in.

BOX | The Bologna Process

Concerns about international acceptance of degrees and credentials have spurred the growth of regional accreditation blocs and quality processes, the most salient of which is the Bologna Process. The Bologna Process has served as a means for non-European countries in the region to incorporate international standards into their higher education systems. Forty-seven countries, all EU members or geographically close to Europe, have joined the process in order to raise the quality of their higher education systems.

One of these countries is Turkey. Turkey's Higher Education Council encourages all universities to issue diploma supplements, such as a standardized CV. A dual quality assurance process with internal and external evaluations is being implemented, with self-evaluations in relation to institutional mission, reinforced by a national Accreditation Evaluation Council. An external, national quality assurance body is currently being developed. European higher education authorities then rate Turkey on a "scorecard" based on a common set of criteria. A Turkish higher education policymaker described Turkey's participation in the Bologna Process to the authors as "a tool for us... Turkey can't afford to ignore international trends in higher education."

This process can be thought of as a kind of "outsourcing" of a part of educational governance. MIT Professor Edward Steinfeld argues that the Chinese government has employed a strategy of "outsourcing" economic governance in key areas to impose discipline on its domestic political economy (for example, using WTO accession to impose competitive pressures on its SOEs). The Bologna Process is also a means for non-EU countries to "outsource" education governance by subjecting it to external

²¹⁰ Patricia Daniels and Mani Soma, *ABET Faculty Workshop Vietnam*, December 2006 <http://www.hcmut.edu.vn/abet/Boeing%20Vietnam%20Workshop%20Dec%202006%2012-03-06.pdf>.

²¹¹ Marjorie Lenn, "Quality Assurance and Accreditation in Higher Education in East Asia and the Pacific," World Bank Working Paper No. 2004-6, August 2004) p. 20.

regulation, in order to bring domestic institutions up to international standards.

IV. Performance or mission based funding

The government has recognized that the state budget will remain the primary source of funding for higher education. State financing should be strategic, encouraging institutions to fulfill their individual missions by aligning use of funds to good institutional practices.²¹² The current budgeting arrangements in Vietnam are based on historical budgets, degree types and centrally determined enrollment targets.²¹³ There are no financial incentives for institutions to improve performance; instead, as discussed above, the current system encourages institutions to focus on upgrading their status and opening part-time programs to generate extra revenue.

In most countries undergoing a shift from state control to state supervision in higher education, governments have sought to spur competition among institutions by exchanging negotiated or historical budgeting for competitive or performance based financing for universities and colleges.²¹⁴ Missions are mutually agreed upon with the institution, then funding is based on the degree to which an assessment organization deems that the institution has fulfilled its mission. Performance contracts are not meant to apply to all of the funding that an institution receives from the government, and need not be in order to be an effective measure to encourage the maintenance of differentiation. When Sweden began to implement performance based funding during the early 1990s, approximately 60% of funding continued to be given in block grants based on enrollment and institution size, with 40% tied to the new performance evaluations.²¹⁵ A key component of the ongoing French reforms is a new performance funding arrangement that considers graduate employment rates and research output.²¹⁶

Competitive grant programs for institutional development can encourage different types of institutions to pursue excellence within their niche. Such funding schemes will differ depending on the policy goal: encouraging quality improvements, curricular reforms in particular fields or departments, reforms at certain classes of institutions, or improvements at private universities could lead to different pools being made available

²¹² Frans van Vught , “Mission Diversity and Reputation in Higher Education,” in *Higher Education Policy*, 2008, 151-174.

²¹³ World Bank, 2008, p.137.

²¹⁴ This discussion comes from Jamil Salmi’s chapter of *Higher Education In the World: The Financing of Universities* (Palgrave Macmillan), 2006.

²¹⁵ Sverker Sorlin, “Funding Diversity: Performance-based Funding Regimes as Drivers of Differentiation in Higher Education Systems” *Higher Education Policy* 2008,

²¹⁶ Jane Marshall, “France: More autonomous universities”, *University World News*, Issue 107, 17 January 2010, <http://www.universityworldnews.com/article.php?story=20100114190851574>.

for different kinds of institutions.²¹⁷ When the Chinese government launched its “Project 211” initiative to attain international standards and upgrade quality at 100 research universities in the mid-1990s, the government did not determine university participants in advance, but instead offered competitive funding for universities to self-evaluate and improve their academic programs in specific disciplines, then rewarded academic excellence.²¹⁸

Vietnam’s policy initiatives to improve quality at specific types of institutions could benefit from competitive schemes to encourage institutional planning and higher standards. Targeted funding could help to improve institutional capacity or encourage specialization. One possible competitive granting scheme could support development of the junior college system by offering grants to institutions with strategic plans to improve academic performance, increase community relevance of their programs, or improve their management structures.

BOX | Linking quality assurance and performance based funding in Hong Kong

Hong Kong offers an example of how the various policy tools outlined above can be integrated to support a rationally differentiated and unified system. Hong Kong has a high quality university sector that owes much to its ample resources and international, English language environment. It has also developed a regulatory system that combines quality assurance and performance based funding in an innovative manner that has successfully prevented mission drift and encouraged differentiation among higher education institutions.

Hong Kong has two accreditation bodies, the Hong Kong Council for Accreditation of Academic and Vocational Qualifications (HKCAAVQ), and the University Grants Committee (UGC).²¹⁹ Key aspects of the HKCAAVQ are independence, internationalization, flexibility, and continual reevaluation. Each is explained below.

- **Autonomy:** The Hong Kong higher education system is one of the few in the region with a fully autonomous quality assurance organization that does not have government members.
- **Internationalization:** Hong Kong’s quality assurance agency is also among the most internationalized in the region. It has international participation in the decision making body and among external reviewers (over a quarter of total members are international).
- **Flexibility and stratification:** The HKCAAVQ effectively balances flexibility and rigidity

²¹⁷ For example, in Australia a granting program called the Learning and Teaching Performance Fund rewards excellent teaching and encourages institutional improvement by supporting universities that develop internal teacher evaluation systems and professional development programs.

www.fondapol.org/fileadmin/uploads/pdf/documents/DT_Higher_Education_Reform_in_France.pdf

²¹⁸ Kai-Ming Cheng, Yan Wang and Su-Yan Pan, “China: The Legacy of Planning,” *Structuring Mass Higher Education*, ed. Palfreyman and Tapper, p. 163-165.

²¹⁹ This discussion comes from the Hong Kong chapter of Marjorie Lenn, “Quality Assurance and Accreditation in Higher Education in East Asia and the Pacific,” World Bank Working Paper No. 2004-6, August 2004.

in its procedure for institutions wishing to make significant changes. Hong Kong has addressed the issue of mission drift via a transparent procedure for institutions wishing to make a significant change in accreditation status that emphasizes continuous improvement, a focus on communication, and the fitness for purpose approach.²²⁰ Under this procedure, the steps for maintaining the same accreditation status after significant changes are as similar as possible to the steps followed in the normal accreditation process. Furthermore, when such changes “may have a bearing on the scope of the accreditation status” the organization pursuing change “will need to undergo the relevant accreditation exercise afresh.”²²¹

- **Continual reassessment:** Both the UGC and the HKCAAVQ continually reassess the institutions for which they are responsible. This is essential not only because it ensures that institutions continue to serve their intended functions, but also because it allows for the higher education system to be dynamic and constantly improve.

Another innovation in Hong Kong’s university sector has been to institute a model of performance based funding to maintain differentiation in higher education. Under the Performance and Role Based Funding Scheme (PRFS), the UGC Assessment panel has worked with the administration of the eight universities in Hong Kong to develop specific mission and roles for each university that fit within the broader system.²²² Missions are developed through cooperation between an autonomous funding and quality assurance agency which considers the systemic goals of higher education in Hong Kong, and the independent administration boards of the universities. The importance of this feature cannot be understated: missions are not assigned via the central government, but they are also not chosen haphazardly by institutions without regard for the overall needs of the higher education system. Next a certain percentage of the recurrent grant given to universities is linked to periodic assessments (thus far every three years) of the extent to which universities have performed well and fulfilled their roles. Currently the amount is set at 10% of the recurrent grant total, but it has been increasing as the program establishes itself and proves its effectiveness.

It is important to note that the philosophy behind the program is to encourage growth and improvement, not to punish institutions for failing. Indeed, in the 2004 report on the first triennium of the PRFS states that:

“The primary purpose of the PRFS is to provide assurance that the institutions are adhering to their roles and that they perform well in those roles. The Scheme ties together funding allocation, performance, and performance against role more rigorously than in the past. The PRFS is a formative exercise aimed at assisting institutions to reflect their role and find constructive ways to further improve, encourage and recognize the performance according to role. It is not about penalizing institutions, but rather facilitating institutions to further advance, and stretch their limits.”²²³

Though still new, initial reports deem the system a success.²²⁴ Two aspects of PFRS are particularly important for Vietnam. The first of these is that the scheme is operated by a trusted, competent, and autonomous assessment and funding agency, which is a foundation for its success. Second, thus far, the program has been relatively limited in scope, only being applied to the 8 UGC funded research universities. Were the system to be implanted in

²²⁰ HKCAAVQ procedure document available at: <http://www.hkcaa.edu.hk/en/publication.asp>

²²¹ Lenn, p.8.

²²² Van Vught, p. 165

²²³ UGC, “Quality,” University Grants Committee, 2004,
http://www.ugc.edu.hk/eng/ugc/publication/report/figure2004/2004_quality.htm

²²⁴ Van Vught, p.166.

Vietnam, it would be wise to limit it at least initially, in a similar fashion, perhaps to the 14 focal universities or an even smaller subset of those institutions.

V. Private universities

In Vietnam as in most developing countries, private higher education has emerged as a “demand-absorbing” sector, often in the form of for-profit institutions. As we have seen, the Vietnamese government’s plans foresee private institutions absorbing a large part of new student demand over the next ten years. Specialized, market-oriented training by entrepreneurial private institutions can play an important role in a differentiated system, and can aid the quick expansion of student enrollment in vocationally-oriented fields. The private education sector should develop, however, within a clear, well-defined legal framework and some form of basic quality standards.

VOICES | Mrs. Nguyễn Thị Bình*

Although there are still many thorny issues relating to management and administration, as well as quality, in the private university and college sector...it is clear that *this system is an important achievement of the process of higher education renovation in our country.*²²⁵

*Former Vice President

In their current form, private institutions can only train in a limited range of subjects because they are dependent on tuition revenue. This will limit Vietnam’s ability to expand technical training through private providers. The example is borne out comparing junior colleges in South Korea and Canada. The third tier in Korea consists almost exclusively of private providers, and is entirely privately financed. It cannot meet the labor market demands of the healthcare industry because equipment and faculty for healthcare training is prohibitively expensive. By contrast, Canadian junior colleges are publicly financed, and they are strong in training healthcare specialists.²²⁶

In most countries, the for-profit sector plays a limited role. In the United States and Netherlands, for example, for-profit universities and colleges mostly serve the market for

²²⁵ Nguyễn Thị Bình, “Supporting the stable development of the non-public higher education system in Vietnam” 25.5.09. http://www.tapchicongsan.org.vn/details.asp?Object=5&news_ID=25539319.

²²⁶ Samih W. Mikhail, “The Alternative Tertiary Education Sector: More than Non-University Education”, World Bank Working Paper, 2008, 102.

adult education, part-time courses, and professional training.²²⁷ China has determined that private institutions (*minban*) will primarily occupy the lower, non-university tiers of the system, and so only a slim minority of private institutions have permission to grant degrees.²²⁸

There are three main tools available to Vietnamese policymakers to shape the role of the private higher education sector. First, Vietnam needs to create a legal distinction between for-profit versus non-profit private higher education institutions. Nguyễn Thị Bình argues that this should be a priority for policymakers: once established, the non-profit sector should be treated equally with the public sector, while for-profit private institutions operate like private businesses. A regulatory framework that treats and taxes all private universities as commercial businesses encourages institutions to pay more attention to their bottom line than to providing a quality education. The current law creates conflict between university governing councils (*hội đồng quản trị trường*), which are by law composed of a school's investors, and academic leadership and faculty.²²⁹ Though Vietnam has already distinguished between for “people-founded” (*dân lập*) and “private” (*tu thực*) institutions, complex procedures and fuzzy legal boundaries have hindered all but four institutions from converting.²³⁰

VOICES | Mrs. Nguyễn Thị Bình

The main reason for this slowness is that the 2005 regulation for private universities [Decision 122/2006/QĐ-TTg] did not clarify the process for transforming [from a people-founded to a private university]; in particular, the important definitions regarding individual ownership and collective ownership and the framework for for-profit or not-for-profit have not been made clear.

Second, policymakers can create a transparent licensing process for new private providers. UNESCO observes that this helps to establish the legitimacy of private higher education institutions:

The establishment of strong and clear licensing schemes, which effectively make sure that all licensed institutions comply with the threshold standards established for the system, prevents the operation of unreliable HEIs. Moreover, it provides a measure of legitimacy and recognition to licensed institutions that unlicensed HEIs (or institutions in systems without a strong licensing process) lack.²³¹

²²⁷ Huisman, J., Meek, L. & Wood, F. 2007. Institutional diversity in higher education: a cross-national and longitudinal analysis. *Higher Education Quarterly*, 61(4): p. 575

²²⁸ In 2008, only 24 of 1,250 Chinese private universities were permitted to offer degrees. Ruth Hayhoe and Jing Lin, “China’s Private Universities: A Successful Case Study,” in *International Higher Education*, No.51, 2008, http://www.bc.edu/bc_org/avp/soe/cihe/newsletter/Number51/p6_Hayhoe_Lin.htm

²²⁹ Recent public disputes at Phan Chu Trinh University illustrate this point.

²³⁰ Decision 122/2006/QĐ-TTg granted permission for 19 people-founded universities to become private universities, stipulating that the procedures should be finished before mid 2007.

²³¹ UNESCO, 93.

The recent scandal at Phan Thiết University exposed the murkiness of licensing for new universities in Vietnam.²³² This has become a significant source of public dissatisfaction, evidenced by a heated debate in 2009 over transferring the power to approve new universities from the Prime Minister to MOET.²³³ Better transparency—for example, by posting applications to open new universities online—could actually help the government to vet new institutions and decrease the incidence of forged or fraudulent proposals.

Third, governments can influence private institutions' behavior by making them eligible for public financing, which can take the form of student aid or direct institutional support. There is a public policy rationale for directly providing institutional support to private institutions: it is cheaper to support seats at a private institution than to build a new public one.²³⁴ Because private institutions diminish the burden on the state sector, they should be allowed to compete for public funding.²³⁵ The most basic form of institutional support is a tax policy to encourage corporate and individual donations to universities—i.e., the income donated to education institutions is not taxable. Another possible policy is providing state support for private universities to develop their own faculties: in Indonesia, private university faculty with graduate degrees receive state salary subsidies.²³⁶

Scholarships or state-supported loan programs should be made available for all students on equity grounds. Private universities could be encouraged to compete with public universities through a voucher system.²³⁷ This is important in Vietnam because economically disadvantaged students with poor academic preparation are more likely to end up at less prestigious, but more expensive, private universities.²³⁸ Japan, which has a very large private sector, subsidizes a fixed 12% of students in private institutions.²³⁹

²³² Nguyễn Ngọc Trân, "From 'Phan Thiet University' to reforming the Education Law 2005" [Từ "ĐH Phan Thiết" đến sửa đổi bổ sung Luật giáo dục 2005], *Tuần Việt Nam*, 24 October 2009, http://www.tuanvietnam.net/2009-10-24-tu-dh-phan-thiet-den-sua-doi-bo-sung-luat-giao-duc-2005#_ftn1

²³³ See, for example, Thanh Hà, "Looking back on Higher Education, college period 1998-2008: More schools, not more quality" [Nhìn lại Đào tạo Đại học, cao đẳng giai đoạn 1998-2008: Thêm trường, không thêm chất lượng], *Tuổi Trẻ*, 31 August 2008, <http://chuyentrang.tuoitre.vn/Tuyensinh/Index.aspx?ArticleID=276317&ChannelID=142>. Lam Nguyễn, "Academics Raise Concerns about rules for setting up schools," *Sài Gòn Giải Phóng*, 20 October 2009, <http://www.saigon-gpdaily.com.vn/Education/2009/10/75252/>. Phan Thảo, "Disagree to give the right to establish universities for the MOET" [Không đồng ý trao quyền thành lập trường ĐH cho Bộ GD-ĐT], *Sài Gòn Giải Phóng*, 21 October 2009, <http://www.sggp.org.vn/giaoduc/2009/10/206174/>.

²³⁴ Salmi, *Higher Education in the World 2006*, p.72.

²³⁵ Ngoc Minh Le and Mark A. Ashwill, "Nonpublic Higher Education in Vietnam", in *International Higher Education*, No.36, 2004, http://www.bc.edu/bc_org/avp/soe/cihe/newsletter/ihe_pdf/ihe36.pdf.

²³⁶ UNESCO, 38.

²³⁷ UNESCO, "A New Dynamic: Private Higher Education," 2009, p. 53.

²³⁸ Nguyễn Thị Bình points out, "the proportion of poor students at non-public schools may be higher than at a number of public schools."

²³⁹ *Higher Education in the World 2006*, p.7.

Finally, the government can bring private higher education institutions under the national accreditation framework—keeping in mind, as discussed above, that different kinds of institutions should be held to appropriate standards, and a new, vocationally-oriented private college or university cannot be expected to meet the same criteria as a major public university.

BOX | Turkey's top-tier private universities

Turkey stands out as a middle income country that, over the course of two decades, has built non-state apex research universities that are competitive with public institutions. In the early 1980s Turkey had a small, elite university sector consisting of 13 state institutions. In 1982, a new constitution legalized not-for-profit private universities, called “foundation universities.” In 1984, Ihsan Dogramaci founded Bilkent University, the first foundation university. It was followed in 1993 by Koc University, and since then 29 other institutions. A handful of top research universities stand out: among the top three are Bilkent, Koc and Sabanci. Each was founded by a wealthy Turkish business family and endowed by a foundation consisting of total or majority ownership of a large number of companies. High tuition, ranging from several thousand dollars to \$23,000 (by comparison with essentially free state university tuition), covers most of operating costs in the universities. The universities compete for scientific research funding from a national scientific council (TUBITAK) and international sources.

