Financial capacity forms an essential pillar of effective higher education. What helps tie it together is effective management of public institutions and stewardship of the higher education system. This chapter deals with the management of public institutions; chapter 6 addresses the stewardship of the system, with emphasis on private institutions and the interactions between higher education institutions and skill and research users (the firms). Public tertiary institutions are critical in East Asia because, notwithstanding significant differences across countries, 70 percent of all students are enrolled in the public sector. Several information, capacity, and incentive constraints and the related disconnects are related to management. For instance, even if institutions receive sufficient funds for highly qualified faculty, insufficient autonomy to select staff and decide on academic programs makes it difficult for them to deliver what firms need. At the same time, lack of accountability of university management to representative university boards may not be conducive to universities’ fulfilling the needs of skill or research users. Examples abound that poor management of public institutions has caused many of East Asia’s disconnects. In this context, good management of the public sector can help tackle the disconnect between higher education institutions and skill and research users.

This chapter focuses on managing public institutions through the optics of autonomy and accountability. Higher education worldwide in the past two decades has moved to market approaches, attempting to achieve efficiency gains. But markets, even for education, need regulators to oversee a correct balance between autonomy and accountability—a balance that many of East Asia’s low- and middle-income countries have yet to find. These countries should aim at comprehensive autonomy, in both academic and procedural aspects. Their most important accountability move will be to strengthen the mechanisms to nongovernment stakeholders (communities, households, students, and academic and other staff) to ensure that autonomy translates into more socially efficient outcomes. But governments remain crucial in the process. And they need to separate long-term vision and policy direction, which they should direct, and quality assurance, where they have a critical role, from operational management, which they should grant to higher education institutions and intermediate “buffer” bodies. They must also generate program ownership, which
early, demonstrable success at a few top institutions can generate.

How decision making is shared across actors and how accountability is structured to translate autonomy into results are the two critical decisions that regional policy makers face in managing the public sector. The following discussion reviews the case for providing higher education institutions with greater decision-making autonomy while supporting strong accountability, then moves to the main characteristics and issues related to autonomy and accountability in the region. It concludes with a summary of the main policy implications.

Global moves to autonomy

Encouraged by governments, higher education sectors worldwide in the past two decades have increasingly adopted market-like behavior in the hope of achieving efficiency gains—often in the form of greater institutional autonomy (box 5.1)—as they moved from state-controlled to state-steered systems. A crucial theme in this transition was structuring an alternative system of accountability, for higher education is not like other goods and is plagued with market failures that have traditionally justified a larger role for government. These include externalities, information asymmetry (at different levels of the sector), and the potential for monopolies. The government thus has a clear role to play, but too strong a grip on higher education institutions or “protective” behavior (such as guaranteed financing) undermines incentives to reform. A key challenge is thus how to balance autonomy with accountability—and within accountability, how to build on the different potential mechanisms available in a decentralized setting.

Institutional autonomy increases the number of lines of accountability. But even as institutions become more autonomous, governments typically continue to play an important role in setting priorities and expecting results (system oversight), thus defining the first of three accountability relationships—a “compact” relationship (figure 5.1).1 In an institutional autonomy setting, front-line service providers become, at least potentially, more transparently accountable to their “clients” (local community, students, and parents) through the second accountability relationship—the “client power” relationship.2 A third, the “internal management” relationship, refers to the internal control and quality measures that need to be in place to ensure the accountability of the institution management or of the faculty to the institution (box 5.2).

Research in the past few years3 has highlighted the importance of autonomy for developing world-class universities and innovation.

**BOX 5.1 Institutional autonomy defined**

_Institutional autonomy_ is the “degree of freedom of the university to steer itself”a or the “condition where academia determines how its work is carried out.”b Allowing for increased institutional autonomy means that governments increasingly exit from the day-to-day management of the tertiary sector, allowing universities and other higher education institutions to determine their own path. Underlying the notion of autonomy are efforts to encourage institutions to have the freedom to make choices about their internal management and governance, given ideally existing market-driven incentives.

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The key message is that autonomy combined with competition is conducive to innovation, especially for institutions closer to the technological frontier.

Enhanced autonomy can also support a better match between output from tertiary institutions and labor market needs. It also allows higher education systems to work with the community to develop programs for developing skills needed by the local labor market (box 5.3).

One study examined how different policies and institutions affect the number of new tertiary graduates as a proxy for investment in tertiary education in 19 countries of the Organisation for Economic Co-operation and Development (OECD). The authors found that, on the supply side, the greater responsiveness of supply of tertiary education (as measured by input flexibility, output flexibility, and accountability) had a positive effect on the number of graduates produced. On the demand side, they found that higher internal rates of return also had a positive effect on graduate numbers, but that financing systems (the ratio of education costs to available financing—an index for liquidity constraints) had a negative effect.

**Autonomy for low- and middle-income East Asia**

Less affluent East Asian countries face the huge challenge of having to manage large and increasing public higher education systems—scaling up many times to thousands of institutions and to hundreds of millions of students—while making sure that these systems address the skill and innovation needs of their economies. Most do this using centralized management structures and limited institutional autonomy, but many are failing—as seen in earlier chapters.

Institutional autonomy, with accountability, could have huge benefits for skill development and innovation in low- and middle-income East Asia. This is largely because greater incentives, arising from more flexible governance structures, and greater use of local information allow better matching of skills and research between higher education institutions and the labor market (first and second disconnects) for differentiated local needs and for quality-enhancing choices. Greater incentives are also positive for resource mobilization, which is a basis for wider coverage and higher quality.

