

Higher Education in Developing Countries: What Role, What Impact?

Devesh Kapur
University of Pennsylvania

University of Washington
May 7, 2008

Outline of Presentation

- Overview of Tertiary Education
- Why? Rising Demand
- How? Supply Responses
- What? The Content of Higher Education
- Who gets educated?
- Role of the State
- Regulation and Standards
- Role of International Community
- Concluding Remarks: what we don't know

Devesh Kapur, CASI

“He was sent, as usual, to a public school, where a little learning was painfully beaten into him, and from thence to the university, where it was carefully taken out of him.”

— T.L. PEACOCK

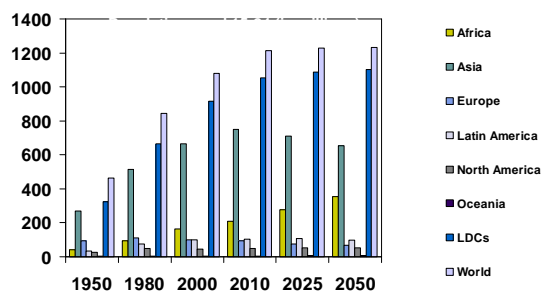
Devesh Kapur, CASI

Higher Education Landscape

- Global tertiary student population:
 - 1991 ► 68 million.
 - 2004 ► 132 million
 - 2025 Projection ► 150 million
- ♦ In 2002, the global market in higher education represented over 3 percent of the total services market
- ♦ 3.5 million people are employed to teach or otherwise service students
- ♦ Global market in educational services is currently estimated at more than \$2 trillion

Devesh Kapur, CASI

Why? Demand from rapidly increasing youth population in developing countries



Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2006 Revision and World Urbanization Prospects: The 2005 Revision*, <http://esa.un.org/urp/>. Devesh Kapur, CASI

Gross Enrollment Ratio, Tertiary Education

| | 1980 | 1997 | 2004 |
|---------------------------------|------|------|------|
| High Income countries | 36.2 | 51.6 | 66.7 |
| Least Developed Countries | 1.8 | 3.2 | 8.7 |
| Sub-Saharan Africa | 1.7 | 3.9 | 5 |
| Arab States | 9.6 | 14.9 | 22.6 |
| Latin America and the Caribbean | 13.7 | 19.4 | 28.6 |
| East Asia and Oceania | 3.8 | 10.8 | 19.6 |
| South Asia | 4.3 | 7.2 | 9.7 |

Devesh Kapur, CASI

Why? Rising Skill Premium in developing countries

| | 1980s | 1990s |
|-----------|------------------------|---|
| Mexico | Increased | Increased until mid 1990's Stable/declined after mid 1990's Increased between 2000-1990 |
| Colombia | Slightly declined | Increased |
| Argentina | Declined | Increased |
| Brazil | Stable/Slight increase | Increased |
| Chile | Increased | Declined early 1990's; Overall increased 1990-2000 (national data) |
| India | Relatively stable | Increased |
| Hong Kong | Increased | Increased |

Source: Goldberg and Pavcnik, 2006

Devesh Kapur, CASI

Why Higher Education?

- Universities facilitate national development by promoting democratic ideals, as well as intellectual and industrial competitiveness.
- Improve economic and political governance.
- Promotes Entrepreneurship.
- Contribute to greater social mobility and egalitarianism.
- Socialization effects of higher education in producing new nationalist elites.

Devesh Kapur, CASI

Why Higher Education?

- In the absence of domestic skills, even global public goods have very limited payoffs, e.g. green revolution technologies in agriculture.

Green Revolution more successful in Asia than Africa. Why?

- greater domestic technological capabilities in Asia
- developed through local agriculture research centers that could adapt the new green revolution technologies to local conditions.

Today, poor developing countries face worse odds.

1. Technologies being developed in rich countries less appropriate to developing country agriculture because of shift in research priorities.
2. Technologies developed in richer countries less accessible because of IPR of privately owned technologies; most biotech companies have little interest in developing technologies for applications in LDC.
3. Even those technologies that are applicable and available require more substantial local development and adaptation. LDCs will need to develop greater domestic agricultural research human capital.