Each private university is established by an act of Parliament after a rigorous approval process, involving a detailed proposal including their academic agendas and financial capacities and assets.²⁴⁰ They are subject to annual financial and academic audits by the national Council on Higher Education (YOK), as well as required to offer a certain percentage of students scholarships. Beyond these requirements, private universities are autonomous in organizing their management, academics, and finances.

Top-tier foundation universities have brought innovative practices to Turkish higher education. In Turkey, like in Vietnam, altering course of study is very difficult for students; foundation universities have pioneered flexibility and inter-departmental transfer. Students entering Sabanci University, for example, only specify which faculty they would like to enter, and choose their specializations upon entering their second years. Their courses tend to be smaller—an important point, given that the Council on Higher Education has raised state university enrollment quotas dramatically, doubling or tripling a department's enrollment over a decade in some cases, which has led to crowded classrooms at the best state institutions. Student evaluations, not widespread in the Turkish system, are used at Bilkent. Bilkent also opened its library to the public, which state universities do not do.

Top foundation universities have put competitive pressure on state universities. Through the 1990s and early 2000s, state university professors joined the faculties of foundation universities.²⁴¹ Private universities offer salaries that are at least triple those of state universities and start-up research funds. Though it is highly unusual in Turkey for

²⁴⁰ Overview and Legal Basis of Private Higher Education in Turkey, *MIZIKACI*, 2008
http://www.albany.edu/dept/eaps/prophe/data/Country_Law/Context_Turkey_PHE.doc.

²⁴¹ Burton *Bollag*, “In Turkey, Koc U. and Sabanci U. Teach in English,” *The Chronicle of Higher Education*, 9 March 2001, <http://chronicle.com/article/In-Turkey-Ko-U-and/20021>.

professors to move between state universities, some state university professors now retire early to teach at foundation universities. Meanwhile at state universities, professors' salaries compared to other professions have declined in the past quarter century.²⁴²

Likewise, foundation universities have built their reputation among students—perhaps the most important measure of the private university sector's success in a country with a well-established and reputable state sector. Turkish high school graduates, like their Vietnamese counterparts, take one centralized university entrance exam and list their top five preferences for programs within universities. Between 2003 and 2007, 34% of the top 500 students (the top 100 students every from each year) chose foundation universities, proportionate to the total proportion of foundation universities in the system.²⁴³

At the bottom of the system, foundation universities have served primarily a demand absorbing function, like in Vietnam. At the top, however, they are competing with prestigious and long-established state universities struggling under excessively controlling state policy. By expanding the availability of high quality tertiary education, foundation universities are beginning to offer a viable alternative to undergraduate education abroad, which has long been the choice of the Turkish elite.²⁴⁴

²⁴² Hatakenaka, 2006, 23.

²⁴³ Ali Dogramaci, 3.

²⁴⁴ "Turkey's curriculum". *The Economist* 374, Issue 8418. 3/19/2005,

Part Four: Conclusions and recommendations

Education and training are not yet truly the top national policy priority. Although the level of investment has increased, efficiency is not high; human resource policies have been slow to renew. The quality of training is still low and not unified between regions; more attention is paid to increasing quantity than to improving quality; programs, curricula, and teaching methods are slow to renew, slow to modernize.

Politburo Statement no. 242, 15/4/2009²⁴⁵

The economic and political stakes of higher education reform are high for Vietnam. The Vietnamese government has recognized this reality and committed itself to sweeping reforms. Policymakers have identified all of the key policy levers for these reforms, including increased autonomy, greater transparency, accreditation, decentralization, and diversified funding. But, five years after the landmark Resolution 14, implementation has been slow and haphazard.

Moving from policy statements to implementation is never easy. Vietnam's higher education system was set up as a network of highly specialized institutions organized along Soviet lines and intended to accommodate a tiny number of students. Governance is still characterized by strong bureaucratic control, and the country has no viable domestic models of non-profit, autonomous higher education institutions. Vietnam has limited resources, but faces enormous pressure to scale up due to vast unmet student demand. These tensions were highlighted in the aftermath of the Phan Thiêt University scandal in October 2009, when a newspaper quoted a senior MOET official as saying,

...given Vietnam's situation, we cannot wait until [universities] attain maturity to allow schools to open and start training [students]. Schools should work to meet the standards, but with our current conditions, in the beginning it will not be possible to immediately attain all of the necessary conditions and standards.²⁴⁶

The remark was pilloried by readers, but it is true that educating more students at a higher level is imperative; Vietnam does not have the luxury of waiting to expand its higher education system until every piece of the optimal regulatory framework is in place. However, it must also be acknowledged that quality will not improve until a robust and coordinated policy framework is created. Absent a new direction for reform, Vietnamese higher education will remain caught between commercialization and decentralization,

²⁴⁵ Statement no. 242/15-4-2009 of the Politburo on continuing to implement Central Committee Decision 2 on the orientation for development of education and training until 2020. Kết luận số 242-TB/T.Ư ngày 15-4-2009 của Bộ Chính trị về tiếp tục thực hiện Nghị quyết T.Ư 2 (khóa VIII) về phương hướng phát triển giáo dục và đào tạo đến năm 2020

²⁴⁶ Vĩnh Hà-Thanh Hà, "Within Vietnam conditions, cannot wait until maturity to open schools" [Trong điều kiện VN, không thể chờ chín muồi mới cho mở trường], *Tuổi Trẻ*, 22 October 2009, <http://tuoitre.vn/Giao-duc/343724/Trong-dieu-kien-VN-khong-the-cho-chin-muoi-moi-cho-mo-truong.html>.

lacking the institutional or system-level accountability mechanisms needed to ensure the public interest. This section reflects on the barriers to implementing goals, and offers some recommendations to guide the reform process.

I. The politics of reform and the problem of implementation

The Vietnamese government enjoys a strong reform mandate. Because education systems have deep roots in society, the Task Force argues that a “transparent and informed dialogue” among academics, government, industry, and citizens is needed to build understanding and support for major policy initiatives in higher education.²⁴⁷ The American political scientist Francis Fukuyama also observes, “The majority of successful cases of state-building and institutional reform have occurred when a society has generated strong domestic demand for institutions and then created them out of whole cloth, imported them from outside, or adapted foreign models to local conditions.”²⁴⁸ Vietnamese society is already engaged in a thoroughgoing discussion of nearly every aspect of higher education, from the role of the market in education to the merits of various international models. The scope and vibrancy of this debate suggests that there is already strong demand for reform. Vietnamese culture places enormous importance on education, and families from all segments of society demonstrate an incredible willingness to sacrifice other kinds of investment and consumption in order to finance university education for their children. Vietnam’s growing economy also works in its favor: growth rewards people who acquire new skills and knowledge to take advantage of new opportunities.²⁴⁹ In brief, it seems likely that little effort would be needed to convince the Vietnamese people that a wide-reaching initiative to extend quality tertiary education to as many as possible should be a top national concern and a priority area for public spending.

And yet, despite a social consensus about the need for reform, laying the foundations for a new system will be a long process. For many countries it has taken decades of concerted effort to build the diverse network of institutions needed to accommodate mass numbers of students and create the governance structures to bring competition, autonomy, and accountability to existing institutions. Academic culture is notoriously resistant to change. Higher education is a complex system that comprises many layers of administrators and lecturers with diverse interests; university leadership and faculty who are shielded from responsibility or public scrutiny in the current system may resist change. It will take time for administrators to adapt to an unfamiliar culture of institutional autonomy and evaluation, and for younger generations of administrators to rise to leadership positions. Even without internal resistance to reform, it will take time to know if reforms are working, as students cycle through the education system and enter

²⁴⁷ The Task Force, 95.

²⁴⁸ Francis Fukuyama, *State-building: governance and World Order in the 21st Century* (Ithaca, NY: Cornell University Press, 2004), p.35.

²⁴⁹ Malcolm McPherson. “The Educational Effect of Economic Growth”, Center for Business and Government, John F. Kennedy School of Government, Harvard University, March 2005.

the labor market. Policymakers will need to be flexible in reexamining and reworking policies based on evidence of their effectiveness.

Before this long reform process can begin in earnest, the top leadership needs to muster the political determination to break decisively from the status quo.²⁵⁰ Some recent steps to improve transparency and accountability are movements in the right direction. The current policy focus on reforming management, reflected in the prime minister's Decree 296 in February 2010, will help to define better the relationships and responsibilities between universities, provincial governments, and the central government. However, too often we observe that efforts to improve the effectiveness of the state sector have focused on "cadre standardization" (*chuẩn hóa cán bộ*), which has generally consisted of putting civil servants through a series of training courses designed to ensure a minimal level of competence. What is still missing are broader structural reforms necessary to make public sector careers more attractive to young people. Conferences and study tours alone will not address the need for improved university management.

Broad structural reforms of the type that the Vietnamese government envisions will require difficult decisions. University rectors will have to be evaluated under a neutral, quality-based, and transparent assessment system. New associations or regulatory bodies, including non-state organizations, will need to be endowed with real powers to develop standards, enforce rules, and provide incentives. University licensing will have to become transparent and corruption in the academy will need to be curbed. Eliminating line-ministry control, a core objective of Resolution 14, will undoubtedly encounter opposition from ministries faced with losing privileges and powers associated with ownership of higher education institutions.²⁵¹ MOET or another national body will need to take a national perspective on the development of the higher education system, which will involve making decisions that are unpopular with provinces, like amalgamating institutions or restricting the upgrading and establishment of new universities. Inertia and resistance from provinces, ministries, and universities themselves will only give way when top national leadership musters the political will to implement the policies that they have already embraced on paper.

II. Recommendations

1) Create the governance mechanisms required for the transition from a state controlled to a state supervised system of higher education

Vietnam is at the beginning of the process of modernizing higher education governance. The state has made a commitment to adjust its role in higher education, as it has in other sectors of the economy and society, from direct management to overall steering and

²⁵⁰ The momentum to pursue decisive change is building in the National Assembly. This should be supported from the highest levels of the state and party.

²⁵¹ An effort in the 1990s to bring all higher education institutions under MOET was unsuccessful. D.V. Khanh and M. Hayden, "Reforming the Governance of Higher Education in Vietnam," in *Reforming Higher Education in Vietnam*, ed. Harman et al (Springer: 2010) , p. 136-137.

supervision. This transformation, which is embraced in Resolution 14, represents a major departure from the current paradigm of state ownership and management. This is a long and complex transition, but one that many countries have undertaken. New accountability and steering mechanisms will be needed to replace direct ministerial control as the system moves towards increased autonomy. Vietnam should start crafting the infrastructure for accountability and quality standards in a differentiated and autonomous system. This infrastructure should seek to foster different institutional types (private universities, research universities, teaching-focused universities, technical colleges, etc). We highlight two key components of this transition that have thus far received insufficient attention in Vietnam: the need for positive incentives, and the potential role for intermediate steering and standard-setting bodies such as professional associations.

Policymakers and commentators have focused on the need to discipline more strictly higher education institutions that violate regulations. Positive incentives should be a part of the new system-level oversight mechanisms, along with tougher penalties. Strict accreditation and licensing procedures and a willingness to close schools that do not meet minimum standards are necessary; but improvement in the quality of education will ultimately come from inside of higher education institutions themselves. Positive incentives can align institutional and individual interests with new performance indicators. Institutions will need to take risks to improve quality, for example by cutting lucrative part-time programs. By rewarding good performance, positive incentives can encourage institutions to participate in reform, instead of reacting defensively in the face of higher standards and transparency requirements. One way to create positive incentives is to introduce some form of performance-based funding or competitive grants targeting particular institutional types, for example to encourage excellent teaching or community engagement (see #6 below).

Many countries transitioning from state control to state supervision use buffer bodies to professionalize system-level governance and balance autonomy and accountability. At the level of the university or college, buffer bodies are governing councils. At the system level, organizations are needed to perform various functions including financing, planning and quality assessment. These institutions take several forms. Higher education councils view the system from a national (as opposed to the local, college or university level) perspective. They determine the scale and structure of the national system in accordance with available resources and expected demand. Research councils are composed of leading scientists who consider research proposals and allocate funding based on scientific merit.²⁵² Professional associations in fields such as law and engineering have the authority to audit and accredit academic programs for specific disciplines.²⁵³ Intermediate bodies of this kind have the expertise and capacity to develop appropriate policies and measures of quality for different kinds of institutions. They are

²⁵² Vietnam is already experimenting with a research council to contribute funding for scientific research projects competitively, called NAFOSTED.

²⁵³ Pham Thanh Nghi, "The Higher Education Reform Agenda: A Vision for 2020," in *Reforming Higher Education in Vietnam*, ed. Harman et al., (Springer, 2010), p. 59.

made up of scientists, scholars, and practitioners whose deliberations are based on technical criteria. Peer review systems play an important role in faculty appointments and institutional evaluations, not only at research universities but also at institutions that focus on teaching. Professional councils and expert bodies can create better measures of output and evaluation for research and teaching in a large, diverse system. This goal was explicitly embraced in Resolution 14, which stated “Ensure the inspection and oversight role of the community: mobilize unions, mass organizations, and especially professional associations in overseeing quality in university education.”

As observed by the National Assembly Standing Committee, Vietnam’s reforms to date have not taken the aggressive strides needed to create oversight mechanisms for a mass system. For example, Vietnam has put a great deal of time into developing an accreditation framework. A rigorous and effective quality accreditation scheme is an essential component of governance in mass higher education systems, and in Vietnam it will be a precondition for the state to give more autonomy to universities. But after ten years of planning and trial periods, Vietnam has constructed one uniform, largely quantitative set of criteria for all universities, and has only completed external evaluation of a few dozen top universities. Universities’ internal quality assurance centers are weak. The existing framework does not touch the sectors where oversight is most immediately needed—new and private universities, and part-time programs. The government has declared its intention to establish independent regional accreditation agencies, but it is unclear when or how these bodies will operate. One under-resourced office in the Ministry of Education and Training cannot take responsibility for formulating and enforcing quality standards for the entire tertiary education sector. It is also unfortunate that the quality assessment framework includes no positive incentives: according to an article by several international consultants involved in the discussions, MOET apparently considered and rejected the inclusion of rewards for good performance in the accreditation framework.²⁵⁴

Vietnamese lawmakers are currently debating a major redrafting of the portion of the education law dealing with universities. They should consider how to create effective mechanisms to improve oversight and increase quality standards, including creating the councils and associations with the professional and technical expertise required to accredit and evaluate different types of institutions and programs. In Vietnam, intermediate associations and bodies of all kinds tend to be weak. Any association would have to be endowed with real powers. However, creating these governance mechanisms would be a long-term investment in accountability structures for a quality higher education system. It would also reduce pressure on central state agencies, which do not have sufficient staff and resources to operate quality assurance mechanisms the cover the entire country.

2) *Decentralize selectively*

²⁵⁴ Westerheijden et al, 194.

The government has made decentralization a key theme of systemic reform. A clear distinction should be drawn between the two kinds of decentralization being discussed. First is decentralization to institutions. There is widespread agreement that decentralizing power to universities and strengthening university governing councils is necessary to improve academic quality and management. This was a central principle of Resolution 14. To date, increasing autonomy for universities has primarily taken the form of increased autonomy to generate revenue,²⁵⁵ leading schools to open profitable programs and disciplines and crowd classrooms. But there is more to institutional autonomy than earning income—institutions also need academic and managerial autonomy. The consequence of devolving financial autonomy without delegating academic authority or constructing quality standards is commercialization.

Greater autonomy needs to be accompanied by increased oversight capacity. To meet this need the central government has also proposed decentralizing some portion of oversight and enforcement responsibilities to provincial government. It is not yet clear exactly which duties will be delegated downward, but they are likely to include some responsibility for quality oversight, implementation of transparency standards such as the Three Disclosures, and oversight of alliance programs.²⁵⁶ In our view, decentralization to local government will not solve the system's problems. Vietnam will not develop an international-standard education system, as envisioned in Resolution 14, if provincial government is in charge of oversight. Supra-provincial bodies should retain responsibility for standards and steering of the higher education system. It is worth mentioning that China has found enforcing standards in higher education to be difficult since it decentralized its higher education system in the 1990s (see Appendix 2), placing all but 5% of institutions under the supervision of provincial governments or localities. This is noteworthy because China has only 35 provinces or province equivalents, compared to Vietnam's 63. Even in the United States, where each state operates its own system of universities and colleges, accreditation is performed by regional bodies.

As in other sectors of Vietnamese society, higher education governance has to strike a balance between local accountability and national standards. Socially and economically relevant training should involve local and private sector actors who have the best information about local needs. Institutional governance mechanisms, particularly at the lower levels of the system, should reflect this. However, devolution of authority to smaller administrative units and local actors can also have the opposite, unintended effect of *decreasing* public accountability because it becomes difficult to enforce minimum standards of acceptable behavior on public institutions. Local actors, whether community members, businesses, or local government, do not always have enough information to protect student consumers. They cannot determine whether universities are behaving ethically, whether medical or law students are being trained to professional standards,

²⁵⁵ Decree 43/2006/NĐ-CP, 25/04/2006.

²⁵⁶ Hoàng Ngọc Vinh, "Decentralization in higher education management" [Phân cấp trong quản lý giáo dục đại học], *Nhân dân*, 31 March 2010.

whether teachers are sufficiently trained, or how money is being used. The 2010 *Vietnam Development Report* asserted that in healthcare, a national certification and auditing system for facilities and personnel is needed to correct the information asymmetries between local actors and hospitals.²⁵⁷ We argue that same holds true in higher education. Universities are complex institutions that teach specialized disciplines with the aim to train an internationally competitive workforce for Vietnam. Institutional and system-level governance mechanisms should reflect this reality.

Provincial government officials would likely agree with this assessment. Increasing provincial responsibility for supervising universities could impose a heavy burden on local government. Provinces are already responsible for primary and secondary education, and have increasing responsibility for healthcare provision. Provinces want quality universities and colleges, but overstretched departments of education with time and personnel constraints will not be able to supervise universities. One exception is vocationally-oriented training, in which more direct local input into lower tier institutions will improve the relevance of education. As suggested in our discussion of vocational training schools in Penang and Bình Dương, local knowledge and direct involvement of businesses is important in demand-driven vocational training, and provincial governments can play a leading role in facilitating linkages between businesses and colleges and founding new training centers.