Autonomy on its own, however, is unlikely to achieve its potential without well-functioning accountability mechanisms. For example, universities may have the autonomy to align their curriculum to what firms need but may only really do so if a combination of government, students, and parents holds them accountable for graduates’ future employment performance. Universities may also have the autonomy to hire the human resources to support an innovative research program for firms but may do so only if the government or the firms hold them accountable for research commercialization. Adequate accountability structures have other benefits. Qualification frameworks have a direct effect on improving the incentives and information for coordination among higher education institutions (fourth disconnect), and governance arrangements for the management of higher education (separating policy from operational...
BOX 5.2  Translating autonomy into more socially efficient outcomes

The main argument for higher institutions’ autonomy lies in the potential gains that flexibility in substantive and procedural issues provides in responding to changes in the labor market, in addressing differentiated local needs and in allowing quality-enhancing choices. None of these benefits will really materialize, however, if the client power and internal management relationships do not work. While a university may know the needs of its local community better than the central government, those needs are most likely better addressed if the community can directly express its preferences by, for example, participating in the university board. More important, involving members of the local community may be necessary to ensure that the university uses its knowledge to satisfy local needs.

Similar reasoning holds for student involvement. And as important are possibilities for students to express preferences by voting with their feet (the “exit” option).

Beyond client power, internal control and quality measures (illustrating the internal management relationship) are also essential to support quality-enhancing choices in higher education institutions. Such measures typically include self-administered quality assurance (including self-evaluations), tenure systems, and other performance incentives for faculty, as well as university boards that can hold university management accountable for its decisions. Institutional autonomy without a culture of internal quality—including holding staff and management accountable for performance—runs the risk of simply not producing the desired outcomes.

BOX 5.3  Addressing local labor market needs in the United States and Mexico

Clemson University in South Carolina, United States, by partnering with the carmaker BMW, transformed itself from a predominantly agriculture and mechanical engineering school into a significant contributor to automotive and motor sports research. The school made the switch because South Carolina has in recent years become a U.S. hub for the automotive industry.

In Mexico, curriculum reform has enhanced the prospects of the University of Monterrey. The university requires students to take part in local development projects as well as obtain professional skills. It has wide representation of external members on its board (external stakeholders control the direction of the institution) and grants a leading role in decisions to faculty and students. The university has been particularly successful at setting up a wide network of business incubators, business accelerators, and technology parks.

management) could even have positive consequences for the interrelation between education levels (fifth disconnect).

The evidence on the effects of autonomy in East Asia is less widespread than for OECD countries, as real autonomy is still rare or, in some countries, very new. Still, the partial evidence now presented points to some early successes of autonomy and, when this information is available, backs up the point that autonomy needs to be accompanied by accountability.

Effects of autonomy at institutional level

There are a few positive examples of what autonomy can achieve in East Asian
institutions. In Thailand, a few universities that have moved out of the government bureaucratic structure have begun to successfully position themselves as value-adding partners for several growth industries. Prince of Songkla University, for instance, has created new master’s and PhD programs in chemical engineering focused on bio-based chemicals and fuels that include expertise in biomass agronomy, chemical engineering for biomass processing, saccharification, and fermentation. An emphasis on biochemicals and polymers makes the programs very useful to firms operating in the rubber industry.10

The Hong Kong University of Technology became an internationally ranked university within a decade of its founding in 1991, aided by two factors. First, its first-tier faculty recruitment policies were successful, tapping into the potential of the Chinese diaspora, thanks to its level of academic and administrative freedom (including freedom to fix salaries). Second, the university related well with local and regional firms through a significant presence of external members from businesses in the University Council, and it had substantial freedom to partner with firms both in and beyond Hong Kong SAR, China, and to launch regional initiatives.11

Finally, Pohang University of Science and Technology (POSTECH) in the Republic of Korea, which specializes in science and technology, is a private university that has achieved world-class status over the past decade. The university has always had high levels of management autonomy and used performance indicators. It also has expanded its collaboration with many companies in the electronics and mechanics sector.12

Effects of autonomy at country level

Some early country-level evidence shows the positive effects of autonomy alongside accountability. For instance, while it is not possible to flesh out the precise relationship between recent Chinese trends in institutional ranking, patents, and journals (see chapter 2) and the autonomy of its institutions, there is a positive relationship because autonomy increased at the same time. Indeed, many reforms have been under way in Chinese higher education, including priority of resource allocation to its flagship universities and very strict output monitoring, but the contemporaneous increase in autonomy (box 5.4), extended to both teaching and research institutions, as well as further support of private higher education providing some enhanced competition, has played a role. The Chinese case appears to illustrate the positive effects of a combination of additional resources and governance reforms aimed at increasing both accountability and autonomy.

Another example, though more incipient, is Singapore. The evidence suggests that following the move toward higher autonomy for its universities (see box 5.4), the National University of Singapore has seen its performance pick up along several dimensions. In the mid-2000s, while active in publishing journals and in patenting, the National University of Singapore in a context of increased competition fell from 18th in 2004 to 33rd in 2007 (based on 2006 results) of the Times Higher Education Supplement (THES) ranking. Such difficulties motivated the government’s 2006 decision to corporatize the university. As a result of greater flexibility in structuring recruitment offers, including the provision of generous start-up research grants and reduced teaching loads in initial years for top researchers—and management flexibility to support market adjustment allowances for faculty in fields with high market demand (such as medicine and finance)—the number of research collaboration agreements, invention disclosures, and patents granted to the National University of Singapore increased significantly. In addition, the university developed relatively quickly a wide range of new interdisciplinary educational programs such as nanotechnology and interactive digital media.13 While it is still early to appreciate the full effects of the reform, since 2006 the National University of Singapore has
Finally, in Japan, while it is also quite early for a full assessment, since 2004, the year of governance reform (see box 5.4), the number of world-class universities has doubled from 5 to 11 in the THES ranking (see chapter 2).

