

If ranking is the disease, is benchmarking the cure?

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Berlin, 7 October 2010

IREG-5 BERLIN

EDUCATION
THE WORLD BANK

outline of the presentation

- uses and abuses of rankings
- from ranking to benchmarking
- benchmarking tertiary education systems

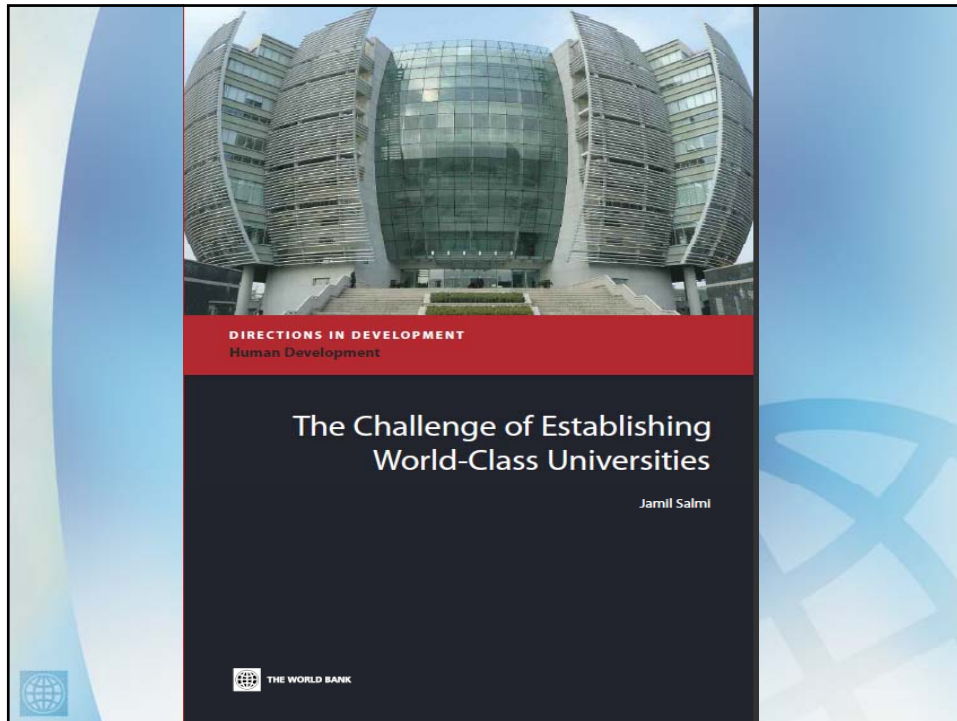




ranking systems in 2010

| Region | National and International Ranking System |
|---------------------------------|---|
| Eastern Europe and Central Asia | Kazakhstan (A, B), Poland (C), Slovakia (B), Romania (B/C), Russia (B, IB), Ukraine (B/C) |
| East Asia and Pacific | Australia (B), China (B, C, IB), Hong Kong (C), Japan (B, C), Korea (A), Malaysia (A), New Zealand (A), Taiwan (B, IB), Thailand (A) |
| Latin America and the Caribbean | Argentina (A), Brazil (A), Chile (C), Mexico (B), Peru (B) |
| Middle East and North Africa | Tunisia (A) |
| North America | Canada (B, C, B/C), United States (C, IC) |
| South Asia | India (B/C), Pakistan (A) |
| Sub-Saharan Africa | Nigeria (A) |
| Western Europe | France (IB), Germany (B/C, C), Italy (C), Netherlands (A), Portugal (C), Spain (B, C, IC), Sweden (C), Switzerland (B/C), United Kingdom (A, B, IC) |





a thin line between love and hate

- disagreement with principle
- criticism of methodology
- boycotts
- political pressure
- court actions (New Zealand, Holland, Canada)

danger of rankings

- changes guided by rankings criteria
 - priority given to top students (equity concern) and/or foreign students
 - resource allocation (research)
- fraud in data presentation or survey participation, payment of students



9

TIMES ONLINE

From The Times

May 14, 2008

Kingston University students told to lie to boost college's rank in government poll



Red Queen effect



11

government responses

- let us make a new ranking (Russia, Ecole des Mines, France / EU)
- let us encourage mergers (France, Russia, Denmark)
- let us give additional money (Excellence Initiatives)
 - concentrate or spread in an equal manner?
 - select or make institutions compete?

risk of resource misallocation

'...Australia cannot afford to spread its relatively small resources too thinly. It must invest in niche areas. This means that some universities and some fields should get preferential treatment. If Australia does not have some universities playing at the high end, Australia will fall behind.' (Gallagher, 2008)



so should we just get rid of rankings?