Vietnam also needs to take a stronger regional or national perspective on the development of the higher education system. Though the prime minister holds the power to establish universities, provincial interests seem to have dominated the growth of higher education institutions, creating a fragmented system that strains the public budget and obviates any need for regional cooperation. Under Vietnam's administrative structure, a province's most important political relationship is with the center, rather than with neighboring provinces. We have argued that an effective, integrated, and diverse higher education system is best designed and regulated from a national or regional vantage point. Furthermore, as policymakers have pointed out, the public budget cannot sustain one university per province.²⁵⁸ Given present incentives, it is hard to envision the emergence of regional bodies with the political authority and provincial buy-in to design a rationally differentiated regional system of universities and colleges. More effective national coordination is also needed to ensure that tertiary education functions as an integrated system of institutions, in which students can move between universities and higher education institutions can share expensive resources such as library materials and laboratories.

²⁵⁷ Experience in decentralization of healthcare does not bode well for education: district-level healthcare infrastructure has degraded to the point that patients and their families seek to bypass the district and even provincial health facilities in favor of hospitals in urban areas. See Cẩm Quyên, "Patients Bypassing Local-Level Health Facilities, Flooding into Central-Level Hospitals" [Bệnh nhân vượt tuyến ào ào đổ về bệnh viện Trung ương], *Vietnam Net*, 18 September 2009.

²⁵⁸ Tuổi Trẻ, "Opening schools is easy" "Mở trường dễ dãi" 17/4/2010.

We should be clear that this is not an argument for a blanket recentralization of control over higher education under the central government. In fact, it would be difficult to find Vietnamese officials, whether central or local, or citizens who believe that recentralization of administrative control in any sector is desirable. However, in higher education, as in other sectors of the economy, as the government reduces the number of functions it performs, it also needs to perform its remaining functions more effectively.

3) Expand access through community colleges, polytechnics, and vocational training

Vietnam should focus on expanding access to tertiary education through a quality, market-responsive vocational and technical college system. The experience of industrialized and newly industrialized countries demonstrates that mass tertiary enrollment is achieved through the lower tiers of a tertiary education system—vocational and technical training, community colleges, and polytechnics. Countries such as Ireland, Finland, and the U.S. found that the most effective approach in creating locally responsive technical education was to establish a new class of institutions with a mandate for responsiveness and governance structures that reflected this. They play a critical role in training the technically skilled workforce for economic development by both addressing skills shortages in particular industries and anticipating future demand for technical skills.

In Vietnam, developing a new generation of polytechnics with a mandate for responsive technical education may be necessary. As argued in *The Intangibles of Excellence*, there are clear advantages to starting green field, since academic culture is slow to change. However, Vietnam's most recent experience with the establishment of the community colleges has not been particularly successful. The existing infrastructure of regional universities, vocational colleges and agricultural research stations may provide a better base from which to build. This would require changing incentives for third tier institutions to encourage them to fulfill their core mission rather than upgrade. Better articulation, through national qualifications frameworks and wider adoption of the credit system, could increase the attractiveness of vocational and college education as opposed to repeated attempts at university entrance exams or enrollment in part-time university programs. Firms will need to be involved in demand-driven training. Vietnam has tried to keep training institutions informed of industry needs through conferences and campaigns. A strategy of more direct involvement, through policies requiring firms to train their workers and, in return, involving the private sector directly in institutional governance, might be appropriate.²⁵⁹

²⁵⁹ Ian Coxhead et al. observe, "The other approach is to bring the private sector directly into the picture. That is, firms should be required by law to contribute toward the training of their employees—and in return, should be given a voice in decision-making over the design, administration and location of training programs. Firms understand their own human resource needs better than vocational training providers. Involving firms in the training of their own workers will help solve the problem of mismatch between the skills of the trained workers and the demands of the market.", "Getting to Work: RESEARCH TOPIC #8: Labour Market, Employment, and Urbanization in Viet Nam to 2020: Learning from International

The government has slated private universities and colleges to absorb most of the enrollment growth over the coming years. Private universities can help to absorb excess student demand; and the best of the for-profit institutions will offer quality training in foreign languages, IT, and business, many offering international certification to students who can afford to pay. However, important questions remain unanswered about regulation and financing in the private education sector. The majority of institutions, with poor facilities and few permanent faculty, will not be able to offer quality training in expensive engineering, science, or healthcare-related fields, and thus cannot substitute for a dynamic, publicly-supported third tier. The proliferation of private universities also imposes costs on the public sector, since private institutions depend heavily on moonlighting faculty from public universities. Technical and vocational colleges need to be funded at a reasonable proportion of universities teaching the same discipline.

4) Invest in expanding science and engineering enrollment

Building capacity in science and technology will be essential for Vietnam to attain its goals in economic and human development, from building an IT industry to improving food and consumer product safety to supporting agricultural adaptations in response to the environmental transformations that are already occurring in the Mekong Delta. Though current market demand for technical skills is low, building quality and enrollment in science and engineering education is an investment in Vietnam's future. Higher skill concentrations will help Vietnam to upgrade its value added and integrate in international supply chains. Vietnam's current enrollment in engineering and technology is 21% of student enrollment as of 2009. Countries that have achieved 20-30% enrollment in S&T have vigorously pursued policies to promote engineering education, such as targeted scholarships and loans for students in these fields, expansion of technical colleges, and significant investment in R&D.

Science and technology has characteristics of a public good: without significant government investment, it is undersupplied by the market. Teaching engineering and technical subjects is expensive because of the equipment and human resources required. Private universities and underfinanced public universities will not be able to offer these disciplines. What's more, the government cannot expect private firms to shoulder the cost of training and research. Currently, the private sector contribution to science and technology is currently very low; increasing it will depend upon top universities becoming more autonomous, administratively capable and research-focused, as well as abandoning introducing of a modern peer review system. However, even as private sector revenue grows, it will not pay for the majority of the costs.

5) Rationalize education financing and increase transparency

A. Rebalance the structure of state spending on education

Experiences," *The Asia Foundation*, December 2009.

The most important issue in state budget expenditure on education is not the level of expenditure (which is around 6% of GDP), but rather the need to find a rational balance in the structure of spending and improve the efficiency of spending. One structural problem is the division between different levels of education: compared with other countries, Vietnam's overall rate of expenditure on all levels of education relative to GDP is high, but its spending on higher education is on the low end.²⁶⁰ A second structural problem is the imbalance between capital investment and current expenditures. Developing countries often point to a greater need for new infrastructure to justify high rates of expenditure on capital investment over current expenditures. But in Vietnam, the effectiveness of this investment expenditure is not reported transparently and efficiency is difficult to monitor, creating opportunities for inefficiency and waste. Current expenditures, on the other hand, make an immediate impact on faculty salaries and teaching and learning materials, yet their share in total expenditure has been falling. The state needs to balance the structure of education expenditure, most importantly reserving a higher share for higher education, current expenditures, faculty salaries and scientific research and education.

B. Transparency in financing

Before seeking to raise expenditure on education, the state needs to establish clear standards for quality and to require transparent use of funds to meet those objectives. This is particularly important as tuition fees rise—families want to know how their added tuition payments will improve the quality of education. MOET's recent policies to improve transparency at universities are an important first step. The current environment of murky financial information creates doubts and questions about the actual income of faculty, the efficiency of state budget spending, and the impact of low faculty salaries on educational quality, as well as whether the root of the problem is insufficient spending or poor financial management. It also creates opportunities for corruption and waste. Better transparency will help the state to hold universities and local governments accountable. If parents and the press have a better understanding of how funds are spent, all of society—along with the state—can help to oversee universities. Private firms and philanthropists are also more likely to participate in financing education if they know how their funds are being spent.

C. Cost-sharing between the state and society

As the state chooses its means and level of intervention in higher education, there are two models for splitting spending between the state and society. The first model is the Western and Northern European model, in which the state is the leading financier. In this instance, the state pays up to 80-90% of education expenditures. In the second model, the state has a limited role in financing but maintains a regulatory role in the system's

²⁶⁰ The level of state spending in 2008 was 5.83 VND/university student/year, around 34% of GDP per capita. This level of spending is above the average in East-Asia Pacific region (24.7%) but is low compared to other regions. Globally, the average level is 90%.

organization, management and resource allocation. The share of the state budget is at or below 50%, for example in Korea (21%) and Japan (41%).

According to MOET's official data, in Vietnam the state share of spending is around 63%, putting Vietnam in-between the two types described above. However, the actual level of private family spending is likely higher than official numbers show because of unrecorded family spending for extra fees. What's more, with the rising tuition scale, the official level of non-state spending will certainly rise above 40%. The state's policy of "socializing" higher education suggests that Vietnam will follow the second model.²⁶¹

The state has correctly identified the need to diversify social revenue sources, such that the burden for financing does not fall entirely on the shoulders of students and their families. The state needs to devise mechanisms and policies that allow universities to diversify their revenue sources.²⁶² Diversifying university revenue sources promotes healthy competition among universities to attract corporate and philanthropic financing. Financing from businesses, individuals, philanthropy, research projects, and students motivates schools to improve their prestige, teaching quality, and research capacity to attract financing—so long as this competition takes place within a framework of external quality standards and oversight. However, it must be recognized that diversifying universities' science and technology revenue will depend upon deeper institutional reforms, including the national modernizing research granting and increasing university autonomy.

6) Promote competition among similar institutions

Regulation is needed to ensure minimum standards and protect consumers, but it is not enough. Educational quality improves when institutions engage in healthy competition, on the basis of their reputation of their faculties, their research, and their graduates' employability. Transparency and performance evaluations, both internal and external, promote competition. Effective and comprehensive quality accreditation is an important component of this. Every effort should be made to improve the public's access to information about schools. MOET has already taken some steps to do this through the Three Disclosures policy. Private universities are another source of competition, but most private institutions are resource-strapped and understaffed, limiting their ability to compete effectively with public institutions in the medium-term future. Making students at private institutions eligible for public support after those institutions meet certain

²⁶¹ MOET has estimated that, out of an estimated \$20 billion needed to implement Resolution 14 between 2006 and 2020, half will be mobilized from tuition and the private sector, and half from the state budget. Cited in World Bank Program document no. 47492-VN, p.13.

²⁶² Policies often used to expand revenue sources include: (i) provincial budgets can keep a portion of taxes (including individual taxes, corporate income taxes, real estate taxes) in order to expand community-linked tertiary education (ii) policies to encourage companies to provide their workers with extra training through agreements with universities and colleges (iii) individual incentives to contribute to the education system: tax breaks for industry and individual donations, gifts and inheritances to education.

standards would provide an added boost for private institutions to compete with public ones.

The state should introduce some competition into the distribution of public resources by partially linking assessment to institutional financing. Current financing structures distort incentives by doing nothing to reward performance while actually encouraging schools to seek out every conceivable means of increasing enrollment. Some degree of performance based funding could be introduced for different types of institutions to encourage them to find a niche. Competitive granting programs and performance based funding programs could promote community relevance, teaching excellence or applied research at colleges and regional universities.²⁶³

7) Create a legal framework for autonomous, non-profit universities

Vietnam lacks institutional models of public or private universities that operate on a not-for-profit basis and combine autonomy with internal governance structures that ensure accountability, transparency and adherence to standards. This is a significant barrier to the development of private higher education in Vietnam. The current legal framework for private universities creates conflict a between shareholders in governing councils and academic directors of schools, and essentially forces universities to pursue profits. Profit-driven education programs can offer quality programs in a limited number of fields with high student demand and low costs, but for-profit institutions will not train engineers, biologists, or social scientists. As Nguyễn Thị Bình and others have pointed out, the vague and incomplete legal framework for private institutions is a part of the problem.²⁶⁴ Vietnam has in the past instituted a number of laws and regulations related to the creation of autonomous and non-profit universities, including the establishment of Vietnam National University with special autonomy, the establishment of university governing councils at all universities, and Decision 122/2006 on transforming people-founded universities to private universities. None of these regulations has been successful in achieving the aim of creating a truly autonomous, non-profit university.

The National Assembly should create a specific legal framework for non-profit, self-governing higher education institutions. This idea has been put forward by numerous lawmakers in recent months. The law could establish a clear set of requirements, including financial transparency and licensing procedure. Explicit legal authority vested in a board of governors composed of various internal and external stakeholders—not shareholders—which is then subject to regular audits by state-appointed agency. Council members have no vested interest in the institution other than overall commitment to the

²⁶³ Samih Mikhail, “The Alternative Tertiary Education Sector: More than Non-University Education,” The World Bank Education Work Paper Series No. 10, May 2008, p.113.
http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099079956815/EWPS10_ASTE.pdf

²⁶⁴ On the need for specific law on higher education, see Ngọc Sơn “3 điều chưa tỏ trong giám sát Quốc hội về giáo dục” 02/05/2010, <http://vietnamnet.vn/giaoduc/201005/3-dieu-chua-to-trong-giam-sat-Quoc-hoi-ve-giao-duc-907485/>.

institution's prestige and success. Vietnam can look to institutional models for non-profit private universities in Turkey, Japan, Korea, and the United States.

This model is very new for Vietnam. Many people have raised legitimate doubts about how a non-profit university would be funded and evaluated by public opinion. A very high level of transparency would be needed in order for the public to trust that the institution truly operated on a non-profit basis. Crafting a solid legal framework for new non-profit universities is, however, the essential first step. Creating not-for-profit institutions would likely be a prerequisite for building a culture of individual or corporate philanthropy in Vietnam, or for private institutions to receive any institutional financing from the state.

8) Begin a national conversation with Vietnamese students abroad about higher education

Vietnam has an enormous potential resource in its tens of thousands of students studying abroad throughout the world. The number of students exiting Vietnam's higher education system for Australia, Europe, the U.S. and other Asian countries is growing quickly. Vietnam needs to begin a candid and open conversation with its students abroad, particularly those in graduate programs, about what it will take to bring them back into public universities. This conversation needs to move beyond the political rhetoric of national duty, and even beyond a narrow discussion of salary. Salary is, of course, an important part of the equation. But in conversations with overseas graduate students, including Vietnam Education Fellows, the authors remarked that students consistently mention academic working environment as their primary concern in deciding their career path. They seek a work environment that provides dynamic colleagues, a reasonable teaching load, and access to the resources, including libraries and laboratories, that will allow them to continue their research and stay up to date with international developments in their field. China has made attracting overseas students and faculty back into the university system a driving feature of its recent higher education reforms.

The printed press, online forums and personal conversations reveal that many of Vietnam's overseas students are deeply concerned about the situation in the higher education system. However, we note that national conferences or workshops on higher education held in Vietnam tend to be dominated by the current generation of university leadership, and retired officials, with young faculty and overseas students underrepresented. This cadre of young people represents a potentially enormous asset for Vietnam. An inclusive policymaking process would take heed of the career ambitions and ideas of these students, and place paramount importance on finding ways to bring them back to academia in Vietnam.

9) The role for donors: support new models for higher education

In recent years, donors have rightly recognized higher education as a priority in their activities in Vietnam. A dynamic and quality higher education system will be extremely

important to Vietnam's development progress. Yet, in our view there are few examples of foreign assistance projects with a visible long-term impact on the institutional development of Vietnamese higher education. We say this for three primary reasons. First, multilateral development assistance has focused overwhelmingly on providing hardware – buildings, computers, laboratory machinery. While hardware is needed, an overemphasis on infrastructure risks reinforcing an attitude of neglect for the software of higher education—human capital, academic programs, good governance. Second, donor funding is driven by priorities in capitals back home, meaning that projects are often short-term. As a case in point, Trà Vinh Community College, one of the flagship community colleges projects, upgraded to university status soon after Canadian bilateral assistance ceased. Third, donor governments have focused on providing scholarships for Vietnamese students. There is great value to opening opportunities for talented students, and this is an important role that donors play. It must also be recognized, however, that scholarships alone will not bring excellence and dynamism to Vietnamese universities if Vietnam cannot create the institutional environment to attract these students back after they finish their studies.

Donors can add the most value by providing long-term assistance to develop new institutional models for Vietnamese higher education. Donor governments can support new models and initiatives in not-for-profit higher education by financing partnerships between Vietnamese and home institutions, which bring long experience and expertise in academic governance. Deep and long-term partnerships can play an important role in developing institutional capacity at all levels, from vocational schools and community colleges to research universities.²⁶⁵ Academic partnerships and degree programs that maintain the standards of the home institution can play a very important role in raising the overall standards of the Vietnamese higher education system.

However, most of the memoranda of understanding signed between Vietnamese and foreign partners end in frustration for both parties, in part because the two sides have very different expectations about the partnership. Vietnamese institutions often assume that foreign universities have funds to invest in overseas projects, and will operate like profit-seeking companies. While there are for-profit foreign universities interested in Vietnam, they are largely teaching vocational programs like language and computer skills. Foreign universities, on the other hand, are interested in research partnerships between faculty (usually with third-party funding) and recruiting students for home institutions. Most do not have the resources for deeper investment in facilities, joint degrees, and scholarships sought by Vietnamese institutions. Many good international universities, however, would be interested in long-term engagement in Vietnam, provided sustained external financial support.

²⁶⁵ One example is the Fulbright School in Hồ Chí Minh City, which has been supported since its inception in 1995 by an annual grant from the U.S. Department of State. The Fulbright School, which teaches a Master in Public Policy program, is a joint initiative of the University of Economics, Hồ Chí Minh City and the Harvard Kennedy School.

Appendix I. An Giang University: Case Study of a Provincial University

An Giang University is regarded as one of the most dynamic regional universities in Vietnam. Its success is due in no small measure to the indefatigable leadership and vision of its founding rector, Professor Võ Tòng Xuân. In this essay Professor Xuân looks back on the challenges he faced during the ten years he served as rector. Resource constraints and state control over personnel issues were significant barriers. Perhaps most tellingly, Professor Xuân shows how the dearth of interprovincial cooperation inhibits regional planning. At its inception, An Giang University was envisioned as a second regional university for the Mekong Delta; a decade later, several more universities had sprung up in the Delta. In this respect, Professor Xuân's experiences at the helm of a regional university offer a cautionary tale on the challenges Vietnam will confront in fostering the emergence of a rationally differentiated tertiary education system.