Devesh Kapur, CASI

How? Supply Responses

- Changing Role of State
- Increasing Role of Private Universities
- Corporate Skill Providers
- Internationalization of Higher Education
- But undercut by Brain Drain?

Devesh Kapur, CASI

The Role of the State

- Regulation
- From Provider to Financier?
- Promoting Access and Equity
- Invest in areas undersupplied by private sector

Devesh Kapur, CASI

How? The growing role of the private sector - I

| Private share of enrolment | Countries |
|-----------------------------------|--|
| Large (over 50 percent) | Bangladesh, Bermuda, Botswana, Brazil, Cape Verde, Chile , Colombia, Cyprus , El Salvador, Estonia, Holy See, India, Indonesia, Islamic Republic of Iran, Israel , Japan , Latvia, Luxembourg , Namibia, Netherlands , Netherlands Antilles, Palau, Palestinian Autonomous Territories, Paraguay, Philippines, Republic of Korea , Slovenia, Tonga, Turks and Caicos Islands, United Kingdom |

Source: UIS Education database, May 2005

Devesh Kapur, CASI

How? The growing role of the private sector - I



| Private share of enrolment | Countries |
|--|---|
| Medium (between 25 and 50 percent) | Angola, Armenia, Burundi, Ivory Coast, Ecuador, Jamaica, Jordan, Kenya, Lao People's Democratic Republic, Lebanon, Malaysia, Mexico, Mongolia, Nepal, Nicaragua, Peru, Poland, Portugal , Rwanda, Saint Lucia, United States of America , Venezuela |

Source: UIS Education database, May 2005

Devesh Kapur, CASI

How? The growing role of the private sector - I



| Private share of enrolment | Countries |
|---|--|
| Small (between 10 and 25 percent) | Argentina, Aruba, Azerbaijan, Belarus, Bolivia, Bulgaria, Ethiopia, Finland, France , Georgia, Honduras, Hungary, Iceland , Iraq, Libyan Arab Jamahiriya, Mauritius, Norway , Panama, Papua New Guinea, Republic of Moldova, Senegal, Spain, Switzerland , Thailand, Uruguay |

Source: UIS Education database, May 2005

Devesh Kapur, CASI

How? The growing role of the private sector - I



| Private share of enrolment | Countries |
|---|--|
| Negligible or non-existent (less than 10 percent) | Australia, Austria , Cameroon, Chad, Congo, Costa Rica, Croatia , Cuba, Czech Republic, Denmark, Germany , Ghana, Hong Kong SAR of China, Ireland , Kyrgystan, Madagascar, Morocco, New Zealand , Pakistan, Russian Federation , Saudi Arabia, Serbia and Montenegro, Slovakia, Sweden , the former Yugoslav Republic of Macedonia, Trinidad and Tobago, Tunisia, Turkey , Uganda, United Republic of Tanzania, Vietnam, Yemen |

Source: UIS Education database, May 2005

Devesh Kapur, CASI

International Student Enrollment in Top Six Host Countries (in thousands)



| | 1999 | 2004 | % Change 1999 to 2004 |
|--------------------|--------------|--------------|--------------------------|
| World total | 1,680 | 2,453 | 46.0 |
| US | 491 | 573 | 16.6 |
| UK | 233 | 300 | 29.0 |
| Germany | 178 | 241 | 46.1 |
| France | 131 | 238 | 81.4 |
| Australia | 117 | 167 | 42.1 |
| Japan | 57 | 118 | 108.5 |

Devesh Kapur, CASI

Cross Border Supply: Universities Travel Abroad



- Range of Arrangements
Overseas campuses, franchise, joint degrees, twinning etc..
- Regulatory issues

Devesh Kapur, CASI

The Virtual Future?



- Early Failures
- Recent successes in the US
- Costs
- Open Courseware Movement

Devesh Kapur, CASI

How? Can Online Substitute for Brick-and-Mortar Universities?