14





benefits of information

- choice of institution (domestic) or for studies abroad
 - surveys of student engagement
 - information about labor market outcomes (Chile, Colombia)



GOBIERNO DE CHILE
MINISTERIO DE EDUCACION

laboral 2009

técnico o profesional?

busca tu carrera

descargas

- Documento oficial (PDF)
- Estudios
- Base de Datos (XLS)
- Nota Metodológica (PDF)
- Video Demo!

varios

- Preguntas Frecuentes
- Glosario de Términos
- Condiciones de Informa
- Links de Interés

Futuro Laboral

El sitio www.futurolaboral.cl es un servicio de información pública desarrollado por el Sistema Nacional de Información de la Educación Superior (SIES) de la División de Educación Superior del MINEDUC destinado a los estudiantes de enseñanza media y superior, sus familias, profesores orientadores, académicos, medios de comunicación, empleadores.

Futuro Laboral actualmente informa sobre 85 carreras profesionales y 50 técnicas, que concentran más del 80%

17

benefits of information

- choice of institution (domestic) or for studies abroad
 - surveys of student engagement
 - information about labor market outcomes (Chile, Colombia)
- culture of transparency
- setting stretch goals

18

positive aspects at institutional level

- collecting and publishing more reliable data
- analyzing key factors explaining ranking
- seeking to improve teaching, learning and research
- proposing concrete targets to guide [but not replace] strategic planning
- entering into mutually advantageous partnerships



the power of rankings

- public debate
 - Malaysia
 - Brazil
 - France



20

national level

12/11 MONDE/SAMEDI 24 JANVIER 2004

SOCIÉTÉ

ENSEIGNEMENT SUPÉRIEUR

FAIBLESSE DU FINANCEMENT public de l'enseignement supérieur et de la recherche, succès de la pétition « Sauvez la recherche », signée par 22 000 chercheurs. L'université française est en état de « crise let-

te », selon Michel Laurent, le vice-président de la conférence des présidents d'université. Un « PLAN D'URGENCE » a été réclamé lors des assises nationales, organisées jeudi 22 et vendredi 23 janvier par l'UNEF et

le Snesup-FSU, les principaux syndicats d'enseignants et d'étudiants. La première faculté française n'arrive qu'au 65^e RANG d'un palmarès international de l'enseignement supérieur établi par une université chinoise.

Selon le chercheur Jean-Jacques Payan, le système français est « le plus indolite et le plus inefficace des pays développés ». Il se prononce pour une AUTONOMIE ACCRUE des universités et une sélection à l'entrée.

La grande misère des universités françaises

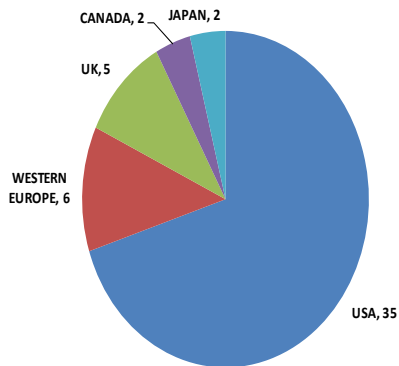
Plusieurs conseils d'administration d'université ont menacé de ne pas voter leur budget pour protester contre l'insuffisance de leurs moyens. Malgré un budget global en hausse de 3 %, les établissements sont contraints à des restrictions sévères et font des « économies de bout de chandelle »

outline of the presentation

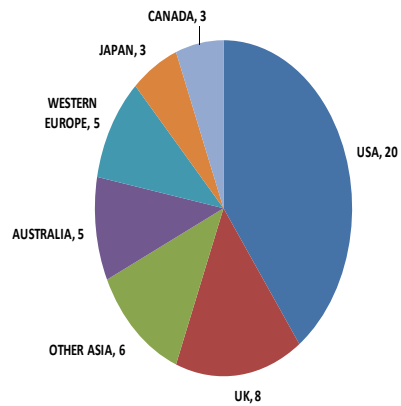
- uses and abuses of rankings
- **from ranking to benchmarking**

top 50 universities (2010)