Korea’s situation, in which it continues to have highly centralized management structures for higher education but still manages to have a number of high-quality institutions, shows that centralization may also work. Given the huge private share, however, the government has to directly manage only 20 percent of the higher education system. Moreover, even then, that Korea’s institutions are not as successful as technological and innovation partners for firms as they are in skill provision suggests that the governance model may not sufficiently encourage strategic vision, innovation, and flexibility. 

Two fundamental issues

This section reviews the two main issues with autonomy and accountability in low- and middle-income East Asia: (a) autonomy is incomplete, and (b) the accountability structure, while including some elements supportive of strong accountability to the government, rarely hits the mark in developing other lines of accountability. These two issues are worse among low-income countries, though they are present in middle-income countries as well.

Incomplete autonomy

The real push for decentralization of higher education management in East Asia came in the mid to late 1990s, beginning with Korea and Malaysia and followed by Indonesia and Thailand. A second wave of reforms came in the mid-2000s, when Japan and Singapore gained three places, ranking 30th in the 2009 THES.

Malaysia extended limited autonomy to all its 17 public universities. But despite a strong blueprint for reform, implementation was poor. Indonesia and Thailand selected a few universities for autonomy. (In Indonesia, after some early reforms, momentum slowed, then accelerated, then slowed again.) China pushed a more ambitious reform toward the end of the 1990s, decentralizing responsibilities to provincial authorities and achieving fairly high levels of autonomy for universities, though under strict regulations.

In the mid-2000s, Japan and Singapore launched reforms geared toward more extensive autonomy. Japan, through the National University Corporation Act of 2004, extended autonomy to all its national universities, 87 of its total of 157 public universities. In 2006 Singapore pushed through extensive autonomy for its two premier public universities, the National University of Singapore and Nanyang Technological University, after accepting the recommendations of the Steering Committee to Review Autonomy, Governance and Funding, set up in 2004. These two universities were incorporated as not-for-profit companies in separate acts, joining Singapore Management University, which already had this status.

Elsewhere, recent attempts at reform in Cambodia are stuck in the legislature. In Vietnam the Higher Education Reform Agenda plans for greater autonomy and a comprehensive university charter. Already approved, implementation is only just starting.
extended autonomy to their key higher education institutions (see box 5.4).

Autonomy for higher education institutions can be divided into two types: substantive and procedural (table 5.1). Lack of alignment between the two is a problem because they need to work in a complementary fashion. For instance, innovation in substantive areas may require additional financial resources or higher-quality staff (often both), and this requires procedural autonomy.

Governments around the world vary in their levels of intervention in substantive and procedural issues, but they are generally letting autonomy rise (box 5.5).

In low- and middle-income Asian countries, both areas of higher education autonomy are still limited. The two policy areas where governments have extended autonomy furthest are (a) institutions’ control over academic content and structure of programs and (b) at least in middle-income countries, the introduction of block grants. Significant limitations remain in other areas (table 5.2). Box 5.6 highlights Japan’s recent shift toward more substantive and procedural autonomy for its national universities.

**Substantive autonomy**

Academic autonomy is one area where several economies in the region have made some inroads, but this trend is clearer in upper-income economies, such as Hong Kong SAR, China, and Singapore, much of whose widespread academic autonomy pre-dates the recent push for reform. Historically in East Asia, academic autonomy has been limited, and governments have often controlled academic content for both public and private universities. Even in Japan, where the National University Corporation Act of 2004 increased substantive autonomy across a range of areas, including human resource decisions and enrollment size, Japanese universities are still required to consult with the government when creating new departments and faculties. They are also required to secure government approval when modifying the number of students they enroll.

In middle-income countries, governments have extended some academic autonomy to higher education institutions in areas of academic structure and course content, but they continue to make enrollment decisions. In China, for example, institutions are required to get the approval of provincial and central authorities to introduce any new program. Certain course elements are mandatory, but institutions have some room to modify content. Admissions policy is based on a national exam and Chinese institutions are not allowed to accept students outside a set quota. A recent pilot project, however, is allowing some institutions to take in up to 5 percent of enrollment at their own discretion.

Higher education institutions in Indonesia also have to meet certain mandatory requirements for course content, but beyond that, autonomous institutions have the freedom to develop content. In Malaysia autonomy over content is quite restricted. A university is allowed to modify up to 30 percent, but must gain approval from the Ministry of Higher Education for anything beyond this.

Low-income countries have some autonomy in areas of academic structure and course content but little else. In the Lao People’s Democratic Republic, the National

<table>
<thead>
<tr>
<th><strong>TABLE 5.1 Substantive and procedural autonomy</strong></th>
</tr>
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<tbody>
<tr>
<td>Substantive (academic)</td>
</tr>
<tr>
<td>Curriculum design</td>
</tr>
<tr>
<td>Research policy</td>
</tr>
<tr>
<td>Entrance standards</td>
</tr>
<tr>
<td>Academic staff appointments</td>
</tr>
<tr>
<td>Awarding degrees</td>
</tr>
</tbody>
</table>

Source: Raza 2010.
University of Laos is the only university that has acquired some autonomy. A decree in June 2000 stipulated its academic and administrative autonomy, specifically an increase in students admitted and changes to the curriculum. In Vietnam some autonomy over academic content is allowed. Higher education institutions there have also been given some autonomy over enrollment: they can take in fee-paying students once they have met the government’s directives. In Hong Kong SAR, China, they have historically had such autonomy and can hire and fire faculty as well as set salaries. Japanese institutions, after the 2004 reforms, have also been given some autonomy over enrollment: they can take in fee-paying students once they have met the government’s directives.