Number of US students in the US who enroll only online

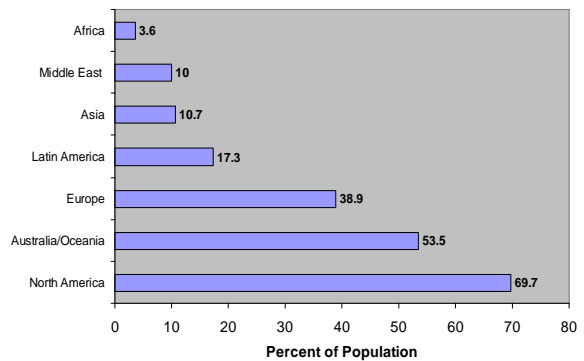
| | |
|------|-----------|
| 2000 | 194,580 |
| 2001 | 315,219 |
| 2002 | 483,113 |
| 2003 | 701,295 |
| 2004 | 936,727 |
| 2005 | 1,214,000 |
| 2006 | 1,518,750 |

Source: Foster and Carnevale, 2007

Devesh Kapur, CASI

Internet Penetration Rate

(as of March 2007)



Source: www.internetworldstats.com

Devesh Kapur, CASI

Who gets educated? Equity & Access

- Selection Criteria
- Financial Aid schemes
- Reaching out to historically marginalized groups (egs. Brazil, Malaysia, India, South Africa)

Devesh Kapur, CASI

What? The Content of Higher Education

- *Economic impact:* Liberal arts education can increase innovation and economic fluidity, leading to more creative and knowledge-based economies with a more adaptable workforce.
- *Policymaking impact:* Development and policy making requires people with generalized as well as specialized knowledge, and critical thinking and communication skills. A liberal arts education may develop these competencies in a country's leaders and citizens.
- *Political participation:* By spreading knowledge and increasing debate, liberal education may extend participatory citizenship to more members of society, thus improving the quality of democracy in a society.
- *Societal cohesion:* Liberal education may promote tolerance and understanding of others, leading to a more peaceful and cohesive society.
- *Possibility of reducing brain drain:* Students may be less likely to go overseas for their education, and more likely to return to a society in which liberal education fosters a vibrant intellectual culture and educated population.
- *Greater international understanding:* Liberal education may increase cross-cultural understanding and lead to more peaceful interaction between nations.

Devesh Kapur, CASI

What? The Content of Higher Education

- "The very humanness of their disciplines is at the root of the problem. They wrestle with questions too entangled in the world's strife - and too inherently complex - to accumulate reliable knowledge and avoid intellectual debasement in the manner of the natural sciences. Causes more than curiosity recruit their acolytes, rivalries too quickly slip into enmities, disagreements superheat over value conflicts, and before disputes can get into substance they're apt to spin off into fierce quarrels over rival modes of verification...."
- "The value of liberal arts education in producing students with skills adaptable to the knowledge economy sounds so plausible that it has entered the working vocabulary of businessmen, politicians, planners, journalists, and ordinary people. It has almost become part of common sense. But viewed from the point of view of economics, the 'futuristic business literature' is, to put it bluntly, all but worthless: it amounts to little more than a collection of slogans, with next to nothing by way of theoretical or empirical basis." - Edwards and Ogilvie

Devesh Kapur, CASI

Regulation and Standards

- Who ensures quality?
- Growth of Regional and International Accreditation bodies
 - Universitas21
 - Washington Accord
 - Council for Higher Education Accreditation (CHEA)
 - International Network for Quality Assurance Agencies in Higher Education
 - Global Alliance for Transnational Education (GATE)
 - International Quality Review Process (IQRP)