I. Introduction

In 1972 I joined the University of Cần Thơ (UCT) after completing graduate studies at the University of the Philippines College of Agriculture and working as a research fellow at the International Rice Research Institute (IRRI). Under the two regimes (pre and post 1975), I witnessed a steady decline in the quality of admitted students. When the war ended in 1975, education at the primary, secondary and tertiary levels in southern Vietnam was required to comply with regulations determined by the Ministry of Education in Hà Nội. The students at UCT – the only tertiary education institution serving the 13 millions inhabitants of the Mekong Delta at that time – had to struggle with a heavy curriculum that included many subjects of limited relevance to the acquisition of professional skills.

In September 1999 I presented a paper at a national conference on “Tertiary Education in Vietnam: Present Situation, Challenges, and Solutions” held at the National University of Hà Nội, to report on my observations on the state of education 25 years after reunification. I argued that it was essential to rapidly create favorable environments for every Mekong Delta resident to access quality education and appropriate vocational training. But with more than 2 million farming families in the Mekong Delta, and an annual output of about 42,000 high school graduates, achieving this objective would be an enormous challenge.

A subsequent seminar entitled “Directions of socio-economic and training network development for the Mekong River Delta” concluded that Vietnam's competitiveness remained very low compared to other countries in the region. The Mekong Delta produces 55 per cent of Vietnam's food grain but the general level of education and training lags far behind much of the rest of the country. In farming enterprises and related activities, most farmers, aside from the cumulative wisdom and experience passed down from one generation to the next, and their newly acquired practical experiences, most farmers lacked formal vocational training. As a result, at every step in the agricultural production value chain, our agricultural products suffer from low quality due

to weaknesses in processing, management, and marketing. Our sectors in services, industries and especially agriculture, remain weak in terms of quality, price, production technology and consumption markets. This situation is due to many factors, but education is undoubtedly one of the most important. One indication of the seriousness of the problem is that in my view graduates today have lower knowledge levels than in the past. If we cannot improve our existing education system, the country will remain backward. This can be explained by the fact that the source of enrolments is continuing to drop in terms of quality and achievement. This reflects unfavorably on our education system, beginning with the primary and secondary levels.

II. Rationale: Improving education in the Mekong Delta

From the outset, one of the central missions of An Giang University has been to address the poor state of education in the Mekong Delta by educating a corps of skilled teachers capable of improving the quality of education at the primary and secondary levels. The poor quality of high school students in Vietnam in general, and in the Mekong Delta in particular, as reflected by performance on university entrance examinations has prompted all those concerned with the Vietnamese education system to conclude that urgent responses are needed to halt the downward spiral. The trend is more severe in rural than urban areas since most of good teachers are concentrated in the cities.

A brief survey by the An Giang Department of Science and Technology on the primary and secondary schools in the Mekong Delta, particularly in the remote rural region known as the Long Xuyên quadrangle²⁶⁶, revealed that this degrading education follows a vicious circle: all teachers in Vietnam are given a performance target to achieve, i.e. they must try in such a way that at least 90% of their students can pass their subject; in the primary level, this target must be 100%, otherwise the teachers could be ranked “poor” in annual performance evaluation. But since students learn poorly in the elementary schools and go on to high schools (due to inadequate facilities, ineffective teaching, inability to pay for tutoring classes, low teacher salaries, etc.) the teachers have to lower the quality standard usually by simply giving higher score than what is deserved. The retention rate in the primary and secondary education is low but the dropout rate both in the primary and secondary education for the Mekong Delta in general and for An Giang province in particular is alarming, from 9.8 to 16%. On the other hand, at the university, most existing teachers were complacent with the on-going teaching practices approved years ago by the Ministry of Education and Training (MOET), and they continued to produce the same kind of teachers for the primary and secondary schools. In the end, the pupils in the primary and secondary schools, and the students in the universities were the victims of this vicious circle. Well-off children may take private tutoring classes to improve their study, but the poor children could hardly afford to do so.

²⁶⁶ The Long Xuyên Quadrangle includes the provinces of An Giang, Kiên Giang and Đồng Tháp. This region, adjacent to the Cambodian border is subject to severe annual floods. It is inhabited by Vietnamese, Khmer, and Cham people.

The root of the problem is the doubtful competence of the teachers in the rural. *If their teaching skills are improved, rural access to better education will follow.* It is mainly the existing education system and the existing process of teacher's education that have been turning out thousands of teachers of doubtful quality. The Vietnamese press has been publishing criticism against the present educational system, and the Resolution of IXth National Congress of the Vietnamese Communist Party prompted for rapid and thorough improvement of the teaching-learning practice in schools. This resolution was in line with the recommendations in my 1999 paper mentioned above. It convinced me to build a new university for the Mekong Delta that would be a pioneer in the national movement to "overhaul" the Vietnamese education system. , first to produce better teachers for the general education in rural areas. An Giang University, my conceptual university for the rural Mekong Delta, was planned to break this vicious circle beginning at the Faculty of Teacher's Education.

III. AGU: The First Phase

An Giang University was by no means a solo initiative. When I was elected to represent An Giang in the National Assembly in 1981, I was fortunate to meet several visionary provincial leaders, including former provincial Party Committee Mr. Nguyễn Văn Hôn. Mr. Hôn shared my vision of establishing a second university for the Mekong Delta. We assumed such an institution would be a provincial initiative, because it was highly unlikely that the central government would invest in building a new university for the province.²⁶⁷ A team of experts from An Giang province was convened to draw up a plan for the new university. Once the plan was finished, we waited for an appropriate opportunity to begin the process of seeking central government approval. Opportunity knocked in February 1999 when the government organized a conference on education in the Mekong Delta in Mỹ Tho city of Tiền Giang province. The meeting was chaired by then Deputy Prime Minister Phạm Gia Khiêm and the late former Prime Minister Võ Văn Kiệt. At this meeting, attendees were astonished to learn that, according to official data provided by the Ministry of Education and Training, education level in the Mekong Delta ranked sixth among the seven regions of the country. In his concluding remarks, Vice Premier Phạm Gia Khiêm agreed with provincial leaders that the region's general education system must be thoroughly improved and that more universities must be built. With its proposal ready, the People's Committee of An Giang Province was the first to implement this decision.

Going through the bureaucratic steps of application procedure was a tedious task, from passing the appraisal of various specialized departments of the ministries of Education and Training, Planning and Investments, and Finance, to defending our case before a

²⁶⁷ In the Mekong Delta, aside from the University of Cần Thơ (which later on was split to establish a University of Medicine and Pharmacology) the Đồng Tháp Teacher's University (later on changed to Đồng Tháp University, since there are surpluses of teachers) is also centrally invested by MOET since at the time of its establishment the Vice Minister Vũ Hùng (formerly Director of DOET of Đồng Tháp Province) recommended to the Prime Minister to invest the very first Teacher's University.

governmental appraisal committee presided by Vice Premier Nguyễn Tấn Dũng. It took Mr. Ngô Minh Đức, the then Deputy Executive Officer of the An Giang Provincial People's Committee Office, almost 9 months until the official signature and seal of the Prime Minister was affixed on the Prime Minister's Decree no. 241/QĐ-TTg on December 30, 1999, to establish the An Giang University on the premises of what was then An Giang Teacher's College.

IV. The Implementation Phase

A. Fine tuning the design

I was proud to have been appointed to serve as the first rector of An Giang University. With the help of provincial experts and advice from many international colleagues, we finalized a pre-feasibility proposal for the establishment of An Giang University. The university would be mandated to serve the southern Indochina region, instead of just the 4 provinces –An Giang, Đồng Tháp, Kiên Giang and part of Cần Thơ– as stated in the Prime Minister's Decree. Why “southern Indochina”? On the map, Long Xuyên City of An Giang is situated in the center of the region encompassing the Mekong Delta, Cambodia and southern Laos.

Our overriding goal was to improve the quality of education at every level. We recognized that the central government's investments in education and training in rural areas were insufficient in comparison to investment in urban areas. In designing An Giang University in this remote area, we knew we would have to “fend for ourselves” both financially and professionally. We were motivated by a conviction that Vietnam desperately needed new approaches in education and training if the country is to seize the opportunities offered by globalization. We need to design appropriate type of education and training with up-to-date and practical contents not only for the young incoming students from high schools, but also for adult learners. The local labor force must possess appropriate knowledge and skills in order to be able to integrate effectively into the economic development programs of the region. In short, our mandate was (and remains) to provide appropriate education and relevant training with the least cost to the rural poor. A related mandate is to identify appropriate scientific and technological solutions to help rural dwellers to increase their incomes and improve their livelihoods while helping to protect their own environment. But I foresaw that we would be operating in a difficult environment:

- students are mostly from poor farming families, and did not receive a quality education at the primary and secondary levels;
- the limited provincial budget would make it difficult to build laboratories and acquire books and other learning materials;
- quality staff would be reluctant to live in a remote area;
- the existing staff of the former Teacher's College on which AGU was founded was of questionable quality.

However, we were blessed with some favorable circumstances such as: strong support from the provincial government and local communities, and my ability to draw upon a national and international network to assist our development.

In response to these conditions, I determine that we needed to:

- design appropriate academic programs and curricula to meet the demands of the region;
- recruit and train our own teachers in improved approaches to education and training, using modern technology in teaching;
- provide teachers and students with improved infrastructure to facilitate the teaching and learning processes. At a minimum they required a good library to start with, while laboratories and experimental fields would be established over time. As our limited budget would make it impossible to assemble a modern library of books in print form, we aimed to develop an electronic library cum documentation center featuring e-books and databases of scientific journals. Teachers were encouraged to establish course web pages with links to external references, other agricultural and technological documents would be made available on the university intranet (for students and teachers) and online for (for teacher alumni and the public including extension workers, farmers, etc.)

B. Breaking ground

To realize those objectives with a very limited budget for a provincial university – which I used to call “a rural school” – one must be a bold but careful decision-maker: prioritizing investment needs; selecting solutions that are current but inexpensive; and leveraging financial resources from many sources. Our basic *modus operandi* is to comply with MOET regulations while integrating innovations in order to achieve the highest academic standards.

Because I recognized that international participation would be crucial to AGU’s development, to everyone’s surprise, the first building we constructed was a comfortable, three-story International Guest House. Next in line was a building housing the library and administrative offices. While new buildings were under construction, I converted the only large auditorium into four computer rooms. Our very first equipment purchase– 160 desktop PCs for use in English and ICT training – was made possible by a special grant of USD200,000 from the Ford Foundation.²⁶⁸ This grant also enabled me to invite two expatriate Vietnamese experts to come to AGU: Mr. Nguyễn Văn Thụy from Michigan State Community College, to establish our first AGU Faculty Handbook and organized workshops to demonstrate various skills in university teaching. Ms. Nguyễn Thị Nga from the Medical Library of the University of Arizona, to guide the set up of a new library for AGU.

²⁶⁸ This grant was made at the recommendation of the Center for Educational Exchange with Vietnam whose director is Mrs. Minh Kaufmann.

C. Academic programs and curriculum development

Based on a survey of the province's human resource requirements conducted by An Giang's Department of Science and Technology, we initially established four academic faculties: agriculture and natural resources; economics and business management; technology and environment management; and teacher's education. The education programs offered by each faculty were designed according to MOET regulations; of course these programs would require modification as they are being taught. In addition to these core programs we designed a number of unique programs intended to meet the development needs of the Mekong Delta.

The first of these AGU-specific programs was the "Integrated Rural Development" curriculum based on my two decades of experience work in Vietnam and neighboring countries. I solicited the assistance of Professor Paul Davies, one of the world's leading experts on rural development, at the Royal Agricultural College in Cirencester, UK, and his PhD student, Mr. Charles Howie, to join me in designing this curriculum. The second program was an agribusiness curriculum designed by the dean of AGU's economics and business management faculty, Dr. Nguyễn Tri Khiêm, in collaboration with Prof. Jens Fischer of the University of Flensburg, Germany.

I also designed and taught a research methodology course entitled "Approaches to Scientific Research." The fourth unique program, the "Inter-Cultural Communicative Competency" course (known as IC3), is described in more detail below.

Although we received MOET approval for the first three original programs, the IC3 was not approved, because it represented what was in Vietnam a totally new approach to English language training. I decided to apply to the IC3 methodology to 50% of the English classes at AGU as an "experiment" of the Faculty of Teacher Training. The new courses were initially difficult for teachers, but once perfected, the students benefited very much, becoming very capable English teachers.

AGU as a pioneer in other areas as well. We were the very first university in Vietnam to require that all students graduate with at least a level "B" on the national English comprehension exam. Similarly, students were required to attain a level "A" certificate in Information and Communication Technology (ICT). AGU teaching staff were encouraged to meet similar requirements. These demanding policies initially encountered stiff resistance from students and faculty.²⁶⁹ I stood firm in the face of this criticism. Today, almost every university in Vietnam has adopted similar policies for their students. Unfortunately, we had less success imposing the policy onto our faculty members, especially the not-so-young members of the Faculty of Teacher's Education.

²⁶⁹ In one news article in 2000, the *Tien Phong (Pioneer) newspaper* questioned the legality of our policy, since the MOET did not ask for such requirements.

In addition to academic faculties, we established five specialized research centers: the Foreign Languages Center, the Information and Communications Technology, the Center Research Center for Integrated Rural Development, the Research Center for Social Sciences and Humanities, and the Resource Center for Community Development. Our online library may have been the first in Vietnam when it went live in early 2001. This initiative was a response to the fact that our need for reference materials far outstripped the capacity of our meager budget to acquire periodicals and books. Our library ICT team led by Mr. Duong Quang Minh, recently returned from the US, installed the Claroline program; an open source freeware program equivalent to the Blackboard system. Faculty and students practiced using Claroline translated into Vietnamese. Lecturers were encouraged to post their syllabi on their web pages. In my course “Approach to Scientific Research,” I taught students how to conduct research online via search engines such as INGENTA, AGORA, CABI, Biological Abstracts, etc. Of course our students were limited to reading the freely available abstracts; in order to access the full text of articles from proprietary databases, the library help desk would ask an AGU faculty member studying overseas to procure it. This process time consuming but it was the only way to compensate for our lack of funds to purchase subscriptions. Even before we established the online library, we incorporated technology into many aspects of university management. These included a university email system and a university LAN. Since 2007 the entire campus has enjoyed free wifi access.

In order to fulfill our mission of providing skills training relevant to the socioeconomic needs of An Giang province, we needed research and experimentation facilities in key areas including agriculture and fisheries. Instead of seeking provincial funds to establish these stations, I decided to use existing provincial stations. An Giang province had invested substantially to build these stations so it was logical to take advantage of these resources and use both their staff members and experimental fields. This turned out to be a win-win approach. For the agricultural and fisheries stations, AGU students and their teachers represent a free pool of additional labor and expertise, while AGU can access essential teaching facilities on a rent-free basis.

V. Finance

As a provincial university, AGU’s primary source of funds is its annual budget allocation from An Giang’s Department of Planning and Investment. All expenditures from this official budget must comply with provincial and MOET regulations regarding how funds can be spent. These regulations are extremely detailed and onerous; for example, they dictate the level of compensation faculty and staff are entitled to receive for participating in a wide range of activities from grading exams to participating in extracurricular activities for students. While I found that many of these items were unreasonable, as the rector I was unable to abolish them because the teachers viewed them as entitlements. These regulations also create perverse incentives that negatively impact how teachers teach. For example, a core responsibility of a teacher, especially at the undergraduate level, is to administer occasional tests or other assignments to gauge how students are absorbing the material. However, MOET regulations only compensate teachers for the

final exam; as a result teachers have no incentive to conduct mid-term assessments. Another ridiculous example is that whenever students wish to organize an extracurricular activity, an organizing committee composed of the rector, vice rector, departments, etc. must be formed. Committee members are entitled to compensation even though such duties should be considered a part of their core responsibilities and, oftentimes they do nothing. In total, these petty payments consume 15-20% of the university's entire budget.

Our development plan is prepared annually and approved by the An Giang provincial legislature, the people's council. We cannot plan our activities beyond the capacity of the provincial revenues, especially when it comes to innovations that do not appear in the list of approved expense items. At times the strictures of this system forced me to resort to dipping into my personal funds, such as to give awards to winners of student contests or to secure housing for newly recruited faculty. According to government regulations, essential expenditures of less than VND50 millions (USD 3,000) can be approved by the rector; large expenses require the approval of the provincial Department of Finance or must be paid for with solicited (i.e. non government) funds, foreign or local. Our annual operating budget grew from USD1.87 million in 2000 to USD2.25 million in 2009. About 30-35% of this budget comes from tuition fee, 60-65% from provincial allocation, and 10% from other sources. International projects accounted for 9% of operating funds in 2000, declining to 2-5% thereafter, until 2008 when we received a three year World Bank grant of USD1.3 million for improving our teaching and research capacity. Ninety percent of the estimated USD20 million construction cost of our new 40-ha campus will be paid annually out of the provincial budget; the remaining 10% will be financed from a national fund.

Major research projects, most of which are conducted by the Faculty of Agriculture and Natural Resources, are often funded by international development agencies. These funds were actively sought by An Giang University. For example, the project to design the integrated rural development curriculum needed expertise inputs from the Royal Agricultural College at Cirencester, UK, where Prof. Paul Davies, one of the world experts in rural development is located. I and Prof. Davies presented our proposal to the British Council, and won a two-year support for faculty exchange, professional visits to AGU by British experts, graduating training for AGU faculty, and library materials. Other examples of external funding include support from the Swedish International Development Agency to carry out research on animal-based farming systems and a grant from the Mennonite Central Committee to develop AGU's IC3 English curriculum. In seeking funds from international donors we always made sure to include funding for AGU faculty to pursue graduate training overseas. On occasion we were also able to secure funds from MOET.