The other area where higher education institutions have some autonomy is staffing. In Hong Kong SAR, China, they have historically had such autonomy and can hire and fire faculty as well as set salaries. Japanese institutions, after the 2004 reforms, have been able to convert the status of university employees to non–civil servants and have committed to introduce fixed-term contracts. Korea, by contrast, continues to limit staffing autonomy in these institutions.

Middle-income countries’ institutions seem to have partial autonomy on staffing, though it is quite restrictive. Institutions in Indonesia that are self-financed can hire and fire faculty (which excludes most university staff, who continue to be paid by public funds). The Thai government no longer requires the 11 autonomous universities to offer faculty lifetime contracts and encourages pay to be incentivized through rewards. It has made some attempt to convert university posts to non–civil service positions, case by case. For the most part, however, “public university employees are currently civil servants, which impose[s] higher costs and less flexibility in terms of hiring and firing staff.”

China and Malaysia seem to have more room to actually hire and fire. It is subject to contract in China, and in Malaysia, given that university staff are still civil servants, effective autonomy is not a given.

Low-income countries in the region have no or very limited staffing autonomy.

**Procedural autonomy**

Even more than for substantive autonomy, procedural—especially financial—autonomy differs widely between high-income economies and other categories.
In Japan after the 2004 reforms, national universities for the first time received non-earmarked block grants to spend as they see fit. And although the Ministry of Education and Training sets the standard annual tuition fee, it allowed higher education institutions to increase fees 20 percent in 2007 (if they wanted to do so).21

Hong Kong SAR, China, has some financial autonomy across a range of areas. For example, its institutions can own and sell buildings that have been donated or have been self-financed. Universities can borrow funds from commercial banks and financial markets but cannot be publicly listed. Universities can set fees only for those programs that are self-funded.

After 2006 in Singapore, though the government remains committed to being the major funder in the sector, newly autonomous universities have been encouraged to seek out other sources of funding, particularly from industry. These universities have been given the freedom to set tuition fees and have been given full autonomy over human resources, including setting remuneration packages.

Korea, again, is different. Public universities remain constrained in areas of procedural autonomy despite a series of reforms after 1995.22 Paradoxically, the reform process has led to an excessive focus on financial accountability in a negative way. Funding has become much more results focused and has produced a culture of excessive regulation.
Japan’s National University Corporation Act of 2004 greatly increased the institutional autonomy of its higher education institutions. The act incorporated national universities with their own governing boards. Under government supervision, universities moved from limited to extensive autonomy in both substantive and procedural autonomy (See table B5.6). These institutions were given more autonomy in managing their human resources and, for the first time, in admissions policies, building and equipment, long-term borrowing, and spending block grants. Faculty members were no longer civil servants, and universities had autonomy to set faculty salaries. But these institutions still had limited autonomy in setting their academic structure and content and had less autonomy in deciding tuition fees than they did before the act.

**TABLE B5.6**  Institutional autonomy of higher education institutions in Japan, 2003 and 2007

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2007</th>
</tr>
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<tbody>
<tr>
<td>Set academic structure/course content</td>
<td>●</td>
<td>●●●●○ ●●</td>
</tr>
<tr>
<td>Employ and dismiss academic staff</td>
<td>●</td>
<td>●●○○● ●●</td>
</tr>
<tr>
<td>Decide size of student enrollment</td>
<td>○</td>
<td>●● ○○● ●</td>
</tr>
<tr>
<td>Own their building and equipment</td>
<td>○</td>
<td>●● ●●● ●</td>
</tr>
<tr>
<td>Borrow funds</td>
<td>○</td>
<td>●● ●●● ●</td>
</tr>
<tr>
<td>Spend budgets to achieve objectives</td>
<td>○</td>
<td>●● ●●● ●</td>
</tr>
<tr>
<td>Decide level of tuition fees</td>
<td>○</td>
<td>●● ●●● ●</td>
</tr>
<tr>
<td>Set salaries</td>
<td>○</td>
<td>●● ●●● ●</td>
</tr>
</tbody>
</table>

Source: Raza 2010.
Note: ○ has no autonomy; ● has autonomy; ●● has autonomy in some respects.
Sources: Byun 2008; Newby and others 2009.

rather than “steering.” By contrast, private universities have seen their financial (and other) autonomy increase.

Governments in middle-income countries have granted some financial autonomy to selected universities. This has taken the form of transferring public funds as block grants, allowing some flexibility to set fees for selected programs, and in a few cases granting the ability to add to basic staff-remuneration packages. But even autonomous institutions are still restricted in borrowing funds commercially and in owning property.

In Thailand, the autonomous universities receive public funds through block grants and have autonomy to establish their own administrative structures or formulate rules on personnel and staffing. These universities also have the authority to manage and use state property. Autonomous universities in Indonesia can also do that. Legislatively, Indonesia’s autonomous universities have been given significant procedural autonomy, though this has not always translated into effective financial autonomy. But Indonesia has been successful in introducing different types of competitive funds, going beyond its autonomous universities. Malaysian higher education institutions, too, receive their public funds through block grants.

Higher education institutions in low-income countries still have little procedural autonomy, but it is growing. In Vietnam they are shifting from relying only on the state budget and are being encouraged by the government to seek other sources of funding. The number of fee-paying students has exceeded the number of students sponsored by government. In Lao PDR the National University of Laos has been given some financial autonomy. A financial system allows the university to manage its own
With the exception of Hong Kong SAR, China, university branches or satellites (domestic or foreign) have very little academic and procedural autonomy.29

Incomplete accountability

Although decentralization is only incipient or incomplete in most low- and middle-income East Asian countries, the trend is still under way, and all countries therefore have to align their accountability systems with it. Current systems still fall short because of the limited development of accountability lines to nongovernment stakeholders (community, households, students, and academic and other staff) and some deficiencies in the design and implementation of accountability toward the central (government) level.