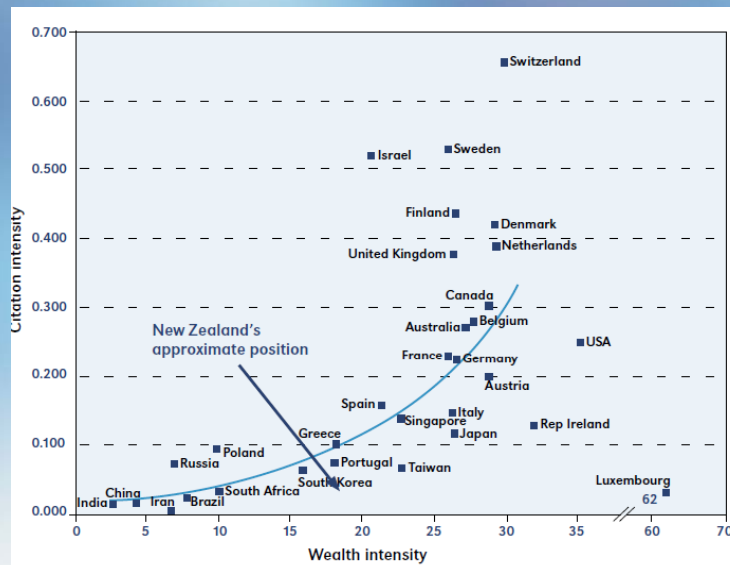
ARWU: 2010



THES: 2010



size effect

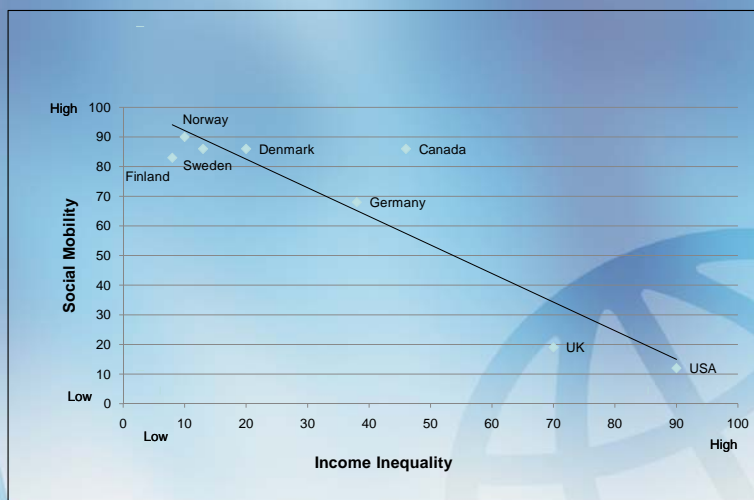


ARWU

Population required to create a top 500-listed university

| Country | No. Top 500s | Population (000) | People required to produce each top 500 |
|-------------|--------------|------------------|---|
| Sweden | 11 | 9,045 | 822.27 |
| New Zealand | 5 | 4,173 | 834.6 |
| Finland | 6 | 5,244 | 874 |
| Switzerland | 8 | 7,581 | 947.63 |
| Norway | 4 | 4,644 | 1,161 |
| Austria | 7 | 8,205 | 1,172.14 |
| Israel | 6 | 7,112 | 1,185.33 |
| Denmark | 4 | 5,484 | 1,371 |
| Australia | 15 | 20,600 | 1,373.33 |
| Ireland | 3 | 4,156 | 1,385.33 |

social mobility and inequality



well-performing economies without world-class universities

| WEF | WB K4D | SJTU |
|-------------|-------------|------------------|
| USA | Denmark | US (1) |
| Switzerland | Sweden | UK (4) |
| Denmark | Finland | Japan (19) |
| Sweden | Netherlands | Switzerland (24) |
| Singapore | Norway | Canada (24) |
| Finland | Canada | France (42) |
| Germany | Switzerland | Denmark (45) |
| Netherlands | UK | Netherlands (47) |
| Japan | USA | Sweden (51) |
| Canada | Australia | Germany (55) |