In order to foster an optimal learning environment we developed a plan to build a new campus on 40 hectares land near Long Xuyên. We mobilized our minds, and I tapped my international experience and sought the advice of experts from the US and Singapore. Building this new campus will cost an estimated USD40 million. In late 2005, the Prime Ministerial Appraisal Committee approved the plan and then Deputy Prime Minister

Nguyễn Tấn Dũng urged us to find financial backers for the project. After a long and frustrating search I was able to convince one of the financial companies, the Milaric Corporation of Canada, chaired by Mr. Nguyen Nhu The, a Vietnamese expatriate, to provide us with a USD40 million loan on terms similar to a World Bank soft loan. Unfortunately this deal fell for lack of a bank guarantor. Construction finally began on 30 December 2006 without any loan, but with annual installment from provincial and national budgets. Ninety percent of the cost is paid annually by the provincial budget; the remainder 10% is supported by national fund. At this writing, after three years of construction, the building project is about 85% completed, although equipment awaits future budget allocations. It will take time but such is the destiny of a provincial university.

VI. Personnel Issues

My most pressing task upon assuming the rectorship of AGU was to recruit competent faculty and staff for the university's four original faculties. This was (and remains) a central challenge for AGU because of the difficult of persuading well-qualified university instructors to teach at a remote new university. Compounding my difficulties was the fact that every individual I sought to hire had to pass a political background check by the provincial authorities.

In the beginning I was forced to rely on personal connections. I persuaded my son, a soil scientist at UCT, to manage the Faculty of Agriculture and Natural Resources. My brother-in-law, an agricultural economist at the International Rice Research Institute in the Philippines returned to manage the Faculty of Economics and Business Management. Because I was unable to find new and competent people to manage the remaining two faculties, I was forced to recruit from the pool of existing personnel. In recruiting instructors, we tried as much as possible to hire either experienced lecturers, or promising and civic minded young faculty with good academic records. Exceptional candidates were offered incentives such as relocation funds and suitable working arrangement. Hiring talented people forced us to be flexible and creative. For example, in order to hire an ICT expert just returned from the US, I agreed to permit him to work two days a week at a technology firm in Hồ Chí Minh City. Regular candidates were interviewed by a selection committee. The most attractive incentive we can offer faculty members is the opportunity to join research projects that include advanced training abroad. While all new recruits understood that they would be paid according to the government salary scale, if they performed well they would have the opportunity to pursue advanced training abroad. In addition to the above incentives, I created another attraction for our prospective recruits: a housing plan for every new comer. Thus the "AGU Staff Village" was built out of a 7.5-ha rice field. Every staff member can buy a 120-meter lot at a price of a fraction of the market price.

VII. Students

As soon as we have decided the number of students for each academic program in the four faculties, we then received the endorsement of the provincial government, after which we applied to MOET to admit this quota of students during the National University Entrance Examination to be held in July. Our entrance examinations were conducted in full compliance with national regulations.

Although AGU was originally conceived as a regional university serving several provinces in the Mekong Delta, over the years a significant majority of our students (roughly 80%) have come from An Giang province. During the first four years, students from Đồng Tháp, Kiên Giang increased from about 2% to a peak of 7-11% in 2003 before declining to 2 -4% in 2009. Students from the other ten provinces in the region varied from 1% of the student body in 2000, peaked at 2.7% in 2003, and dropped to 0.3% in 2009. Several factors explain this trend. First, the strongest students probably prefer UCT more established programs and reputation. Second, by 2004 most provinces in the Mekong Delta had established their own universities. Students from ethnic minorities account for between .5% and 4.5% of the student body. Beginning in the 2006-2007 academic year, with a grant from the An Giang provincial government, we issued 10 scholarships each to students from Cambodia and the province of Champasak in southern Laos.

VIII. External linkages and relationships

A. Relationships with other academic institutions

AGU has built relationships with other universities and institutions in Vietnam and abroad. In the country, the first institutions we sought assistance from included the University of Cần Thơ, the University of Economics of Hồ Chí Minh City, the Faculty of Sciences of Hồ Chí Minh University, the Teacher's College of Ho Chi Minh City, the University of Education of Hồ Chí Minh City, and the University of Agriculture and Forestry of Hồ Chí Minh City. One of our motivations for forging institutional linkages with these universities was to ensure that when their faculty taught at AGU on a part-time basis, they would do so with the full support of their home institution. We also created a partnership with the Cửu Long Delta Rice Research Institute (CLRRI) in Cần Thơ. Through a grant from the Rockefeller Foundation, CLRRI used built four modern biotechnology laboratories and sent a number of their researchers abroad for graduate training. This partnership was intended to support AGU's undergraduate degree program in Agricultural Biotechnology, with CLRRI providing lecturers, lab instructors and practical laboratories for biotechnology related subjects. The Faculty of Agriculture and Natural Resources enjoys a wide network of relationships with provincial departments of agriculture and rural development and especially with the Faculty of Agriculture of Cần Thơ University. In general however there is little cooperation among universities in the Mekong Delta as each institution struggles to develop and to compete for external lecturers.

B. International actors

As described above, from the earliest days of AGU I drew upon my personal network of colleagues and collaborators abroad to support the university's development. My experience at UCT had proven that international networks are crucial source of support to a fledgling academic institution. But I have to confess that it is extremely difficult during this time of world economy to pull some of my former international collaborating agencies out of Can Tho to come to An Giang. Anyhow, some of the essential supports from international organizations, as discussed elsewhere above were timely and fit well to our dire needs. Without this support most of AGU's most innovative programs would never have come to fruition and AGU would not enjoy the respected position it does today.

C. Relationship with the state

AGU's mandate as determined by Prime Ministerial Decree 241 is to provide academic, scientific, and technical support to the development of An Giang, Đồng Tháp, Kiên Giang, and part of Cần Thơ. This mandate has consequences for how we can allocate official budget expenditures. For example, by law we can only grant scholarships to pedagogy students from these four provinces. It will be illegal if we pay teacher student scholarship to students coming from other provinces. These scholarships are funded out of the An Giang provincial budget. Together with a vice chairman of the An Giang People's Committee, I twice visited with the authorities in Đồng Tháp, Kiên Giang and Cần Thơ in an effort to persuade them to share the cost of these scholarships with An Giang. Unfortunately, Vietnam's budget law does not allow one province to support another province or one ministry to support another ministry. If the An Giang budget is insufficient, it is the responsibility of the national budget to pay for this deficit item. In fact, for many years An Giang's public finances have been in deficit due to the fact that the provinces primary economic activity, rice production, is tax exempt under Vietnamese law. As a result, An Giang must rely on budget support from the center to cover a portion of the province's expenses, including those incurred by An Giang University. Similarly, we are unable to secure support from the Ministry of Agriculture and Rural Development for training programs designed for our agriculture students. However, in the area of research, our students and faculty members are free to apply for grants from the research budget of any province provided that the intended output will prove beneficial to it. Provinces can call on AGU to advice on science and technology matters. On the other hand, the construction cost for our new 40-ha campus is supported partly by the national budget and partly by An Giang budget. As the construction nears its completion, 8% of the total cost was supported directly by the national budget.

D. The university and the community

My time at the UCT was used fully to fulfill a vow that my wife and I had made before we left the International Rice Research Institute in 1971. We pledged to dedicate our knowledge and skills to train competent agricultural technicians to improve the lives of Vietnamese farmers and to share Vietnam's agricultural achievements with other

countries in the world. The students whom I helped educate at UCT graduated with a clear direction and sufficient knowledge and skills to serve the farming communities in their respective provinces. UCT contributed to the success of the agricultural reforms that formed the basis of the Party's *đổi mới* policy from the mid-1980s that rejuvenated Vietnamese agricultural production.

When I arrived at AGU, my ambition was to use pioneering educational methods to train a new generation of teachers and other skilled professionals. In this way I envision a second *đổi mới*, driven by education. At the same time AGU should function as a community college, providing short and medium term vocational training to adults in order to help them better capacity to integrate into the working communities in Vietnam and abroad. We must also concentrate our research and development efforts on responding to the requirements of local communities. Through these programs I hope that we can realize what has thus far proven elusive: a sustainable reduction of poverty among Vietnamese farmers, particularly the rice farmers. AGU must pursue integrated development programs incorporating education, production, and environment management. Our achievements can in turn offer models from which other localities in southern Indochina can learn, thereby helping to transform the region with richer farmers using modern agricultural practices in modern, hospitable rural communities. Within two years I was forced to concede that vision was far too ambitious given our modest capacity.

IX. Constraints

While we have succeeded in securing external support for many initiatives, the regulations of the province and of MOET sometimes conspire to curb our enthusiasm. Perhaps the most intrusive regulation is the requirement that all proposed faculty hires be subject to a political background check. Politics also limits my ability promote and assign individuals as I wish. For example, one of my best female instructors was sent to study in the US; when she returned, having earned a doctorate (with honors), I wanted to make her vice rector. Unfortunately both AGU's internal Party committee and that of the Province did not approve because of a slight irregularity in her political background.

Intrusive external regulations determine how many students AGU can admit annually, decide tuition fees and determine salary scales. We must devote substantial time for Party and military training activities. We are limited in our ability to offer short training courses as a community college would to serve the adult learners. With respect to admissions policies we must follow the rigid and costly national University Entrance Examination (UEE). It is widely recognized that current university admission procedures create large barriers to entry for students; however at the "output" end, when students complete their studies there is very little quality control. Although a decision has been made in principle to eliminate the UEE and instead use the high school graduation exam this has not yet become a reality, as concerns remain about impartiality.

Financing is another constraint. I recognized from the beginning that budget sources would be limited by An Giang's fiscal position. Even for essential expenditure such as student's dormitories, we had to find other ways to secure better conditions for our students. I have persuaded five districts in An Giang Province to solicit money from the people of the district to construct dormitories for students coming from the districts. Then there was the problem of provincial certification when we want to borrow loan from private sector. Sometimes we got around with this problem when we need to proceed with rural development effort by negotiating with our collaborating agencies to sign contracts with us.

In retrospect, perhaps the greatest stumbling block I faced was the conservatism of instructors in the Faculty of Teacher Education. Although no less than twice I received the personal endorsement of senior central government leaders to implement a thorough renovation of the four-year teacher training curriculum, my efforts were frustrated by faculty members. Their resistance in part reflected the fact that they themselves lacked the knowledge and ability to design and teach new courses. (In Vietnam there is a popular saying to the effect that the least talented individuals pursue teaching as a career.) Instead, these faculty members were content to passively implement the standard curriculum as set by MOET, while, ironically, blaming MOET regulations for their failure to innovate. This situation effectively derailed my vision of promoting a second *đổi mới* in education.

In general, I believe I have failed in my efforts to attract experienced and well known teachers to join our core faculty. The present mechanism for issuing titles such as "associate professors" and "professor" makes it difficult for small and remote universities such as AGU to incentivize its best faculty. These people continue to flock in big universities in big cities. At present most AGU lecturers lack the research skills of their elder predecessors and rarely have the opportunity to teach students at the master's level, a crucial prerequisite for promotion to associate professor. After ten years in operation, AGU has only one associate professor; I am the only a full professor. This problem will remain until a more equitable mechanism is developed for redistributing professors and associate professors in the existing Vietnamese education system. Fortunately the central government is paying more attention to the faculty development needs of universities like AGU. Leading universities with established graduate programs are now given a special admissions quota to train faculty members from newly established universities. More government scholarships for foreign study (known as Program 322) are now being granted to faculty at new universities.²⁷⁰

X. Conclusion

²⁷⁰ As of December 2009, 37% of AGU's 612 instructors hold a postgraduate degree, as compared with less than 10% at the start. At present, 26% are studying for master of PhD degrees, including 35 abroad. The rest of the faculty hold bachelor's degrees. Only twelve instructors hold PhDs, of whom one is a professor and one is an associate professor.

A. An Giang University, ten years on

Ten years are too early to pass judgment on our success or failure, but at least we have established our reputation nationally and internationally, particularly in designing a modern campus and a few unique study programs. AGU has pioneered innovative approaches to agricultural development in the Mekong Delta and is sharing this knowledge internationally, including in five African countries. We have also pioneered the application of information technology in a regional university setting. According to our annual survey, all of our graduates succeed in finding employment, oftentimes finding jobs even before they graduate. As the above discussion has made clear, a great deal remains to be done. We must put more effort into developing innovative approaches to teacher training in order to elevate the quality of primary and secondary education in Vietnam. Improved study programs are needed in all fields. We must do more to attract talented instructors and encourage our faculty to publish in peer-reviewed academic journals.

B. Looking forward: national policy recommendations

I hope the time will come when AGU and other provincial universities will constitute a network of community colleges and universities free from the control of the MOET to support the socioeconomic development of their region by training a skilled workforce. The provincial university will be able to provide technical and scientific support to their respective provincial authorities with funding from the province. Ideally, these institutions should incorporate the local vocational training schools that at present are operated, ineffectively in many cases, by provincial Departments of Labor, War Invalids, and Social Affairs. This also will leave a small number of research-oriented universities in major cities. With a clearly defined mandate, regional and provincial universities will still require adequate investment from the government in order to comply with international standards.

Appendix II: International perspective: Lessons from India and China²⁷¹

As Vietnam works to reform its higher education system, of special interest for Vietnam are the experiences of two developing countries that built large higher education systems in recent years, and are among the world's most successful economies. China is now the world's largest higher education system with some 27 million students in a wide variety of institutions, including an active private sector. India is the third largest higher education system, with 13 million students. China today enrolls about 23 percent of the age group, while India serves 10 percent. Both countries will face pressures for further expansion in the coming decades and both are committed to increased access—indeed, close to half of the world's enrollment growth in the coming several decades will come from these two countries.

Both countries have identified higher education as a key tool for economic development and recognize the importance of postsecondary education in general and research universities in particular as central instruments for more sophisticated economic development. Although China and India's booms have been fuelled mainly by cheap labor and inexpensive low-end manufacturing, both countries' futures depend on a better-educated workforce. The recent report of the Knowledge Commission in India has the development of human capital as its main recommendation. China also sees higher education as central to the development of human capital and the continued success of China's economic development.

At the same time, both countries face significant challenges in their efforts to build an effective higher education system. One lesson from examining the Chinese and Indian systems is that many developing countries are grappling with the same challenges of expansion and quality as Vietnam, and that system-wide improvement is a long and gradual process.

I. A Diversified and Differentiated System of Post-secondary Education

All effective mass higher education systems are differentiated by function and often by funding sources and other variables. While China has not formally developed a coherent and articulated academic system with clearly defined missions and variable patterns of funding, it seems that such a system is emerging, with input from both the central government and the provinces. China has so far paid special attention to the top of the system, especially to the 150 or so research universities responsible to the central government. Of these, priority has been given to building an elite sector of high quality universities, providing very generous support to a handful of institutions.²⁷² In 2009, 9 of these universities have been identified as "China's Ivy League" with the goal that they will become "world class universities" quickly.

²⁷¹ This section was written by Philip Altbach, adapted from his June 2009 article in *Economic & Political Weekly*.

²⁷² China's strategy for apex research universities is discussed at length in *The Intangibles of Excellence*.

Most of China's approximately 1,700 universities are funded by and responsible to the provincial governments and in some instances to municipal authorities. These provincial universities tend to be in the middle and toward the bottom of the academic hierarchy. China abolished line ministry control over universities in the 1990s by decentralizing management and financing of hundreds of institutions to provincial and municipal governments. The Ministry of Education retains direct control over less than five percent of colleges and universities, including the top institutions designated to become China's world-class apex. This decentralization resulted in many institutional mergers, combining several (in some case as many as seven) smaller institutions into larger universities.²⁷³

China's initial focus on the system's apex has recently been supplemented by a push to move to expand the non-baccalaureate sector with the aim of creating a system similar to American community colleges. The number of tertiary vocational-technical colleges has grown far faster than universities, increasing more than tenfold between 1997 and 2005.²⁷⁴ Planning-era vocational institutions are being expanded, and may be integrated into the new "community college" sector. While system-wide articulation and two year associate's degrees—essential qualities of the American community college system—are still underdeveloped, there have emerged more locally determined programs aimed to retrain laborers and rural-urban migrants, support the technical sector, and increase the quantity of skilled labor.²⁷⁵ One driving factor is the need to accommodate growing numbers of secondary school graduates. Another source of differentiation is the expanding commercial activities of public universities under pressure to finance the enormous state-mandated expansion. Many of these have opened their own semi-private colleges. A problem in China, and for that matter in much of the world, is that there is little or no articulation between the non-university postsecondary sector and the universities, thus limiting student mobility.

The key point is that there is recognition of the need to provide both increased access to students who may not have the academic skills to succeed in a university and who need vocational skills.

India does not have a coherent differentiated academic system and as of 2009 has not identified a strategy for moving toward a system approach. India has a widely respected small elite sector of high quality, technical institutions. These well-known Indian

²⁷³ Gerard Postiglione, "Chinese Higher Education for the Twenty-First Century" in *Higher Education in Developing Countries*, 154. One strategy for decentralization was "joint development", whereby universities maintain their funding from a central ministry but the provincial government incorporates the university into the regional development strategy, encouraging increased local responsiveness by contributing capital funds. This was a transitional arrangement that eventually led to provincial governments assuming full management and financial responsibility for institutions, reducing the role of the central government and increasing the power of provinces. These transition years served as a capacity building period for provincial governments. Mok, 2005.

²⁷⁴ NBER 19.

²⁷⁵ Gerard Postiglione, "Community Colleges in China's Two Systems," in *Community College Models*, ed. Raby and Valeau, (the Netherlands: Springer Netherlands, 2009).

Institutes of Technology, now numbering 13, and Indian Institutes of Management are the only institutions that can be considered close to “world class.”²⁷⁶ The traditional universities remain well below international standards, a fact often masked by India’s strong economic performance and the success of its tiny elite sector.²⁷⁷ The bulk of the Indian higher education system, however, is undifferentiated. The 380 universities, mostly under the jurisdiction of Indian states, which have primary responsibility for education in India’s federal system. Of these, the 24 universities under the control of the central government tend to be somewhat better funded, and of higher quality than the rest, but there is no clear differentiation among them. India has a total of more than 18,000 postsecondary institutions—more than 17,000 of these are colleges offering mainly undergraduate degrees. A few of these colleges have taken advantage of legislation that permits high-quality colleges to separate from their sponsoring universities and offer their own autonomous degrees. These colleges are recognized as more prestigious than the rest. There are also a variety of other kinds of postsecondary institutions. Oddly named, “deemed” universities are university-level institutions, mostly specialized, are recognized by the University Grants Commission, a central government agency, and thus have degree-granting authority. Additional technical institutions are recognized and evaluated by the All-India Council of Technical Education, another central government agency. India has not as yet attempted to define a coherently differentiated academic system. There is no formal division of responsibility for access or research among the colleges and universities. The panoply of institutions, sponsorship, and jurisdiction makes the emergence of a system very unlikely under current circumstances.