How does East Asia fare on the various mechanisms, relative to the rest of the world? The answer may be broken down into accountability to nongovernment stakeholders and to the government.

Accountability to nongovernment stakeholders

As higher education institutions receive more decision-making power, they need to increase their own institutional and management capacity. One important area is the governing board (box 5.7).

Like the rest of the world, East Asia is showing a trend toward establishing governing boards or university councils, but their powers and representativeness are still limited, even in upper-income East Asia (table 5.3). All economies except Korea have governing boards, but their functions are fairly limited in selecting the university leadership, and only in Singapore does the board select vice chancellors, presidents, and rectors. East Asian board heads are selected by the government, internal university bodies, the boards themselves, or a by a mixed approach (boards’ members are generally selected by either the government or a mixed approach). Although most East Asian countries’ external stakeholders participate in boards, this is limited for students.

In Thailand the role of the university council has been strengthened in the autonomous universities,30 though they remain heavily influenced by the Commission of Higher Education.31 In Japan the authority of the university councils is second to that of the president of the university, which is unusual for both the region and world. The National University Corporation Act of 2004 centralized power under the presidents, far greater than in other OECD countries. In Indonesia autonomous universities are accountable to a board of trustees,32 comprising representatives of ministries, the academic senate, and broader society, for example.

On other accountability mechanisms, most countries have a national career structure for academic staff, usually organized by career ranks.33 The criteria for career advancement and tenure nearly always include qualifications and achievements in teaching and research,34 though the importance of these criteria varies by country. (Seniority and personal connections are often more important than achievement.) In some countries, such as China,35 achievement in research is more valued than teaching skills. But many institutions in Cambodia, Indonesia, and Mongolia, for example, have a weighting toward teaching.36 Performance-pay management is still little used in the region, though growing. Box 5.8 provides examples of faculty performance programs in China.

Competition, the main mechanism to ensure exit, is constrained by lack of systemic financing and information mechanisms to support mobility across institutions. Competition is an effective tool to ensure client power (see figure 5.1), by allowing consumers who are unhappy with the provision of services to exit and opt for another provider. The fear of exit forces providers to be more accountable to consumers. Key elements for ensuring that this mechanism works include a strong and comparable alternative to existing higher education institutions (public or private), the option to exit, and information
Globally, there has been a trend toward establishing boards that favor a managerial model with a small number of external representatives. In setting the strategy and direction of the institution, the board is a key actor in translating public policies and orientation in institutional practice and policy implementation. The board’s functions tend to be strong on the role of presidents or rectors, who are usually appointed by the board and are thus accountable to it. The board’s head tends to be elected (or appointed) by the board itself or by another internal university body.

These arrangements allow for some accountability of the institution to external stakeholders (such as private sector representatives) and for accountability of university leaders to their institution (through boards appointing the presidents or rectors and board heads appointed by the university).


about the quality of provision so that consumers can make choices.

It is unclear how much private and public delivery compete, however. Most countries do not have academic credit transfers allowing students to move easily between institutions, and public information on the quality and relevance of institutions and their programs is patchy (table 5.4). Narrow use of demand-side financing, such as voucher schemes and government scholarships, for public and private sectors, also makes such mobility difficult.

**Accountability to the government**

While less involved in operational management, governments worldwide still have a leading role in strategic vision, monitoring and evaluation, and financing of the public sector. Various instruments governments need to manage a more autonomous public system are a strategic vision and higher education legislation, a quality assurance system, education management information systems, and performance-based financing (discussed in chapter 4).

In East Asia, most upper-income economies have a strategic vision as well as the necessary accompanying legislation. Middle-income countries such as Indonesia, Malaysia, and Thailand are still transitioning and setting up the new systems, as are low-income countries.

While academic autonomy is important to support a better fit between supply and demand for skills, core curriculum guidelines have to be set by the center. As part of their strategic vision for higher education, countries in lower- and middle-income East Asia will need to incorporate elements of a curriculum reform. Chapter 3 has pointed out that curricula are currently often outdated. Holding faculty and institutions accountable for better skill delivery will be greatly facilitated by a new curriculum approach (box 5.9).

All countries in the region have a quality assurance body and seem to be moving to a more outcome-based system, as seen in the widespread use of accreditation, audit, and assessments (see table 5.4). Upper-income economies have quality assurance approaches...
that include accreditation, audit, and assessment, while low- and middle-income countries mainly use accreditation or audit. Incentives for compliance appear to be generally strong: governments require public higher education institutions to undergo the quality assurance process, and apart from Hong Kong SAR, China, the same for private institutions (more on private institutions in the next chapter).

It is not clear yet, however, to what extent quality assurance is ready to take up the