27

what the rankings lens does not allow us to see

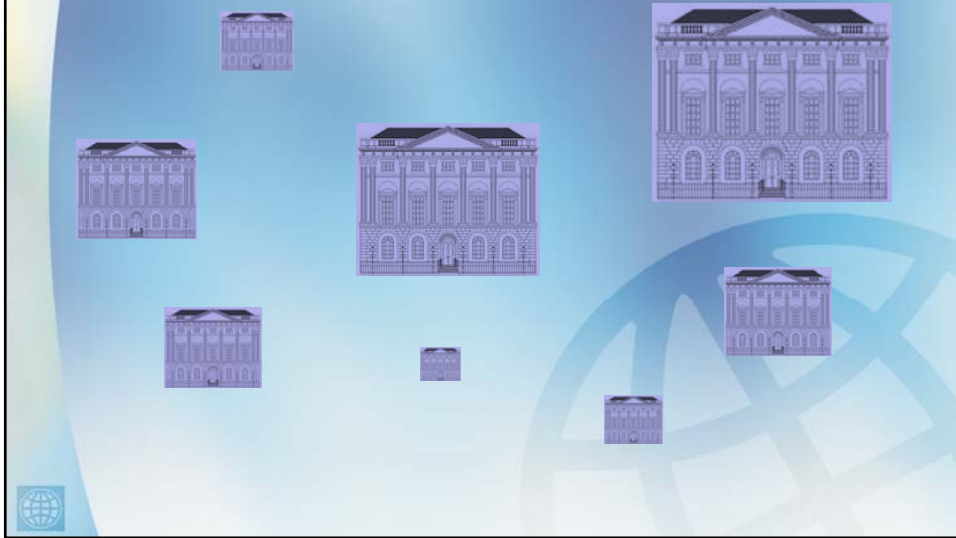
- overall performance of tertiary education systems
- access vs. equity
- quality and relevance
- institutional differentiation
- contribution to local economic and social development (human capital vs. patents)

'The United States doesn't have a world-class higher education system because it has many world-class universities; instead it has world-class universities because it has a world-class higher education system.'
(Birnbaum, 2007)

outline of the presentation

- uses and abuses of rankings
- from ranking to benchmarking
- **benchmarking tertiary education systems**

cross-country comparisons help put things into perspective



multi-dimension comparisons enriches the diagnosis



what is benchmarking?

- process of comparing the performance of one's tertiary education system to that of other systems
 - competitors
 - good practices



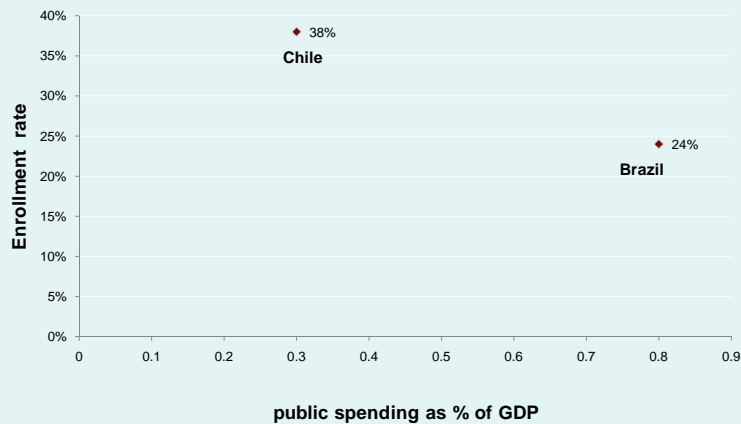
purpose

- improving performance
 - diagnosis (identification of areas for improvement)
 - definition of specific corrective interventions
 - no consensus on what countries should do to improve their performance
 - wide variations in system performance with similar funding levels and common country characteristics