If this description is confusing, it is because academe has grown without planning in response to massification and the need for new kinds of institutions to serve an expanding economy. Responsibility for higher education is divided among several agencies in the central government, the states (which have different policies and perspectives), an increasingly powerful private sector, and occasionally the courts. Over the years, efforts to reform higher education have sidestepped the traditional universities, instead adding new institutions, such as the IITs, alongside them.

Like China, India has a large and varied non-university, vocationally focused higher education sector. And like China, the sector has little prestige and no articulation with the university sector. Many of these institutions are under the jurisdiction of the All-India Council for Technical Education (AICTE), a central government agency. With a few exceptions such as some institutions related to the information technology industry Bangalore and several other places, Indian observers agree with the quality and focus of the vocational sector is low and poorly articulated with industry.

²⁷⁶ James Surowiecki, “India’s Skills Famine”, *the New Yorker*, 16 April 2007, http://www.newyorker.com/talk/financial/2007/04/16/070416ta_talk_surowiecki.

²⁷⁷ The government recently announced that it will establish an additional 8 Indian Institutes of Technology and 7 Indian Institutes of Management, along with 30 new research-oriented central universities, 10 National Institutes of Technology, 2 Indian Institutes of Science, and 1,000 new polytechnics. The feasibility of this effort is dubious, given the insufficient resources committed to it.

As is the case for all mass higher education systems, overall quality has declined in both countries as numbers of institutions and students have expanded. Only 9 percent of teaching staff in China hold a doctoral degree—although 70 percent have doctorates in the research universities. In India, 35 percent have doctorates, with a higher proportion in the research universities. Overall student quality has declined in both countries as admission has extended to a wider segment of the population. Facilities in many of the mass-access institutions are poor, with shortages of laboratories and poor information technology access. The proportion of students who do not complete their degrees has increased significantly. These are inevitable implications of a mass higher education system.

II. National Planning and Analysis

It is interesting that India has engaged in national higher education planning since independence in 1947, while China has only heavily emphasized higher education as a driver of growth for the past decade.²⁷⁸ Yet, India has struggled to coordinate its higher education institutions or to bring coherence to national higher education development, while China has successfully developed parts of its university system.

Since 1947, almost a dozen major national planning exercises for higher education have taken place. Some involved “blue ribbon” commissions, while others were carried out by the Planning Commission or the University Grants Commission of the Government of India. These commissions have produced numerous thoughtful recommendations for higher educational reform, including proposals to foster research universities, “decouple” the colleges from the universities, and many others. In no case was it possible to implement the major recommendations although some reforms came from the planning exercises. Lack of political will, economic problems, and the divided authority over higher education between the central government and the states all made implementation difficult.²⁷⁹ The Indian government’s plans to build new universities largely ignore the complex problems of the existing university sector. Initiatives favor establishing new institutions without clearly defining how they will improve upon the existing system.²⁸⁰

In China, policy changes and major innovations seem to have come from central government initiatives that were fairly quickly implemented and backed with funds and other resources, with a focus on the apex but also increasingly oriented toward vocational and adult education. It is also significant that China, in recent years, has developed research and analysis capacity in higher education so that decisions on higher education can be informed by data and careful analysis. Many universities compile data and internal

²⁷⁸ Yao Li et al, “The Higher Educational Transformation of China and Its Global Implications”, NBER Working Paper, No.13849 March 2008., <http://www.nber.org/papers/w13849>

²⁷⁹ Jayaram 2007: 74-76.

²⁸⁰ Philip Altbach and N. Jayaram, “India’s Effort to Join 21st-Century Higher Education”, *University World News*, 11 January 2009, <http://www.universityworldnews.com/article.php?story=20090108193113947>.

analysis. The central government also has research capacity in higher education. In contrast, only the University Grants Commission (UGC), the central government's funding agency for the universities, has research capacity—and it is quite limited.

In both China and India, higher education planning and policymaking has been for the most part a central government responsibility. India has suffered from the division of legal responsibility for higher education between the states and the center. It is fair to say that in both China and India the state and provincial governments have paid little attention to higher education policy and planning, and higher education has not been a significant part of provincial development strategies. The main exceptions are a small number of the wealthier and more developed Chinese cities and provinces that see universities as an important part of economic development. Examples include the municipalities of Shanghai and Beijing, and Zhejiang province. A recent OECD report on Chinese higher education concluded, however, that this decentralization has hindered system-wide strategic planning, coordination, and quality assurance efforts.²⁸¹

Vietnam can, of course, greatly benefit from realistic and data-driven policy research and analysis for higher education. The Indian lesson is that central planning without appropriate data and without the political will to implement plans does not yield success. China teaches us that even limited planning combined with resources and determination can be successful.

III. The Academic Profession

At the centre of any postsecondary institution stands the academic profession. Without well-educated and committed professors, no academic institutions can be successful. China and India, in part because of the scale of their academic systems, face major challenges in developing and sustaining a professoriate capable of providing instruction and leadership. The large number of academics needed for these expanding systems of higher education is unprecedented. Providing training at the doctoral level for a substantial proportion of the academic staff will be difficult to accomplish. Creating and sustaining conditions for academics to do their best work and to retain the “best and brightest” in the profession is also a concern.

Both countries have a problem of “inbreeding” in the academic profession. Many professors were educated at the same university where they are employed. Most analysts of higher education believe that such inbreeding reduces diversity of thought and the possibility for new ideas and innovative programs because the academic profession comes from the same intellectual and methodological background. Several of China's top universities, such as Peking University, have moved to end inbreeding and prefer to hire faculty members trained elsewhere.

²⁸¹ Michael Gallagher et al, “OECD Reviews of Tertiary Education, China”, 2009

In both countries, academic salaries are low—the “best and brightest” are lured to jobs outside of the universities—or to academic positions in other countries. Both countries have typically increased salaries automatically for length of service and promotion in rank, thus stifling creativity and competition. Both countries have made efforts in recent years to improve salaries—India recently significantly increased academic salaries for everyone, and for the first time in many years, academic salaries are competitive, although they remain too low at the top institutions. China has implemented a strategy of improving salaries most at the top universities in an effort to lure top talent to an academic career. Salaries and promotions are now based on performance and evaluation of teaching and research rather than on longevity. In China, this has resulted in a significant downsizing of faculty and staff.²⁸²

More than 550,000 full-time academics are teaching in Indian colleges and universities and 1,200,000 in China. An additional 350,000 part-time instructors work in Chinese higher education and a small but growing number in India. The large majority of academics are teachers of undergraduate students and do little, if any, research. Most academics in both countries do not have a doctorate and some have earned only a bachelor’s degree; only 9 percent have doctorates in China, although 70 percent hold doctorates in the research universities, and around 35 percent in India, again with a higher proportion of PhDs in research-oriented university departments. Teaching loads tend to be quite high for those exclusively teaching undergraduates. Conditions for academics in colleges and universities located in rural areas and less-developed regions compare unfavorably with urban institutions. On the other hand, the small minority of academics, probably under 3 percent of the total, who teach graduate (postgraduate) students and are appointed to research-oriented departments in the better universities, are much better off in terms of remuneration and working conditions. In India, only academics holding positions in university departments and in specialized research institutions are expected to do research. Most, if not all, of these academics have doctoral degrees, often from distinguished universities in the West.

IV. Academic Culture and Academic Freedom

Just as important to a successful higher education system as well trained professors is an academic culture that will support good teaching and research. Both China and India have problems in this regard. Both countries have a highly bureaucratic academic environment

²⁸² In a study on the Chinese academic profession, Xiangming Chen observes the effects of replacing the bureaucratic title system with a competency and qualifications-based posting system: The introduction of the post system launched a massive downsizing of faculty and staff in higher learning institutions, as in all government departments and state-owned enterprises in China. Those who are downsized are mostly administrators, Party officials, supporting staff and a small number of incompetent faculty members. At Xiamen University, for example, the introduction of the post system led to a reduction from 31 to 24 administrative departments and from 54 to 32 academic sections, with a cutback in the total number of staff from 537 to 270. At Central China University of Science and Technology, 290 staff members were cut from the total of 450 in 2000. ““Chinese Academic Profession,” in Philip G. Altbach, *The Decline of the Guru: The Academic Profession in Developing and Middle-Income Countries*, (Palgrave MacMillan, 2003), 119

that makes change quite difficult within institutions and places the academic profession under significant pressures. China, at the top of the system, is trying to create a more open academic culture with greater room for innovation. India remains mired in bureaucracy, with few efforts to reform.

Academic freedom—the freedom to pursue research and engage in teaching without restriction—is problematical in China. Restrictions on research in some social science fields for political reasons are evident, and academics must be careful of what they write or say in public. There is some recognition that such restrictions are, in the long run, harmful to the development of an internationally competitive and effective university, and slowly the system is opening up. India enjoys a high degree of academic freedom, although in some universities there are informal barriers on research and expression on sensitive social issues.

Corruption, while little discussed in both countries, is without question a problem for the emergence of an effective academic system and especially for internationally respected and competitive universities. Data is limited, but most observers believe that at the bottom levels of the academic systems, there is corruption in admissions, academic appointments, and in the management of universities. There seems to be less corruption at the top institutions. A related issue in China is that of *guanxi*, or the importance of personal connections and relationships in all aspects of academic life. In India, the involvement of caste, language, or religious connections in appointments and promotions is of similar importance.

V. Governance

How universities and academic systems are organized are key to their success. Both China and India have problems of academic governance at the institutional and system levels. As noted, both systems are highly bureaucratic, creating barriers for innovation and autonomy. Faculty members feel constrained by organizational rigidity. Unlike in most Western countries, the academic staff has relatively little say in the management of institutions.

In the Chinese case, the combination of academic and political administration sometimes creates tensions within institutions and is an added layer of decision-making and management. Chinese universities have a dual governance system that links the academic side of universities as represented by the president (rector) and his or her staff, and the party secretary (often with the title of executive vice president), representing the Communist Party bureaucracy within the university. Both sides must agree on the management and leadership of the institution. Other key aspects of academic and management operations, such as the promotion of professors, remain centrally controlled,

though recent proposals by the Ministry of Education would substantially devolve substantially more decision making authority to universities.²⁸³

In Indian universities, while there is a single academic leadership team, political authorities, usually at the state or provincial level, exercise much influence on decisions in the universities, often interfering in academic appointments, the organization of departments, and in other ways. In some cases, the political struggles of the broader society are brought onto the campus by unions or student organizations, creating disruption and often conflict. Strikes and other disruptions by students are common, and occasionally professors disrupt the functioning of the universities. Violence and destruction of campus property is not unusual.

In both China and India, extra-academic influences have weakened university leadership. At the top universities in both countries, presidents and vice chancellors are often appointed directly by the government, thus violating norms of academic autonomy. Political constraints of different kinds weaken the academic culture of the universities in both countries.

VI. Access and Equity Challenges

One of the greatest challenges to higher education in both China and India consists of providing access to the growing segments of the population demanding postsecondary education. A related issue is providing equity to population groups underrepresented in the student population. At present, India is still at the “elite” stage of access, with 10 percent of the age cohort entering higher education.²⁸⁴ The government has recognized the need to expand access to 15 percent during the 11th Five Year Plan (2007–2012) and to 21 percent by the end of the following plan, in 2017. This expansion would be the largest in India’s history and will require a dramatic growth in institutions as well as expenditure. China, already at a 22 percent participation level, is approaching mass access. It builds from a higher base, but significant expansion will take place as well. Much of this expansion took place over the past decade: between 1998 and 2005, both new enrollment grew about five times,²⁸⁵ In 2005, the minister of education indicated that the participation rate would be 40 percent by 2020.²⁸⁶

Not the same issue as access, equity involves higher education for population groups that may be underrepresented in the system and includes, depending on the country or region, gender and socio-economic inequalities, rural and urban disparities, and ethnic or other minority groups. The urban and rural divide, both in China and India is immense, with implications for access and equity. In common with many developing countries, a majority of the population lives in rural areas. Even with the dramatic urbanization in

²⁸³ Yojana Sharma, “China: More autonomy for universities,” *University World News*, Issue 118, 4 April 2010, <http://www.universityworldnews.com/article.php?story=20100401090125731>.

²⁸⁴ Trow, 2006.

²⁸⁵ NBER, 5.

²⁸⁶ Kapur and Crowley, 2008.

both countries, a substantial majority of the population is still rural. Access to higher education is dramatically lower, and quality tends to be lower as well.

Equity is in many ways a more difficult challenge than higher education access. Historically, equity has been a major concern of Chinese and Indian government planners. Many of the top universities have regional quotas so that applicants from all over China can get access. In the past few decades, equity has become a less important priority than access. In higher education as in other aspects of the society and economy, the disparity between the affluent coastal areas and the vast interior is significant. Rates of access to higher education in western China are significantly lower than in the coastal provinces and the large cities, as is the overall quality of the universities. Fewer data are available concerning access rates for China's minority groups and disparities according to gender or social class. From the beginning of the People's Republic, China has devoted considerable attention to these inequalities by encouraging expansion of access in western China. In the 1980s, loan programs were implemented to permit students from poor backgrounds to participate in higher education. However, major inequalities persist. It is possible that the continued prosperity in the high growth regions of the country may raise inequalities, although data are unavailable.

The most controversial issues in Indian higher education include the array of policies aimed at improving access and equity for tribal groups, lower castes, and *dalits* (a self-designation of the traditional "untouchable" or lower groups in the Hindu caste system). Policies relating to what in India is called "positive discrimination" are politically charged and often the subject of acrimonious debate, legal acrimony, and litigation. Since independence in 1947, positive discrimination, also called reservations, throughout the public employment system and in higher education in India has meant that *dalits* and some additional lower castes (known as Other Backward Castes) and tribal groups have proportions of seats in colleges and universities, positions in the civil service, and some other sectors reserved for them. This means that postsecondary institutions are required to hire, and enroll, a fixed percentage of these groups—almost half of the total. While positive discrimination has been a policy of the Indian government for decades, a considerable debate is still under way about both the justification and the effectiveness of the policy. Positive discrimination has been claimed as largely ineffective in raising the status of the groups it is intended to help and a mistaken social policy in a meritocratic society. At the same time, court orders have expanded the scope of the "reservation" system to institutions, such as the Indian Institutes of Technology, where it was not fully in place before. A 2008 government decision mandating that the Indian Institutes of Technology, seen as bastions of meritocracy, must hire professors according to the strictures of the positive discrimination laws has renewed debate about the policy in general.

In both countries, public spending has not kept pace with student expansion. The Chinese response has been to introduce higher tuition fees and push public institutions to raise external funds through research, training, industrial services and philanthropy; while in

India, fees have been capped due to equity concerns, keeping consumer contributions at around 5 percent.

VII. The Private Sector

Worldwide, private higher education is the fastest-growing segment of postsecondary education.²⁸⁷ China and India both have significant private higher education sectors, even though China's private higher education sector remains a relatively small part of total enrolments and number of institutions. About 4,300,000 students attend private postsecondary institutions—1,600,000 in private universities, 1,800,000 in second-tier colleges of public universities, and 870,000 in other kinds of institutions. In addition, there is a large private vocational sector, and many of the private institutions are not authorized to grant degrees. A small number call themselves universities, and a smaller proportion has been awarded the right by the Ministry of Education to offer university degrees. Some of the new private schools are nonprofit entities, while others are owned by business enterprises, families, or other arrangements. While accurate statistics concerning the total number of private institutions in all categories—including large majority that are not authorized to offer degrees—are unavailable, the number is well over 1,000. Permission to establish private higher education institutions has occurred relatively recently, and most private institutions have been in existence for only a decade or two.

Semiprivate colleges have also been established. Some Chinese universities, to earn extra income and meet local demand for access, have established private affiliated colleges that have a relationship with the sponsoring university. Classes are taught by regular university staff for the most part. Some problems involve the degrees offered by these affiliated institutions. Many students expected that regular university degrees would be offered, although the actual degrees were not from the sponsoring institution. Conditions of study vary in these affiliated colleges. In some cases, students sit in the same classrooms with regular students, while in others they attend in the evening. In still other cases, the affiliated colleges are entirely different buildings. A similar phenomenon is apparent in the dramatic growth of alliance, distance, and in-service programs operated by Vietnamese universities, which responds to student demand for credentials from recognized institutions and supplements university revenues.

In general, the private sector has grown in response to the demand for access to higher education and an interest in some vocational courses that cannot be met by the existing universities.²⁸⁸ The regulations concerning earning profits from higher education institutions are not entirely clear, and many different arrangements, often far from transparent, seem to be in place. Government agencies try to maintain some quality and

²⁸⁷ Philip G. Altbach, "The Private Higher Education Revolution: An Introduction" in *Private Higher Education: A global Revolution* (Rotterdam, the Netherlands: Sense Publishers, 2005)

²⁸⁸ The government's recent push to expand and increase the market responsiveness of public vocational training increased competition for *minban*. Mara Hvistendahl, "China's Private Technical Colleges Suffer as Vocational System Evolves", *Chronicle of Higher Education* 55, no. 11, 2010.

fiscal control over the private sector. However, regulations change, and the numbers of institutions have been growing rapidly, problems of management, financial transparency, and quality assurance exist. Nonetheless, the private sector is expanding and is becoming more diversified as a few private universities seek to compete with some of the better Chinese universities. For the present, however, if a student has a choice of enrolling in a public or a private institution, he or she will consistently choose the public institution, not only because of the cost of tuition (much higher at the private schools) but because of prestige as well.

The private sector in India is larger and more complex. Technically speaking, most Indian undergraduate students study in private colleges; perhaps 95 percent of these institutions are managed by private agencies such as religious organizations, cultural agencies, philanthropic groups, and others. Many, however, receive significant funds from government sources. These colleges are called “aided” institutions. Other colleges may receive no funding from government. These include many medical colleges (medicine is an undergraduate subject in India). Almost all are affiliated to universities.