<table>
<thead>
<tr>
<th>Economy</th>
<th>Leadership of board selected by</th>
<th>Members of board selected by</th>
<th>Vice chancellors, presidents, rectors selected by</th>
<th>Senior management of universities selected by</th>
<th>Composition of board</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>Governing board (public universities)</td>
<td>Governing board</td>
<td>Internal selection</td>
<td>Appointed by vice chancellors, presidents, or rectors and internal selection</td>
<td>Academic staff, nonacademic staff, external stakeholders</td>
</tr>
<tr>
<td></td>
<td>Presidential selection committee (national universities)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singapore</td>
<td>Governing board</td>
<td>Government</td>
<td>Governing board</td>
<td>—</td>
<td>Academic staff, nonacademic staff, external stakeholders</td>
</tr>
<tr>
<td>Hong Kong SAR, China</td>
<td>Government</td>
<td>Mixed³</td>
<td>Professional selection</td>
<td>Professional selection and appointed by vice-chancellors, presidents, or rectors</td>
<td>Academic staff, nonacademic staff, external stakeholders (2:1 ratio of external stakeholders to university members)</td>
</tr>
<tr>
<td>Korea, Rep.</td>
<td>Boards not allowed by law (in public universities)</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Middle-income</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Malaysia</td>
<td>—</td>
<td>Mixed³</td>
<td>Government</td>
<td>Vice chancellors, presidents, rectors</td>
<td>Academic staff, nonacademic staff, external stakeholders</td>
</tr>
<tr>
<td>Thailand</td>
<td>Governing board</td>
<td>Mixed³</td>
<td>Professional selection</td>
<td>Professional selection</td>
<td>Academic staff, nonacademic staff, external stakeholders</td>
</tr>
<tr>
<td>China</td>
<td>Internal university bodies</td>
<td>Internal university bodies or government</td>
<td>Government</td>
<td>Professional selection</td>
<td>Academic staff, nonacademic staff, external stakeholders</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Governing board</td>
<td>University senate</td>
<td>Internal selection³</td>
<td>Vice chancellors, presidents, rectors</td>
<td>Academic staff, nonacademic staff, external stakeholders</td>
</tr>
<tr>
<td>Philippines</td>
<td>Government</td>
<td>Mixed³</td>
<td>Internal selection</td>
<td>Vice chancellors, presidents, rectors</td>
<td>Mix of government officials and private citizens appointed by the president, students, and faculty</td>
</tr>
<tr>
<td>Low-income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lao PDR</td>
<td>Government</td>
<td>Government</td>
<td>Government</td>
<td>Professional selection</td>
<td>Government</td>
</tr>
<tr>
<td>(National University of Laos)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cambodia</td>
<td>Mixed³</td>
<td>Government</td>
<td>Mixed</td>
<td>Mixed</td>
<td>Academic staff, nonacademic staff, external stakeholders</td>
</tr>
</tbody>
</table>

Sources: Raza 2010 based on Expert Survey; OECD 2008b.

Note: Most institutions are public. — = not available; n.a. = not applicable.

a. Some members are selected by the chief executive (often the chancellor) of the university, and others are elected.
b. Members of the governing board are appointed by the government and the governing board.
c. Differs by institution.
d. Internal election involving the entire university community.
e. Members of the governing board are appointed by the government and university.
f. Appointed by the government (public) and the university owner (private).
China has introduced over the years a number of faculty performance programs with positive effects that may be useful to other lower- and middle-income countries.

**Teaching evaluation.** The Chinese government formally established a teaching evaluation program of all regular higher education institutes in 2000. This evaluation involves a five-year cycle with the first round of outcomes made available to parents and the general public in 2003.

Under the auspices of the program, some institutions are making serious efforts to better assess their instructors’ teaching effectiveness, using several tools. In some cases the teaching evaluation done at the university level consists of three parts, each conducted by a different group. Part 1 is teaching observation conducted by a “committee on teaching supervision” composed of senior teaching colleagues in an instructor’s subject area (such as deans and professors). These supervisors have the right to attend any lecture for the purpose of assessing the instructor’s teaching ability. Part 2 consists of teaching observations conducted by fellow colleagues. Part 3 is the use of student course evaluations, perceived by many instructors to be the most effective indicator of teaching performance, because student assessments affect the teachers’ prestige in the faculty. Institutes applying these measures have improved their teaching facilities, increased their educational spending, and put extra emphasis on teaching quality.

**Research and performance.** Tianjin University considers papers published abroad and the frequency with which those papers are cited and quoted abroad. It has also moved to a system similar to merit pay in which instructors receive “work post subsidies” on the basis of their performance. Moreover, the Beijing University Teachers’ Engagement and Promotions System Reform Plan initiated at Beida (Beijing University) has been the precursor to personnel reform plans in other universities including Tianjin. The Beida reforms aim to make university hiring more competitive by giving existing lecturers a set number of years to be promoted; if their performances are not up to par, their contracts will not be renewed. As part of the reform, Beida institutions and departments are encouraged to not hire their own graduates, but instead to look for talent both domestically and abroad. Research outputs have increased in both Tianjin and Beijing universities.

**Graduate employability.** China faced both a serious decrease in teaching quality and an increase in unemployment rate among university graduates. While the rapid drop in educational quality was the focus of most faculty concern, the government was more concerned about graduates’ unemployment. The government’s response included graduate employment rate as a major indicator of program quality on the national “Assessment on the teaching standard of undergraduate programs in higher institutes.” This focus on employment placed enormous pressure on university faculties to quickly address the problem or otherwise face consequences. If a specialization could not reach a graduate employment rate of 60 percent or above for a certain number of years, the specialization would then be eliminated. The government felt its actions had been largely successful when the Ministry of Education announced in 2006 that the new reforms resulted in an annual graduate employment rate of 70 percent. The recent crisis brought back unemployment issues but to a lesser extent.

### TABLE 5.4  External quality assurance, East Asia

<table>
<thead>
<tr>
<th>Economy</th>
<th>Type of body</th>
<th>Type of system</th>
<th>Body funding source</th>
<th>Requirementa</th>
<th>Disclosure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Independent body</td>
<td>Semi-autonomous body</td>
<td>Government-represented body</td>
<td>Accreditation</td>
<td>Audit</td>
</tr>
<tr>
<td>High-income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Singapore</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Hong Kong SAR, China</td>
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<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Korea, Rep.</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Middle-income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
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<td>X</td>
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<td>X</td>
<td>X</td>
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<tr>
<td>Thailand</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
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<tr>
<td>China</td>
<td>X</td>
<td>X</td>
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<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Indonesia</td>
<td>X</td>
<td>X</td>
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<td>X</td>
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<tr>
<td>Philippines</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Low-income</td>
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<tr>
<td>Vietnam</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Lao PDR</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Cambodia</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>


a. This requirement is for public and private institutions, unless otherwise stated.
b. For Hong Kong SAR, China, quality assurance is mandatory for public universities and voluntary for private universities.
For higher education systems in the region to be more relevant to labor market needs, curricula across disciplines must serve broader objectives than simply transmitting academic knowledge. Previous evidence has made clear that countries should place more emphasis on core behavioral skills that are particularly applicable to services, such as decision making, communication, and client-orientation skills, do a better job of incorporating in their curricula problem solving and creative thinking, and provide more relevant and practical technical and business skills for managers and professionals.