Devesh Kapur, CASI

Brain Drain

Expatriation Rates (Doctors and Nurses from Low-Income Countries, 2000)

| | Nurses | Doctors |
|---------|---|--|
| <10 % | Bangladesh, Benin, Bolivia, Burkina Faso, Burundi, Central African Republic, Dem. Rep. Congo, Côte d'Ivoire, Ethiopia, Gambia, Guinea, India, Kenya, Mali, Mauritania, Myanmar, Nepal, Niger, Nigeria, Pakistan, Senegal, Sudan, Timor-Leste, Togo, Uganda, Yemen, Zambia | Bangladesh, Burkina Faso, Dem. Rep. Congo, Guinea, India, Mongolia, Myanmar, Nepal, Niger, Pakistan, Rwanda, Sudan, Yemen |
| 10-25 % | Cambodia, Comoros, Eritrea, Ghana, Guinea-Bissau, Laos, Madagascar, Mozambique, Papua New Guinea, Rwanda, Solomon Islands, Somalia, Vietnam | Afghanistan, Cambodia, Central African Republic, Chad, Comoros, Côte d'Ivoire, Ethiopia, Gambia, Laos, Madagascar, Mali, Mauritania, Nigeria, Solomon Islands, Vietnam |
| 25-50 % | Sao Tome and Principe, Zimbabwe | Benin, Burundi, Eritrea, Ghana, Guinea-Bissau, Kenya, Malawi, Papua New Guinea, Sao Tome and Principe, Senegal, Somalia, Timor-Leste, Togo, Uganda, Zambia, Zimbabwe |
| >50 % | Haiti, Liberia, Sierra Leone | Haiti, Liberia, Mozambique, Sierra Leone |

Devesh Kapur, CASI

Brain Drain

| WHO region | Number of countries | | In countries with shortages | | Foreign doctors & nurses in OECD | |
|-----------------|---------------------|----------------|-----------------------------|-------------------|----------------------------------|---------------|
| | Total | With Shortages | Shortage (1000s) | Increase required | Number (1000s) | % of shortage |
| Africa | 46 | 36 | 818 | 139% | 98 | 12% |
| Americas | 35 | 5 | 379 | 40% | 199 | 53% |
| South & SE Asia | 11 | 6 | 1164 | 50% | 101 | 9% |
| Mediterranean | 21 | 7 | 306 | 98% | 71 | 23% |
| W. Pacific | 27 | 3 | 326 | 119% | 212 | 65% |
| World | 192 | 57 | 2358 | 70% | | |

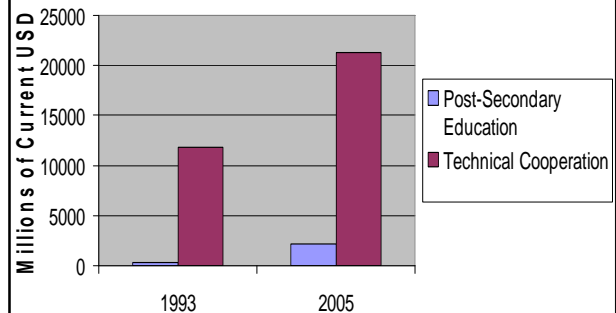
Devesh Kapur, CASI

Role of International Community

- International Regulatory Mechanisms
- GATS
- International Aid

Devesh Kapur, CASI

Official Commitments from DAC Countries by Sector



Devesh Kapur, CASI

Some Questions

- Are economic effects of higher education on developing countries different from those in industrialized countries, especially its impact on institutional development?
- Given limited resources, how should countries distribute resources within HE – between individuals and institutions, across disciplines, between research and teaching?
- With the state unable to meet growing demand pressures what should be the proper role of the state? How should its financial and regulatory roles change, to ensure not just quality but also equity and access so that higher education becomes a ladder rather than a barrier to social mobility?
- Global faculty shortage: Where will the faculty come from?

Devesh Kapur, CASI

Some Questions

- How should countries rethink the provision of higher education in an "open economy?" When should countries subsidize students acquiring education abroad or instead encourage foreign providers into the country or simply link domestic institutions with foreign quality assurance mechanisms?
- Do new technologies offer developing countries a new paradigm to expand the provision of high quality but low-cost higher education?
- What is happening *within* universities and to students who spend a considerable part of their prime years in these institutions?
- How meaningful is the large growth in higher education enrollment? Is it at the expense of quality and do we really know how to measure quality?

Devesh Kapur, CASI