Economic Growth and Tertiary Education

Arguments that link education and economic growth are familiar to all of us. A recent analysis of sources of economic growth conducted by the Organisation for Economic Cooperation and Development (OECD) found that improvement in human capital—as measured by increasing levels of educational attainment—was a common factor behind growth in all OECD member countries in the 1980s and 1990s (OECD Economic Outlook, December 2000). Indeed, of the several possible factors contributing to economic growth, only exposure to trade had a greater positive effect than improvement in human capital.

Today, close attention is being given to how to further increase the contribution from human capital to growth. The extent to which countries’ economies are based on human capital is reflected by their development of “knowledge workers” and a “knowledge economy.” Three key facts illustrate progress along these lines: (1) between the mid- to late-1980s and the late 1990s, employment in knowledge-based industries increased as a share of overall business-sector employment in two-thirds of the developed countries for which data are available; (2) the share of workers with tertiary education increased more rapidly than their share of the overall population; and (3) white-collar, high-skill employment increased more rapidly than employment in other occupations.

These findings serve as a backdrop for the reshaping of policies concerning education, learning, skills, and competencies. Comparative data further illustrate how countries differ on two measures of human capi-
tal: literacy and educational attainment. Tables 1 and 2 show education-related data for the Group of Seven (G-7) countries where available.

These types of comparative data, in conjunction with the increased attention being given to human capital, growth, and the evolution of the knowledge economy, suggest that policy interests will be directed more broadly toward improvement of skills and knowledge rather than focused on specific sectors of the economy. Indeed, Ministers of Finance in developed countries of Europe, North America, and the Pacific Circle have identified the development of human capital and broad-based and lifelong learning as primary targets for policy attention.

**Policy Development from a Comparative Perspective**

Policies directed at or affecting tertiary education are continually being formulated, implemented, or revised. A review of commission reports, policy papers, and legislative initiatives reveals three tendencies in policy making:

- In countries such as the United Kingdom, Australia, Ireland, Norway, and the United States, policy thinking has been *broad based*. The issues identified for policy action are to some degree new to tertiary education, or at least new to the extent that they are expressed in explicit terms. Colleges and universities, for example, are seen as a means to address adult learning needs in Ireland’s Green and White Papers on Adult Education, by its Commission on Access, and in the responsibilities assigned to its new Qualifications Authority to facilitate access, progression, transfer, and mobility, as well as to establish and maintain quality. In Norway, the Competence Reform has directed policy discussions beyond qualifications, institutions, and structures to the acquisition of knowledge and skills.

- In countries such as the United Kingdom, Denmark, the Netherlands, New Zealand, Ireland, and, in some respects, Japan and Germany, policy thinking and approaches have been *innovative*. In a variety of ways, policy reflection and action represent substantial departures from long-standing policy approaches. Innovation can be found in performance-based funding of institutions and students; qualifications, quality, and standards; and governance.

- In countries such as Denmark, Japan, Australia, New Zealand, and Germany, there is evidence of *sustained policy attention*. Sweeping reforms launched in the late 1980s in Australia and New Zealand have been reviewed and, where found to be insufficient, revised over the course of the decade and into the early 2000s. The Danish and Japanese experience is better characterized as a continuous process of reform that, in Japan in particular, now has a sharper and potentially more profound edge.
through the initiative to change the legal status of the national universities. Although more substantial reform has come rather later in Germany, policy initiatives traced back to the mid-1990s continue to be pushed today.

A wide range of policies has been adopted around the world—some similar to those in the United States, others quite distinctive. The approaches often reflect a blend of strong and weak measures; some have had unintended effects and so have been revised or dropped. Higher education policy makers in the United States likely would benefit from a closer look at the accumulating policy experience in other countries.