A small number of private universities have been approved by state or central government authorities to offer degrees. These institutions do not receive any government funding and rely on tuition and in some cases philanthropic donations for funding. In addition, there are private specialized post-secondary institutions, mainly business schools. Some have degree-awarding authority while others offer only certificates because they lack government degree-granting approval. Almost all are financed by tuition payments.

The growth of the private sector in India has been dramatic. Currently, 43 percent of the institutions and 30 percent of student enrolments are in private unaided institutions. While accurate statistics are unavailable, the large majority of these institutions are for-profit or quasi for-profit, and many are family owned.

The expansion of the private sector has been facilitated by the complex and often dysfunctional regulatory framework for higher education in India. The state governments, along with central authorities, have the power to recognize colleges and universities. For example, in 2002, the state of Chhattisgarh, in a less-developed part of India, suddenly passed legislation for the recognition of private universities; 134 quickly applied and 97 were approved. Most of these were not located within the state but were in all parts of India. Some other states also recognized new private institutions. The University Grants Commission, seeing this anarchic situation, stepped in with new regulations, and after considerable dispute, the Indian Supreme Court recognized the authority of the University Grants Commission over the state governments in 2004. This example illustrates the complexity and the lack of overall direction relating to aspects of higher education policymaking in India.

Financial and ethical lapses can be seen in some of the new private institutions. Enforcement of standards is lax and regulatory frameworks inadequate—leaving room

for such problems as charging high fees for admission, a practice called “capitation fees” (substantial fees charged at the time of matriculation), tuition fees higher than those allowed by regulations, corrupt practices in admissions, hiring, and the award of degrees, and others. These issues have tarnished the reputation of the private sector (Gupta, 2008).

Private higher education in China and India is expanding. It is already a significant part of the higher education system, and its expansion will continue for a simple reason: the public sector is simply unable to provide the financial resources needed to provide the access demanded by growing populations. It is likely that the private sector will continue to function mainly at the bottom of the academic hierarchy, will be largely vocational in nature, and, as the economists say, will be mainly “demand absorbing”.

VIII. Conclusions for Vietnam

The problems and challenges of one country can, of course, have only limited relevance for another nation. Yet, a consideration of some of the key issues facing higher education in the two largest developing countries, China and India, may have some salience for Vietnam. This discussion shows that there are many common concerns and problems facing higher education development worldwide, in particular the complexity of planning for and implementing the transition to a mass system of higher education. China has tried, with some success, to face some of these problems and have succeeded in dealing constructively with them.

Whether China’s top universities will achieve “world-class” status remains to be seen. It is clear, however, that China has understood at least some of the key challenges and has made both policy changes and investments to solve them. It is less clear that China is developing solutions to the problems it faces at the bottom of its higher education system—where in fact most of the students are located. Given the interest in decentralization of higher education in Vietnam, closer examination of the Chinese experience in decentralization may be beneficial. The lessons from India are less clear. India’s higher education system has expanded rapidly over the past four decades but without much clear direction. The “excellent periphery” of the IITs and a few other specialized training institutes is separated from the mass of the system. Current ambitious plans to develop a globally competitive top tier in higher education so far lack both the resources and a vision for change.

Appendix III: Higher education and economic growth²⁸⁹

A. Growth and tertiary education

Economic growth (i.e., the sustained increase in real per capita income) and higher (i.e., post-secondary or tertiary) education are interdependent. This assertion appears to be at odds with the widely-held view, prominent among education specialists and economists, that higher education “drives” economic growth.²⁹⁰ It also runs counter to the general observation, based on international comparative data,²⁹¹ that the countries with the highest tertiary education participation rates have the highest incomes (i.e., have grown on a sustained basis). Further contradictory evidence is contained in empirical studies, based largely on post-1960 data, which shows that education (defined as years of schooling, highest level of education attained, or some related measure) is a statistically significant determinant of economic growth. In these studies, countries that have higher average years of schooling (after adjusting for initial effects of income and quality of schooling) tend to have more robust rates of growth than countries where there are fewer average years of schooling.²⁹²

There are three problems with this apparently compelling body of evidence. First, the international comparative data do not preponderantly (let alone unambiguously) support the view that higher education drives growth. Rich countries (i.e., countries that have grown on a sustained basis) have high tertiary education enrolment.²⁹³ But, not all countries that have high tertiary enrolment (the Philippines and former socialist bloc countries are examples)²⁹⁴ are rich.²⁹⁵ When low income countries are considered as a group, the relationship breaks down. Countries with low tertiary enrolment have low

²⁸⁹ This appendix was written by Dr. Malcolm McPherson of the Harvard Kennedy School.

²⁹⁰ Atkinson (1996), Bollag (2003), Hanushek (2004), NIU Outreach (2005), Hanushek (2005, p.15), Hanushek and Woessmann (2007), Fischer (2009), Benditt (2009),

²⁹¹ The World Bank’s *World Development Indicators* (World Bank 2009) report that in high-income countries (i.e., those with per capita incomes above \$11456 in 2007 prices) the gross enrolment rate in tertiary (i.e., post-secondary) education was 67 percent. Corresponding data for low-income countries (i.e., incomes below \$935 in 2007 prices) was 6 percent and for middle income countries, 24 percent (WDI 2009, Table 2.12, p.86).

²⁹² The literature is typified by the work of Barro (1996, 1999, 2001); Hanushek and Kimko (2000); Krueger and Lindahl (2001); and Hanushek *et al.* (2008). Pritchett (1996, 2001) enquired “where has all the education gone” when he failed to find a positive significant relationship between years of schooling and economic growth. Using a different approach, Sanders (2003) obtained similar results. More recently, Cicone and Jaroncinski (2008) showed that the relationship between education and economic growth is sensitive to the time period examined. Others researchers argued that Pritchett erred by treating years of schooling as being equivalent across countries. Once they allow for differences in education quality, the positive relationship re-emerges (Breton 2002, Dessus 2003).

²⁹³ Although this pattern has predominated in the post WWII period, it can be traced back to the dawn of “modern economic growth” (Kuznets 1966, pp.286-294).

²⁹⁴ World Bank (2009, Table 2.12, p.84-86)

²⁹⁵ Governments in some countries with high tertiary enrolments (Singapore, South Korea, Taiwan) are concerned that this may not be adequate to keep growth going. Several other them (especially in Asia) have boosted financing for higher education to raise its quality (Fischer 2009).

incomes (i.e., they have not grown on a sustained basis); but, just as important, all countries with low incomes have low tertiary enrolment.

Second, a major branch of the economics literature, which modern writers trace back to Adam Smith, links human capital²⁹⁶ rather than education to economic growth.²⁹⁷ This literature fully acknowledges that formal education (particularly higher education) contributes to the formation of human capital by developing skills, expanding knowledge, and shaping attitudes. Yet, it also makes clear that formal education is only one factor that generates, maintains, and improves human capital during a person's "formative years" and throughout their lifetimes.²⁹⁸ In practice, the majority of what people learn and come to know occurs beyond the reach of formal education organizations.²⁹⁹ This explains, in part, the importance attached by development specialists and development agencies to lifelong learning,³⁰⁰ a phenomenon that is intimately linked to the degree to which the economy and society stimulate learning, reward adaptation, and promote progress more generally.³⁰¹

Third, despite the tightly-instrumented and highly selected econometric evidence, economic growth (a rate of increase) is not determined, driven, or whatever quasi-causal term is chosen, by years of schooling (a level) or some equivalent measure whether adjusted for quality or otherwise manipulated.³⁰² The conventional single equation approach that relates economic growth to a range of selected determinants (such as measures of education), upon which the empirical results cited above are based, is fundamentally inappropriate for modeling (and understanding) such a complicated relationship. The only value such a "model" might have is if the period examined is so short that feedback from economic growth (i.e., rising income) to education can be neglected. That, however, is not the purpose for which the equations are estimated.

²⁹⁶ "Human capital refers to the productive capacities of human beings as income producing agents in the economy" (Rosen 1998, p.681).

²⁹⁷ Modern contributions began with Schultz (1959, 1963) and include Becker (1964), Freeman (1977), Makiw, Romer and Weil (1992), Kremer (1993), United Nations (1996), AfDB (1998), Temple (1999), Johnson (2000), FRBD (2004), and Jones and Schneider (2005).

²⁹⁸ Heckman (2006) and Heckman and Masterov (2004) emphasize the social benefits of ensuring that non-cognitive as well as cognitive skills are developed from an early age.

²⁹⁹ See Outlook (2001). One estimate suggests that the average person spends less than 5 percent of their lives "at school" (FRBD 2004).

³⁰⁰ Fulmer (2000); Willums (2001); World Bank (2003); Kochan (2004); FRBD (2004). The World Bank has devoted considerable effort analyzing what is required to stimulate and support a culture of lifelong learning. Billing itself as the "knowledge bank", the 1998/99 World Development Report examined "knowledge for development" (World Bank 1999).

³⁰¹ The various "learning-by" approaches (learning-by-doing, engaging, participating, failing, trading, trial-and-error, networking are just some) capture much of what is intended (McPherson 2005, n19). It blends the individual's motivation and the incentives for learning within the social and economic setting.

³⁰² There is no dispute that individuals with more education earn on average more than those with less education (Psacharopoulos 1995; Psacharopoulos and Patrinos 2002). But, this relates income to education attainment (or vice-versa). It does not relate education attainment (however measured) to economic growth.

Given the nature of policymakers' concerns, namely does higher education have an independent role in raising the rate of economic growth on a sustained basis, single-equation growth regressions are misleading at best, and counterproductive at worst. To begin sorting out the relationship between higher education and economic growth, analysts require a multi-equation, multi-variable framework that incorporates the relevant inter-dependencies, feed-back, and knock-on effects (including the fact that over policy-relevant periods, economic growth is its own determinant).³⁰³ While it may be convenient to pretend that some other partial technique will suffice, as so much of the empirical literature does, it does little to help policymakers understand the economy's dynamics.³⁰⁴

Economic growth, to emphasize the obvious, is a process not an event. It is the outcome of the dynamic, interacting flows of production, expenditure and income. Contributing to these flows are the services produced within higher education organizations, the expenditures made to generate those services, and the incomes derived from them. Some elements in this circular flow have a positive impact, for example, through the accumulation of skills and physical capital, the creation of new techniques, or the opening of new markets. Some elements, such as corruption or gross macro-economic mismanagement, have negative effects.

Higher education has similar effects. It adds to the supply of skills and knowledge (thereby boosting growth) but in the process it degrades or makes obsolete other skills and knowledge (thereby undermining growth). Similarly, economic growth (i.e., rising income) provides additional resources for expanding higher education and upgrading its quality even as rising income adds to the complexity of the challenges facing those engaged in higher education.³⁰⁵ The implication is that, even without the confirmation

³⁰³ Gunnar Myrdal used the term "cumulative causation" to describe how a growing economy creates the conditions which stimulate further growth (Ricoy 1998). For example, optimism about growth prospects boosts investment and productive capacity which, in turn, further stimulates growth. This spill-over effect is central to endogenous growth models which focus on how increasing knowledge supports the conditions for the further expansion of knowledge, investment, and growth (Romer 1986; Lucas 1988; Warsh 2005).

³⁰⁴ The intense focus by growth specialists on single equation methods leads them to systematically neglect the fact that economic growth results from the dynamic interaction of elements which propel and economy and those which hold it back (McFadden 2008; Lutz, Cuaresma and Sanderson 2008; Cicone and Jaroncinski 2008). Some elements do both. Population and capital stock are obvious examples. Population growth (demand side) expands markets boosting growth. But, more people (supply-side) absorbs resources just to keep "social overhead capital" at existing levels. Similarly, investment adds to the capital stock, but a larger capital stock requires additional resources to cover depreciation and maintenance.

³⁰⁵ A key feature of any growing economy is the systematic shift in the mix of skills that are demanded and supplied (Blanchard 1995; ILO 1998; Acemoglu and Zilibotti 2001; Ramcharan 2002; FRBD 2004). The demand for different skills is derived from the structure of economic growth. Education, training, learning-on-the-job and/or self-learning allow workers to modify their skills to accommodate the changing demands. Changes in wage rates mediate (and signal) the adjustment by rewarding the acquisition of skills that are both difficult to obtain and in short supply. The expansion of the global "knowledge economy" over recent decades has placed a premium on the ability to adapt (FRBD 2004; World Bank 2002; Kochan 2004). Lau (2009) argued that universities can and should contribute. He noted "universities must...teach general

provided by formal multi-equation models,³⁰⁶ the relevant relationship for policy making purposes is that economic growth and the expansion of higher education need to be seen as inter-dependent.³⁰⁷ One does not drive or determine the other in any meaningful sense.

From the above discussion, we see that to use most effectively the skills and knowledge generated within higher education, the conditions appropriate to high rates of economic growth must be generated and sustained. These conditions include such prudent macroeconomic management that keeps inflation in check (so that differential wages provide appropriate signals), public support for experimentation and research, improved infrastructure to reduce networking, transactions, and communication costs, and widespread debate about economic and social management and the direction of social policy.

B. Competitiveness and workforce development

To gain some idea how Vietnam might upgrade its value added through productivity and competitiveness, it is useful to examine how workforce development contributes to Vietnam's adaptation to the global knowledge economy.

Productivity and competitiveness are linked both at the micro and macro level. Productivity is defined as output per unit of input.³⁰⁸ Competitiveness is typically not defined directly.³⁰⁹ As described by Michael Porter "competitiveness depends on the productivity with which a nation utilizes its human, capital and natural resources."³¹⁰ Productivity, in turn, depends upon prices received in open markets, the efficiency of production, and the "ability of an economy to mobilize its human resources." That is, in Porter's framework, productivity links human resources (or workforce) to competitiveness.

rather than specific skills; they must teach students the art of learning and self-learning rather than knowledge itself..."

³⁰⁶ I have been unable to locate any multi-equation statistical models relating higher education to economic growth in the mainstream literature. The framework used in Appiah and McMahon (2002) traces many of inter-relationships among formal education (all levels), economic growth, health and other variables. They derive policy options using simulation exercises.

³⁰⁷ Various dimensions of the inter-connections among economic growth and education (often through human capital) have been examined (Goldin and Katz 1999; Bils and Klenow 2000; Birdsall 2001). A framework connecting economic growth and human development is elaborated in the 1996 Human Development Report (United Nations 1996) and Ranis, Stewart and Ramirez (2000). Education, training and learning contribute to the connections (or "chains") from economic growth and human development, and vice-versa.

³⁰⁸ For example, labor productivity is output per worker in a firm, a sector, or the economy as a whole.

³⁰⁹ For example, the Singapore Competitiveness Report 2009 (Ketels, Lall, and Boon 2009, p.57) stated: "Competitiveness captures the medium-term economic fundamentals that ultimately determine the level of prosperity an economy and its citizens can enjoy. At its core, prosperity is driven by the level of productivity that companies achieve in a location and the ability of an economy to mobilize its resources, especially its human capital, for productive economic activity." An excellent review of the many ways competitiveness has been defined is provided by Garelli (2003).

³¹⁰ Emphasis in original (Porter 2008)

A useful measure of competitiveness is unit labor cost. Enterprises (industries) are competitive if their unit labor costs are less than or equal to those of similar enterprises (industries) in other locations. Unit labor cost measures the wage share in a common currency, i.e., $(w.L/Q)/e$, where w is the wage per worker in VND, L is the number of workers, Q is the value of output in VND and e is the exchange rate in VND per \$. Enterprises or industries that can keep their unit labor costs lower than their competitors will gain market share.

Rearranging the identity as $w \div e \div Q/L$ focuses attention on three policy-relevant variables, namely, the wage rate, the exchange rate, and labor productivity.³¹¹ Wages are determined by overall supply and demand for labor, and particularly the institutional arrangements that encourage labor to adapt to changing market conditions. That adaptation may include migration from areas of high unemployment to areas where jobs are expanding, relocation by skilled workers to enterprises and industries that demand their skills, occupational welfare initiatives that improve the wellbeing of workers, and learning/training activities that raise workers' capacities.³¹² Exchange rates are largely determined by spot markets (formal and parallel) modified by the degree to which the authorities seek to manipulate these markets.³¹³

Labor productivity is related to the skill of the workers, their health and welfare (including food security), the competence with which they are managed and their productive activities organized, the quality of cooperating capital and other resources, and the general "state of demand." The last-mentioned depends on the position of the economy in the cycle. That, in turn, is related to some of the key variables, mentioned above, that affect the exchange rate, particularly the deficit, debt, and inflation. A further factor is the quality of the broader infrastructure (and institutional setting) within which the enterprises providing the employment are operating.³¹⁴

A more detailed overview of the factors affecting competitiveness, especially the pressures and requirements of a modern, globally-oriented workforce has been provided

³¹¹ This rearrangement shows the direct links among competitiveness and wages (expressed in dollars) and labor productivity. Unit labor costs fall (i.e., competitiveness increases) as the dollar value of wages declines and as labor productivity rises.

³¹² The World Employment Report 1998/99 (ILO 1998) stressed the role of worker learning and training as features that enable economies to adjust and adapt. Workers with more formal education had a greater facility (and willingness) to adapt and adjust to shifting labor market conditions. For countries like Vietnam that cannot rapidly change the overall level of workers' education, more determined efforts will be required to provide on-the-job training, support for worker relocation, and programs that facilitate the school-to-work transition.