As a general pedagogical trend, multidisciplinary and transdisciplinary courses have become popular for equipping graduates to learn and think across a broad range of fields while also developing in-depth academic skills. These courses often follow a problem-centered approach and use case studies to understand complex systems. They do not require higher-qualified or more faculty. Indeed, if well developed and accompanied by adequate faculty training, problem-centered approaches enhance student independence and creativity, minimizing faculty supervision. These approaches could help improve the quality of teaching even within the current faculty constraints.

Universities in Europe, the United States, and Australia are instituting more of these courses. Following core national guidelines, the University of South Australia, for instance, has enumerated seven skills that it seeks to cultivate in its graduates and has reformed its pedagogical practices to achieve them:

- Technical skills within a given discipline in sufficient depth to begin professional practice
- The ability to undertake lifelong learning
- Problem-solving skills and critical thinking
- Teamwork skills
- Ethics and social responsibility
- Communication skills
- Skills to demonstrate international perspectives as a citizen and a professional

Sources: Hicks and George 1998; Kennedy and Lee 2008.
employment and skills) in all countries is likely to weaken quality assurance by limiting information on outputs and outcomes.\textsuperscript{44} This may also be why performance-based financing is still in its infancy.

**Moving forward**

All indicators suggest that the decision-making autonomy of higher education institutions is still limited in low- and middle-income East Asian countries. This explains at least part of the disconnect between institutions and firms in skills and research. Accountability lines to nongovernment stakeholders, including the role of boards, remain underdeveloped. Internal management processes are generally weak, with boards struggling (or even not having the power) to fulfill their fiduciary role.

The compact relationship (see figure 5.1) tends to be more developed, at least in terms of regulation and existence and the mandatory nature of quality-assurance mechanisms, and has been moving to some extent from an input-based to an output-based approach (from regulation to quality assurance). Yet performance measures on graduation, labor market outcomes, and research are rarely used for quality assurance and funding allocation, and performance standards are not set high.

Some of the main implications from this chapter are now given.

**Autonomy**

*Increasing autonomy across income groups.* While governments in middle-income countries may feel more urgency to increase autonomy than low-income ones (particularly China, which is the closest to the technology frontier), low-income countries should not lose time either, and they should aim at comprehensive and not piecemeal autonomy.

*Increasing autonomy in staffing.* Institutions should have full autonomy on hiring and firing (though adapting a decentralized hiring system in countries with centralized staffing may be difficult because of the civil service system).

**Aligning substantive and procedural autonomy.** Governments worldwide used to be more generous with substantive autonomy than procedural autonomy, though this is now changing. In East Asia, too, governments prioritize autonomy in substantive areas more than procedural areas. Governments need to conceive both types of autonomy as a whole, because many aspects of substantive autonomy can be undermined by the lack of procedural autonomy.

For example, within staffing policies, hiring and firing faculty will depend critically on the ability of institutions to set salaries. Diversifying funding is also an essential means of increasing autonomy.\textsuperscript{45} Securing funding from the private sector is particularly important, because it is a critical mechanism of external efficiency. As higher education institutions continue to be mostly public bodies reliant on base funding, diversifying funding offers these institutions greater autonomy.

**Accountability and system oversight**

*Strengthening accountability mechanisms.* As they move to higher autonomy, all countries will need to align their accountability framework to this new setting. The most important step will be to strengthen accountability mechanisms to nongovernment stakeholders to ensure that autonomy translates into more socially efficient outcomes. This will require two main types of measures, both of which should be supported by the governments.

The first is strengthening and empowering governing boards. This should include the appointment of the board head by the board itself or internal bodies of universities as well as the capacity of the board to appoint the president or rector (as in most countries). Boards may need to receive extensive training, particularly in low-income countries. This move may also require keeping a limited number of members but preserving broad representativeness, which is essential to strengthen the client power relationship.\textsuperscript{46}
The second is strengthening the exit option for students. This will entail steps to increase mobility and competition, including national qualification frameworks (box 5.10), disclosure and publication of information on institutional and graduate performance, and some demand-side financing.

More widely, the role of government, though changed, remains critical. As the power (and capacity) of boards increases, priority setting as well as monitoring and evaluation will become a shared responsibility. The challenge is how to make the various accountability relationships work in a complementary way, building on relative strengths.

Implementing successfully the compact relationship will require the capacity to hold institutions accountable on broad clear goals, while minimizing intrusions in daily management and protecting the capacity of institutions to fix many of their priorities. This will entail setting clear goals for the system as well as an effective quality assurance system focused on initial accreditation, audits, and outcome assessments. A semi-independent or independent system will be more credible. And the quality assurance system must address the challenges of internationalization (discussed in chapter 6).

Separating policy and operational management. Such separation at the central level would allow governments to maintain a distance from the regular lobbying in the sector to focus on policy and help them articulate the sector’s priorities with the broader overlapping labor market and education system. In most cases, East Asian governments have established separate departments within the ministry of education to be responsible for the sector, which may be better than entirely separate bodies for policy coordination but is insufficient to grant full policy coherence if the departments are too involved in the operational management of the sector.