34

comparing Brazil and Chile

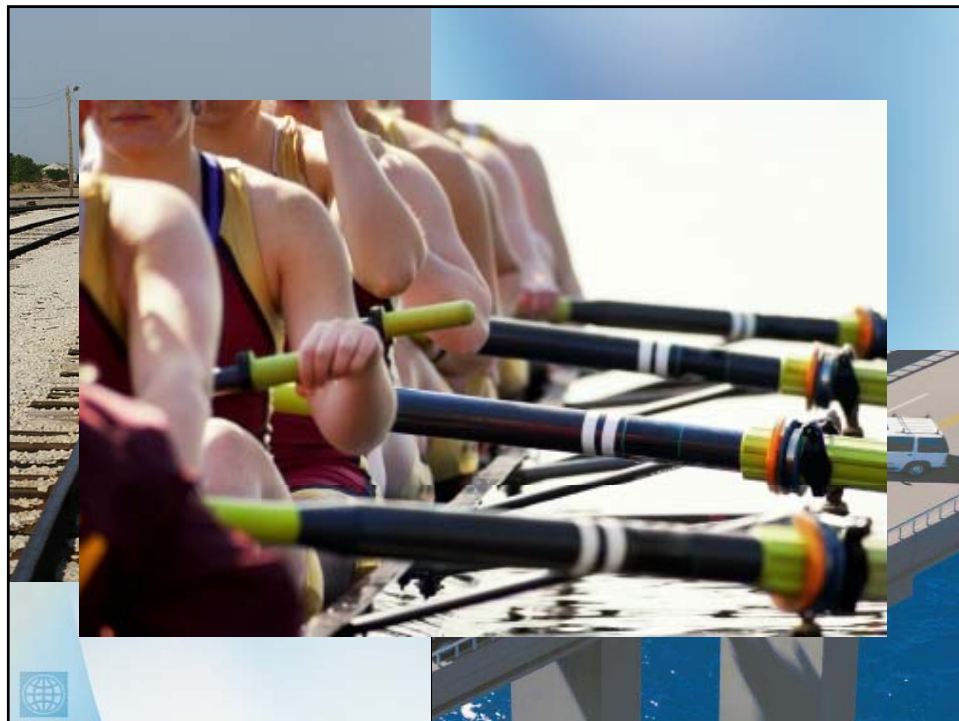
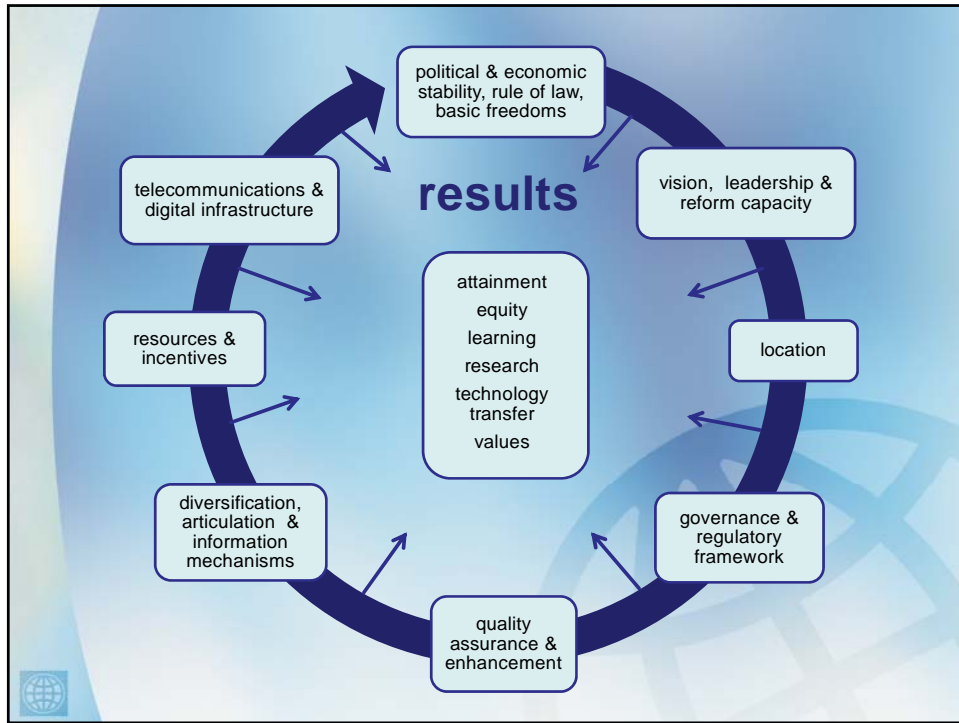


35

elaborating the theoretical framework

- distinction between performance and health of system
 - how good are the system's actual outcomes?
 - does it operate under conditions known to lead to high performance?
- definition of outcomes / outputs / results
- identification of determinants and causality relationships