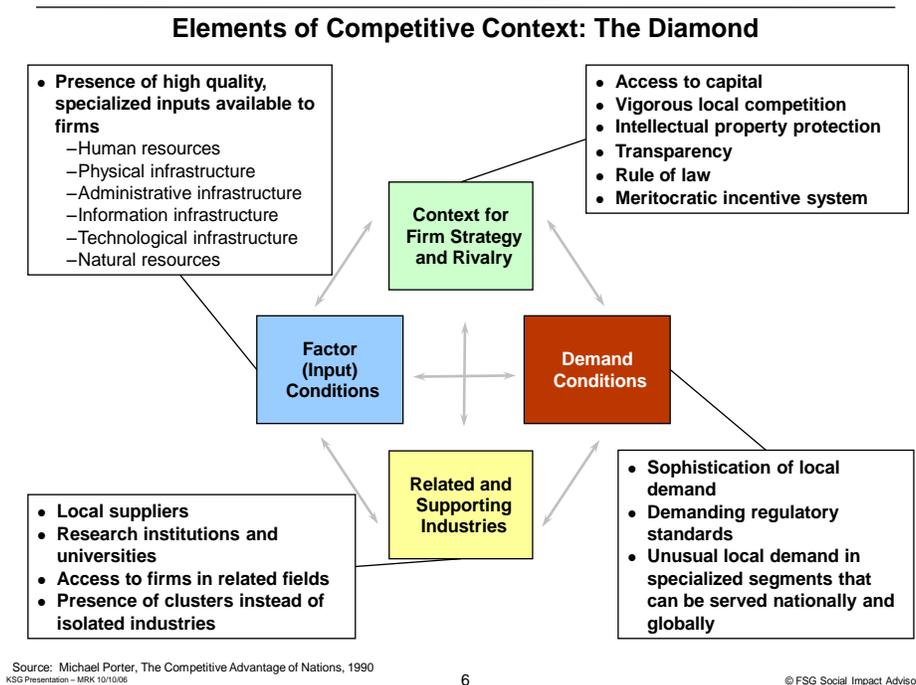
³¹³ Such attempts are frequently in response to pressures associated with budget deficits, rising levels of local and national debt, rapid increases in domestic credit (often boosted by lending to state-owned enterprises), and changes in capital flows due to shifts in local and external expectations regarding the economy's prospects.

³¹⁴ This point was emphasized in the World Bank study "The Quality of Growth." It is central to the analysis of Hall and Jones (1996), Miller and Schmitz (1996), and World Bank (2003, 2006).

in Michael Porter’s “competitive diamond.” Within this frame of reference, economic growth depends on “enterprise growth” which is connected through supply and demand conditions to the workforce. To grow, enterprises require workers who have the appropriate skills. And, as enterprises continue to grow, they demand more skilled workers.

The Competitive Diamond

There are four elements contributing to the competitiveness and productivity which sustain economic growth.³¹⁵



“Factor (input) conditions” refer to the local supplies of derived or “created” factors. Porter notes that although natural endowments (a stock) determine a country’s potential for growth, competitiveness is related to the factor supplies (a flow) that the nation itself can create (skills, knowledge, physical plant and equipment), or mobilize (through market-based trade).

“Firm strategy, structure and rivalry” refers to the ability of local enterprises to respond to threats by rivals to their competitive positions, to take advantage of opportunities for productive expansion, and to adapt to changing conditions of factor supply and product demand. “Demand conditions” refer to the degree to which local customers, through

³¹⁵ Taken from Kramer (2006) based on Porter (1990, 1998).

their demands for superior products and services, put pressure on enterprises to raise quality and lower costs. “Related and supporting industries” incorporate the advantages in terms of availability and proximity (particularly through industry and/or firm clusters) that reduce the input costs and improve the quality of services that support the enterprise’s productive activities.

All of these elements interact within a broader setting influenced by government policy and action. Governments promote and sustain competitiveness through prudent macroeconomic management and specific actions which remove barriers to productive enterprise and exchange. Governments also stimulate economic activity through the provision in advance (or concurrently) of public goods such as infrastructure, and their support for the creation of specialized inputs (such as knowledge and skills).³¹⁶

Workers (and workforce development) are connected through demand and supply. On the supply side, workforce enhancement programs prepare workplace-ready, employable, workers with the knowledge, attitudes and skills that local enterprises, their suppliers and those in supporting industries require to raise their productivity.

On the demand side, improving productivity raises workers’ incomes creating the incentive for them to add to their skills. Employers’ incomes rise as well. Both groups find training rewarding. Employers may provide the training directly or contract with others for the services. Workers have a range of options including on-the-job training, learning-by-doing, or formal self-improvement activities. On both counts, the demand for services that boost workers’ skills and competences will increase.

The above, however, are only the first round effects. The expansion of enterprises and rising productivity that underpins competitiveness foster growth in other parts of the economy – initially within the enterprise’s cluster, and then more broadly. These effects will reverberate throughout the economy as economic management improves – the result of enhanced government capacity through appropriate higher education and training.³¹⁷ Further positive changes will emerge as new activities are started. All of these will raise the demand for better trained and more highly skilled workers.

Viewing the above discussion as a whole, we have come full circle. Higher education and economic growth are interdependent. Economic growth depends on competitiveness which is directly related to labor productivity. That, in turn, is supported by a macroeconomic setting in which factor inputs and demand conditions, firm strategies, and

³¹⁶ Here Porter is in accord with the general conclusions of the 1995 World Development Report “Workers in an Integrating World” that “cheap labor” [or “low wages”] does not provide a country with a competitive advantage (World Bank 1995). The cost of labor needs to be related to the context within which the labor works and, more importantly, competes.

³¹⁷ These changes will improve the human and institutional capacities of government. Those, in turn, will ensure that government actions help lower transactions costs (through the expansion of infrastructure), reduce the costs of doing business (by removing barriers to competition), and broaden the scope for further competition (by promoting activities that generate specialized information and skills).

infrastructure provide a conducive setting for rapid, broad-based economic growth. Ensuring that the conditions appropriate to sustained economic growth are achieved requires workers with the technical skills, managers with the relevant organizational capacities, and policy makers and public officials with the requisite abilities. Maintaining these conditions requires that workers, managers, policy makers, and public officials are prepared to (and see the benefits of) continuing to learn and upgrade their capacities. Properly organized, higher education could make a major contribution to this ongoing effort.

There are several issues that relate to policy.

First, to respond constructively to global competition, Vietnam should focus on the overall competence, organization and welfare of its current workers. Although the prospect of foreign competition may stimulate an interest in raising worker productivity, the greatest pay-off in terms of economic growth and national welfare will come from domestic re-organization. This has clearly been evident since the mid-1980s under the reforms associated with *đổi mới*, specifically in agriculture but more broadly in the selective expansion of industry.

Second, for Vietnam to efficiently upgrade the skills and capacities of its workforce and thereby take advantage of the global economic opportunities, its policymakers should identify the sources of the economy's current competitive advantage, and the key constraints to sustaining that competitive advantage. One source of competitive advantage that the government or its agencies do not have is the ability to "pick winners". Indeed, one of the major lessons of past decades is that government attempts to "pick winners" almost invariably undermines competitiveness.³¹⁸

Three, instead of attempting to "pick winners," national planners will find more than enough to occupy their attention and challenge their capacities by ensuring that public goods are efficiently and effectively provided. Public goods are generated by the development of efficient infrastructure; effective, predictable administration; broad-based health and education services; prudent economic management; and low inflation.³¹⁹ All of these elements help create the conditions in which the enterprise, risk-taking, and inventiveness of the private sector can most effectively engage the time and skills of the work force.

³¹⁸ There is now extensive experience on the limited ability of governments and their agencies in countries as diverse as Japan, Oman, Malaysia, South Korea, Tanzania, Botswana, Saudi Arabia, and Brazil (among others) to recognize the types of new activities and industries that will generate future value-added and growth. Indeed, the generalized demise of central planning was a major case study, spread over several decades, of the general inability of governments (even when they had complete control of the economy) to pick winners.

³¹⁹ Low inflation is a public good. It reduces risks, sparing asset holders the expense of hedging their resources (by shifting into gold, foreign exchange, and other real property). With improved predictability, private investment will rise.

If Vietnam is to remain competitive in the global knowledge economy, its workers at all levels need to be encouraged (and rewarded) for learning and adapting. As suggested in the previous section, part of this will be in modifying the entry, exit and progression patterns within higher education to accommodate “cafeteria-style” learning. It will also require willingness by the authorities to encourage enquiry, debate, critical analysis, the exploration of new ideas, and experimentation with new modes of organization. Many constructive changes have been made in Vietnam over the last three decades. But, many more will be needed for the progress to continue. Perhaps the main challenge is whether the economic and social system, as currently structured, has (or can develop) the required flexibility.

Appendix IV: Executive Summary of *The Intangibles of Excellence: Governance and the Quest to Build a Vietnamese Apex Research University*³²⁰

The emergence of knowledge as the key driver of economic development has prompted renewed focus on the importance of higher education in developing countries, particularly at the research university level. Research universities, which sit at the apex of a country's higher education system, educate public servants, engineers, and entrepreneurs; generate socially beneficial knowledge and provide linkages to global currents of knowledge; and attract home foreign-trained scholars and scientists. For these reasons, the Vietnamese government has made the development of high-quality research universities a cornerstone of its national education policy, incorporating this goal into key policy statements such as Resolution 14 (adopted in 2005). Realizing this important objective will require translating policy aspirations into actionable policy reforms. The current approach to reform has emphasized inputs such as money and infrastructure, often at the expense of other, intangible factors that are no less determinative of outcomes. This paper argues that good governance—comprising institutional autonomy, academic freedom, merit-based practices, transparency and accountability—is as important as physical resources in building internationally competitive research universities. A consensus has emerged among Vietnamese public intellectuals that meaningful progress will depend upon a fundamental reordering of the relationship between academic institutions and the state.

According to standard metrics for measuring university quality such as faculty publications in peer reviewed journals and international ranking tables, Vietnam lacks even a single institution of internationally recognized quality. Faculty members at leading Vietnamese research universities and institutes publish far less than their peers in the region; this lack of research output suggests that Vietnamese scientists are out of touch with developments in their fields. Scholars and scientists fear that teaching quality has stagnated or deteriorated. Increasingly students are exiting the system through foreign study. The press reports that academic corruption is rife, particularly in graduate and in-service programs. The current state of higher education and science represents a serious threat to Vietnam's economic future. Foreign investors such as Intel have identified the human capital deficit as their primary barrier to expansion in Vietnam. Leading public intellectuals such as mathematician Hoàng Tuy argue that the most immediate root of this crisis is not a lack of resources, but an outmoded governance system that denies universities the incentive to innovate or compete and fails to make them accountable to students, employers, or the community.

Faced with demand for tertiary education that far outstrips supply, Vietnam, like many other countries, has increasingly relied on private, for-profit providers. The for-profit

³²⁰ This paper was written by Laura Chirot (laurachirot@gmail.com) a New School researcher based at the Fulbright School in Ho Chi Minh City, and Ben Wilkinson (ben_wilkinson@harvard.edu) of the Vietnam Program at the Harvard Kennedy School's Ash Institute for Democratic Governance and Innovation. Funding from the United Nations Development Programme made the study possible and is gratefully acknowledged. The paper is available at <http://ash.harvard.edu/extension/ash/docs/Apex.pdf>.

model, however, does not offer a viable route to establishing research universities; with the exception of certain applied fields, it is impossible to reconcile the mission and objectives of a research university with the profit motive. The private sector has a natural tendency to invest in the kinds of educational activities that yield high private returns—for example, business administration—while neglecting fields in the sciences and humanities that yield high social returns. Commercially oriented training can certainly play a constructive role; but “world class” research and teaching capacity, particularly in science and technology, requires significant and sustained government investment.

International experience offers valuable insight. This report examines China, India and South Korea, which have all successfully built a handful of excellent universities. These countries’ policy approaches have two key elements in common. First is governance, comprising strong institutional autonomy and accountability mechanisms. Second is the government’s overriding commitment to building the national stock of human capital, combining merit-based and competitive personnel practices with vigorous policies to encourage foreign graduate study and subsequent return. The differences among these cases are also instructive for Vietnamese policymakers to consider, particularly in the comparison of India and China. In the 1950s and ‘60s, the first Indian Institutes of Technology and Management were born of collaborations between Indian stakeholders and consortiums of US universities, including MIT, University of California Berkeley, and Harvard Business School. India opted to build the IITs and IIMs from scratch, setting up independent governance structures in order to create a new culture of transparency and academic excellence, and attracting foreign-trained professors back to India. These institutions are now among the best universities in the developing world. China, meanwhile, has invested huge sums of money to upgrade a handful of existing universities over the past decade. These universities have also been granted long-term, meaningful autonomy over their finances, academics, and personnel policy, while the government has imposed top-down performance standards. This approach, motivated by the Chinese government’s decision that a few world class universities were critical to China’s continued growth, has required significant political will because it has meant fundamentally transforming the governance structures at these institutions and incurring the political costs of overturning longstanding patterns of rewards and privileges. As a result, China’s top universities such as Beijing and Tsinghua have made significant progress in research outputs and global rankings.

Vietnam seeks to involve international academic institutions in the establishment of new research-oriented universities. Meaningful international partnerships must be long term and oriented toward institutional development. In the case of the IITs and IIMs, the US university partners made decade-long commitments to help the new institutions build academic programs, faculty, and management capacity. The rationale for institution-building relationships is that, put simply, it takes universities to build universities. Beyond providing the academic and administrative expertise, foreign university partners can safeguard a fledgling institution from pressures to compromise governance principles at both the system and institution level. It should be emphasized that the institutional development model can only succeed if the participating international universities

demonstrate flexibility and a willingness to discard existing exchange paradigms. While the active participation of individual faculty members is crucial to ensuring lasting linkages, the partner universities must be willing to make a long-term institutional commitment to the endeavor.

Because of the expense and partnerships required to build a quality research university, Vietnamese policymakers should consider focusing on one new institution, and financing a long-term international partner to assist with institution building. International comparatives suggest that a clear break with the current governance paradigm could be best accomplished through a “green field” approach to building a new institution. The stakes of this venture are high. Quality institutions of higher learning can play a transformative role for social and economic progress; likewise, societies with stagnant universities are unlikely to build the skilled workforce and knowledge economy needed to sustain their continued development.

Appendix V: Tables for Part 2 Section III, The Financing of Higher Education

Table A. State spending for all education levels

State budget spending (VND billion)	2001	2004	2006	2008
Total State budget for education and training	19,747	34,872	54,798	81,419
Pre-school	1,359	2,550	4,096	6,920
<i>% total State budget for education and training</i>	<i>6.88%</i>	<i>7.31%</i>	<i>7.47%</i>	<i>8.50%</i>
Elementary	6,380	10,253	17,105	23,204
<i>% total State budget for education and training</i>	<i>32.31%</i>	<i>29.40%</i>	<i>31.21%</i>	<i>28.50%</i>
Secondary	4,204	7,577	11,833	19,133
<i>% total State budget for education and training</i>	<i>21.29%</i>	<i>21.73%</i>	<i>21.59%</i>	<i>23.50%</i>
High school	2,149	3,609	5,663	9,118
<i>% total State budget for education and training</i>	<i>10.88%</i>	<i>10.35%</i>	<i>10.33%</i>	<i>11.20%</i>
Total	14,093	23,990	38,698	58,376
<i>% total State budget for education and training</i>	<i>71.37%</i>	<i>68.79%</i>	<i>70.62%</i>	<i>71.70%</i>
Vocational training	968	2,162	3,671	7,979
<i>% total State budget for education and training</i>	<i>4.90%</i>	<i>6.20%</i>	<i>6.70%</i>	<i>9.80%</i>
Vocational high school	627	752	1,434	3,093
<i>% total State budget for education and training</i>	<i>3.18%</i>	<i>2.16%</i>	<i>2.62%</i>	<i>3.80%</i>
Colleges and universities	1,798	3,294	4,881	8,752
<i>% total State budget for education and training</i>	<i>9.11%</i>	<i>9.45%</i>	<i>8.91%</i>	<i>10.75%</i>
Total spending	3,393	6,208	9,986	19,824
<i>% total State budget for education and training</i>	<i>17.18%</i>	<i>17.80%</i>	<i>18.22%</i>	<i>24.35%</i>
Other items	2,262	4,675	6,115	3,220
<i>% total State budget for education and training</i>	<i>11.45%</i>	<i>13.41%</i>	<i>11.16%</i>	<i>3.95%</i>

Table B. Educational expenditures

Unit: VND billion	2001	2003	2005	2006	2007	2008
Total expenditure from state budget for education and training	19.747	28.951	42.943	54.798	69.802	81.419
Other expenditures	4.1756	5.838	9.7487	9.5073	9.8816	13.7777
Tuition revenue	1.904	2.593	3.87	4.329	4.762	5.238
Lottery and treasury revenue	1.47	2.848	5.3	4.441	4.22	7.442

Science and technology revenue	0.64	0.17	0.24	0.30	0.37	0.47
Other revenue (donations)	0.16	0.23	0.34	0.44	0.53	0.63
Total social expenditure for education and training	23.344	34.789	52.691	64.305	79.683	95.197
Total state budget expenditure for education and training (adjusted)	21.217	31.799	48.243	59.239	74.022	88.861
Current expenditures (from state budget)	15.981	23.917	35.369	44.359	54.713	62.01
% of state budget for current expenditures	80,9%	82,6%	82,4%	81,0%	78,4%	76,2%
Total current expenditures	18.69	26.91	39.82	49.43	60.37	68.35
% Total social expenditure on education	80%	77%	76%	77%	76%	72%

Source: Table 17, 18, *Proposal to reform education finance 2009-2014* and authors' calculations.

Table C. Breakdown of current expenditures

Unit: VND billion	2001	2003	2005	2006	2007	2008
Current expenditures	15.981	23.917	35.369	44.359	54.713	62.010
Salaries and allowances	8.572	13.950	21.101	29.252	35.647	39.915
<i>Share of current expenditures for salaries and allowances</i>	<i>53,6%</i>	<i>58,3%</i>	<i>59,7%</i>	<i>65,9%</i>	<i>65,2%</i>	<i>64,4%</i>
Spending on social health insurance	1.183	1.925	2.912	4.037	5.388	6.592
<i>Share of current expenditures</i>	<i>10,7%</i>	<i>10,4%</i>	<i>10,1%</i>	<i>10,1%</i>	<i>9,8%</i>	<i>10,6%</i>

Source: Table 18, *Proposal to reform education finance 2009-2014* and authors' calculations.

Table D. Breakdown of university and college personnel³²¹

Unit: Person	2000	2005	2006	2007	2008
College and university faculty	32.205	48.579	53.518	56.120	60.397
College and university management	19.189	27.726	29.569	29.03	29.48
Total university and college personnel (including management and faculty)	51.394	76.305	83.087	85.150	89.877
<i>Management as a percentage of total university and college personnel</i>	<i>37,3%</i>	<i>36,3%</i>	<i>35,6%</i>	<i>34,1%</i>	<i>32,8%</i>

³²¹ Đề án Đổi mới tài chính... MOET 2009 + author's calculations

Source: Table 37, Proposal to reform education finance 2009-2014 and authors' calculations.

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