Strengthening education management information systems. Alongside performance-based financing, governments should improve information to help enforce quality standards (with quality oversight provided by boards).

Creating an enabling environment

Several factors are important in creating an enabling environment for successful reform.

Generating ownership of the reform process. Successful outcomes are usually driven by domestic ownership of the reform process and by a political consensus that decentralizing higher education management is better for the economic needs of the country. More emphasis needs to be placed on undertaking dialogue with key stakeholders,

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**BOX 5.10 National qualifications frameworks**

Part of the broad quality assurance system, national qualifications frameworks help provide nationally consistent recognition of outcomes in postcompulsory education and thus are essential for student mobility between education and training institutions. While they can potentially address disconnects among skill providers (whether in a different or even in the same education level) and should therefore be supported, their design and implementation are complex. Challenges include developing standards-based on-the-job analysis, preparing new modular (competency-based) curricula, and designing assessment methods and new performance tests. These shifts have rarely been adopted in the region. Australia’s national qualifications framework is the most accomplished. It was introduced in 1995 on a nationwide basis and was phased in over a period of five years, achieving full implementation by year 2000.

particularly higher education institutions themselves, to ensure that they see the merits of how a decentralized system can potentially benefit them. Leadership at the government and higher education institution levels is also critical.

Building institutional capacity. Reforms often stumble because capacity is lacking within either government or higher education institutions, and this lack also makes governments wary of pursuing reform. Building capacity in areas such as financial management in higher education institutions or establishing an education management information system, for example, even before the reform formally starts, is essential. Given the limited capacity in institutions in low- and middle-income East Asian countries, the staggered approach to introducing autonomy that many countries have pursued makes some sense to address the issue of limited institutional capacity. By contrast, this slow pace has often led to reform stagnation or even reversal. A better option may therefore be to ensure that a minimum set of preconditions is in place and then start with far-reaching reform.

Prioritizing the legislative framework. Failure to adequately consider reform sequencing can slow the process, and prioritizing and getting the legislative framework right is key. The legal focus in the region, rightly so, has prioritized the conversion of public higher education institutions into autonomous independent entities. What is equally important, however, is to ensure that the overall legislative framework is adequately reformed to accommodate the new autonomous role of these publicly owned institutions.

Demonstrating success. One way to increase ownership and address opposition is providing autonomy only to top universities to generate a “demonstration” effect. (This is a stronger justification than lack of capacity for staggering reform.) This strategy could be useful in low-income countries where the domestic climate is yet not ready for reform or in middle-income countries where some top-performing universities are ready to take off.

Notes
2. Again, this follows WDR 2004 terminology. The client power relationship can build on two main options: “participation,” where communities have the mechanisms (such as councils and stakeholder associations) to express their preferences and hold the management of the institution accountable for results, or “exit,” where students can leave nonperforming institutions (which requires competition among institutions).
4. OECD 2008b.
6. This was measured as the share of graduates in the 20- to 29-year-old age cohort.
7. Such accountability may occur, for example, through performance-based financing or by requiring the publication of employment information.
8. They can do so through competitive financing for research and broad-based university boards, for example. This latter point is discussed further below.
9. There is also a nearly complete lack of rigorous studies assessing the effects of autonomy on higher education in the region.
14. These are critical characteristics of excellence, according to Salmi 2009.
16. This information comes largely from an institutional survey applied to a group of regional experts (The Expert Group on New Skills for New Jobs) in 2010. Mongolia, not included in the survey, has a very centralized structure.
20. World Bank 2009a, 84.
25. In the areas of financing and staffing, effective autonomy has been undermined by the
lack of comprehensive reform in legislation, though a new law was passed in 2009, which seeks to cover some previous gaps in autonomy (World Bank 2010c).

27. UNESCO 2006.
33. OECD 2008b.
35. Wu 2010.
38. In Indonesia, for example, although the decision to make universities autonomous goes back to 1991, the strategic vision was only issued in 2003, the quality assurance system was put in place in 2008, and the legal framework for higher education was promulgated in 2009. In Malaysia the legal framework was in place as far back as 1996–97, but the strategic vision and quality assurance body were established only in 2007.
39. The push for more outcome-based accountability has evolved not only because of the changing relationship between government and universities, but also because of the increased focus on efficiency, value for money, and the globalization of education (Huisman and Currie 2004).
40. Distance education is a cheap and effective way to enroll students who under traditional modes would be unable to participate in the tertiary education system. The initial costs of distance education are high. Once the system is established, however, it can grow to scale at a relatively low cost. Distance education represents between a fifth and a third of total higher education enrollment across China, Indonesia, Korea, and Thailand. But the emergence of distance learning in the region does pose new challenges that can threaten educational quality in countries with weaker regulatory capacity. The need to strengthen the capacity of national quality assurance systems must accompany the region’s efforts to take advantage of these new opportunities.
42. Fielden 2008.
43. By the same token, this may help address the disconnect between education levels by enhancing time and attention for strategic planning and public budget development across education levels within the ministry.
44. World Bank 2009a, 2009b.
45. Fielden and LaRocque 2008.
46. Empowering governing boards would also be instrumental in providing higher autonomy for satellites, by making them accountable to the boards.
47. Fielden and LaRocque 2008.
48. One reason why the Mongolia decentralization process did not succeed in the 1990s was that the process was imposed by international donors and lacked strong domestic roots (Steiner-Khamasi and Stolpe 2004).
49. An example is Indonesia, where the lack of a legislative framework has delayed the effective autonomy of institutions.
50. The recent approval of a university charter providing a clear framework for higher autonomy and the role of university councils is a good first step in Vietnam.
51. Vietnam is following this strategy with its special autonomy to some of its new model universities. It has worked in a few other countries, such as South Africa (Cloete 2002).