36





justification for conceptual framework

- World Bank: Constructing Knowledge Societies (2002)
- OECD Synthesis of Tertiary Education Reviews (2007)
- Salmi: Challenge of Establishing World-Class Universities (2009)
- Aghion et al: Governance and Performance of Research Universities (2009)



three types of indicators

| | |
|---------------------------|---|
| quantitative | <ul style="list-style-type: none">• objective measure |
| qualitative - observed | <ul style="list-style-type: none">• objective description |
| qualitative - interpreted | <ul style="list-style-type: none">• value judgement |

examples of indicators (results)

| | |
|-----------------|---|
| attainment | <ul style="list-style-type: none">• proportion of the working-age population (25-64) with a tertiary degree |
| achievement gap | <ul style="list-style-type: none">• proportion from highest quintile over proportion from lowest quintile |
| quality | <ul style="list-style-type: none">• number of ranked universities per 100,000 inhabitants |

examples of indicators (results)

research
output

- number of citations per 100,000 inhabitants

technology
transfer

- number of patents per 100,000 inhabitants

values

- proportion of voting age people who actually vote



examples of indicators (system health)

regulatory
framework

- legislation and QA requirements favorable to private institutions (Y/N)

institutional
autonomy

- Board selects university leader (Y/N)

quality
assurance

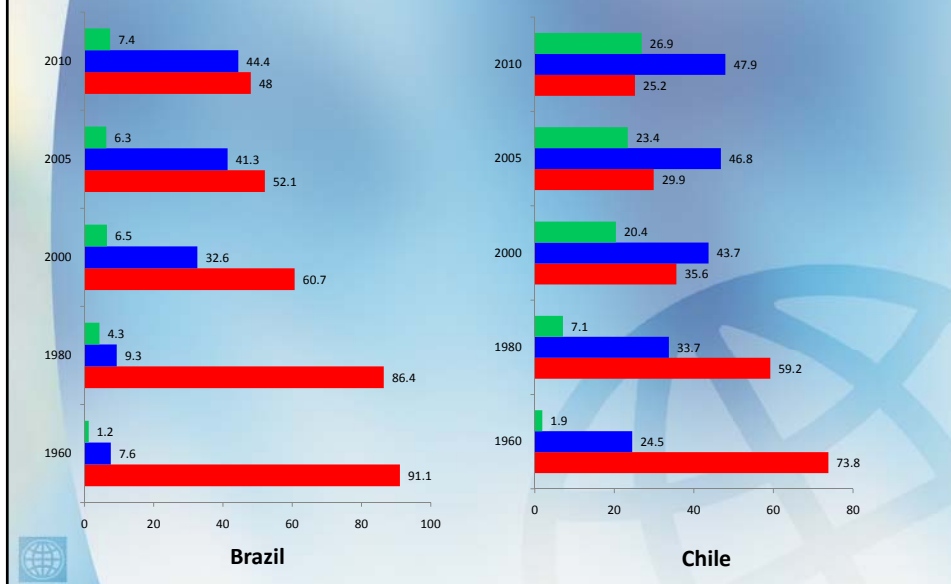
- proportion of accredited programs



examples of indicators (system health)

| | |
|-----------------------|--|
| financing | <ul style="list-style-type: none"> investment in tertiary education as proportion of GDP |
| allocation mechanisms | <ul style="list-style-type: none"> proportion of public funds allocated with performance criteria |
| resource utilization | <ul style="list-style-type: none"> average cost of a graduate |