Although results have been mixed, one example worth studying is the development of voucher-type funding schemes, which illustrate a deliberate effort to link higher education with overall economic and social policy development. The United Kingdom and Sweden have been active in efforts to implement voucher systems. Both countries expected that vouchers would be used for participation in a wide range of learning activities, including programs at tertiary education institutions. In the United Kingdom, the government managed the accounts and contributed £150 to match the learner’s £25 contribution in his or her first year. To be eligible for the government contribution, the learner must have been in the labor force, not enrolled full-time, and not taking part in a public training program. Third-party (employer) contributions to the account were permitted, but account holders were obliged to treat those contributions as income subject to tax. Course fees were discounted for eligible courses, and even more so if a “key course” (e.g., computer literacy) was chosen. In Sweden, the government has considered a $300 government contribution, to match a similar contribution from the learner. Plans call for allowing the account holder to benefit from earned income tax relief, but also for taxation of such funds as income when withdrawn. As in the United Kingdom, funds used for approved learning would attract an additional subsidy—a “competence grant premium.”

Similarities with the Lifetime Learning tax credits in the United States are obvious, with one important difference: The U.K. and Swedish schemes envisaged a much wider reach of eligible providers and programs. In the U.K. case, however, the voucher system has been suspended. Nevertheless, both schemes reflect efforts to mobilize new funds or redirect existing funds for learning activities and to shape the demand for those activities—as such, they represent learning opportunities for U.S. policy makers.

**Internationalization: Policies Reaching Across Borders**

Cross-border flows of students, staff, and services are introducing a new dynamic in tertiary education, driven to some extent by increased policy attention to portfolios outside education and, in other cases, emerging independent of deliberate policies.

Patterns and trends revealed in recent OECD data (OECD 2002) can be summarized as follows:

- For a subset of leading “host” countries, enrollments of foreign students roughly doubled over 20 years from 1980 to 1999. Within this group, only Canada and France experienced lower relative increases than the United States.

- From 1995 to 1999, OECD countries in the Americas (the United States, Canada, and Mexico) experienced a relative decline in the share of foreign-student enrollment. OECD countries in Europe—European Union (EU) countries in particular—accounted for most of this shift, increasing market share from all regions. Asia-Oceania recorded increases in its share of the volume of foreign-student flows, both from within its region and from the Americas.

- Looking only at the six anglophone OECD countries over this same period, the United Kingdom and Australia increased their shares of foreign student enrollments largely at the expense of the United States, Canada, and the rest of the OECD.

The flows partly reflect deliberate national policies, including offering study programs in English, providing financial support, and, in countries with low or no tuition fees, allowing foreign students to enroll on the same terms as domestic students.

OECD analyses reveal the considerable financial stakes for the countries concerned. The United States gen-
erates the largest revenue—some $10 billion in the year 2000—from the “export” of education services. (Exports of educational services are defined narrowly, referring only to the revenues generated by foreign student flows into a country; imports refer to payments made for students studying abroad.) The United Kingdom, Australia, and Italy also record substantial revenues from enrollment of foreign students. Foreign-student flows to Australia account for about 12 percent of the country’s overall service exports (the third-largest service export earner). For Canada, the share has declined.

The stakes are sufficient to receive attention under the multilateral negotiations of the General Agreement on Trade in Services (GATS). Negotiations are focusing mostly on cross-border supply (provision in another country) and consumption abroad (e.g., study abroad). Similar types of questions arise within the area of the EU, where broader EU aims for integration are supported by soft measures such as funding for intra-European student flows—including support for the development of infrastructure such as credit transfer protocols and inter-institutional agreements on integrated study plans—and by hard measures such as free movement of citizens, facilitated by mutual recognition of diplomas, certificates, and other evidence of formal qualifications.

Trade and European interests will increasingly shape the scope of both national education policy and institutional initiatives, as well as the associated global competition for students, staff, resources, and prestige. Thus, a key question is how best to harness growing cross-border influences at national, state, and institutional levels.

Conclusion

American higher education leaders can gain a deeper understanding of the issues and trends affecting their institutions by tracking policy developments in tertiary education around the globe. In recent years, renewed attention to the contribution of human capital, skills, and knowledge to economic growth has attracted interest from policy makers from outside the realm of higher education. Partly associated with education’s higher profile, government authorities have undertaken broad-based reforms aimed at tertiary education and in so doing have introduced specific policies that are innovative from a comparative perspective. In general, new policies have established oversight or funding arrangements covering a wider breadth of provision than typical university-based programs. Moreover, the emergence of a global market for tertiary education has attracted policy attention from trade ministries and in multilateral negotiations, and likewise has given rise to new challenges and opportunities for individual institutions.

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