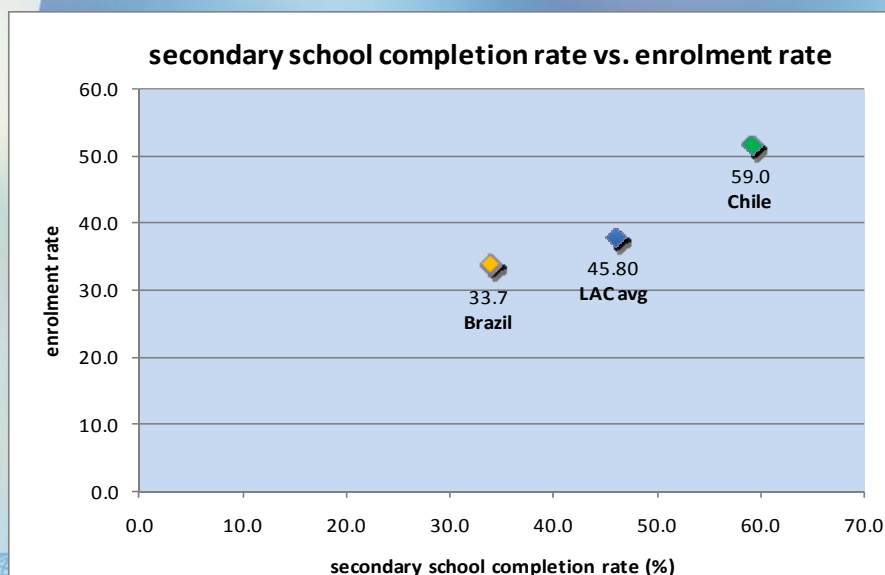
comparing Brazil and Chile's attainment



key drivers of enrolment

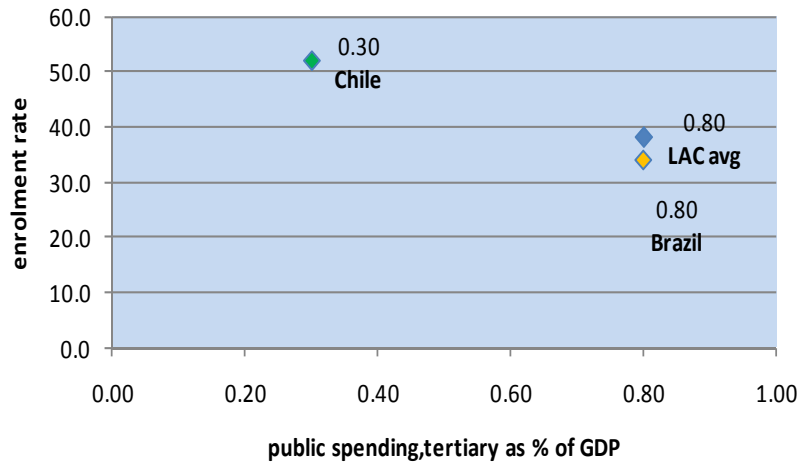
| No. | Driver |
|-----|---|
| 1 | secondary education completion rate |
| 2 | public and private spending on tertiary education as a percentage of GDP |
| 3 | share of private spending as a proportion of total spending on tertiary education |
| 4 | proportion of public spending, tertiary on total student aid (loans plus grants) |
| 5 | private enrolment share, tertiary (%) |
| 6 | proportion of students studying at non-university institutions (open university, polytechnics. etc) (%) |

secondary school completion rate

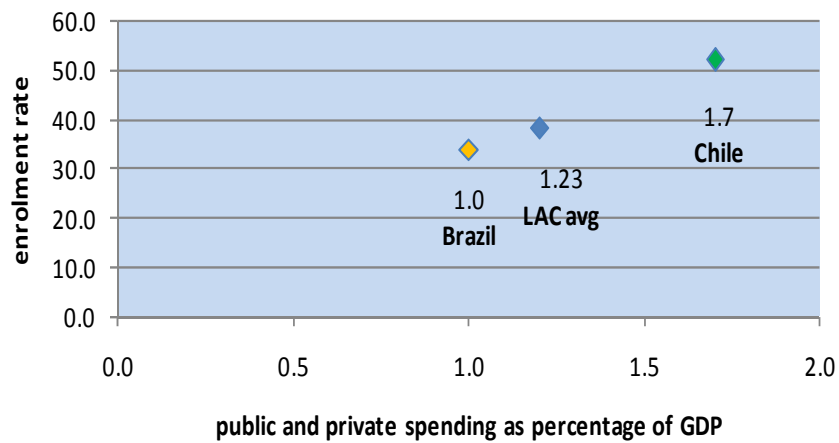


public spending

public spending vs. enrolment rate

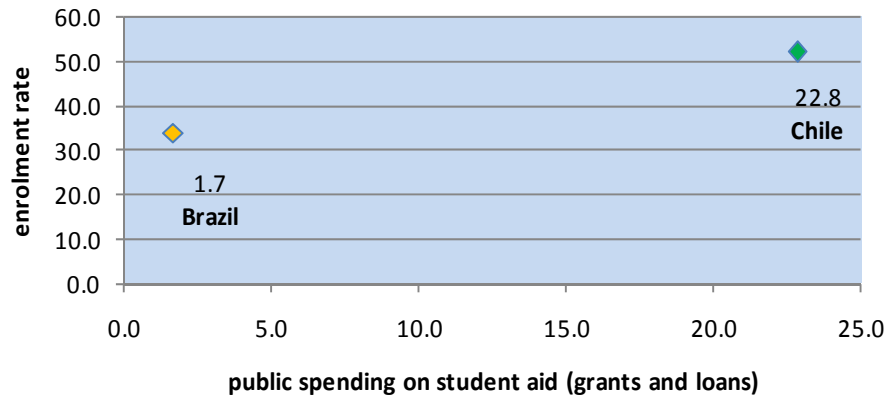


public and private spending as % of GDP vs. enrolment rate



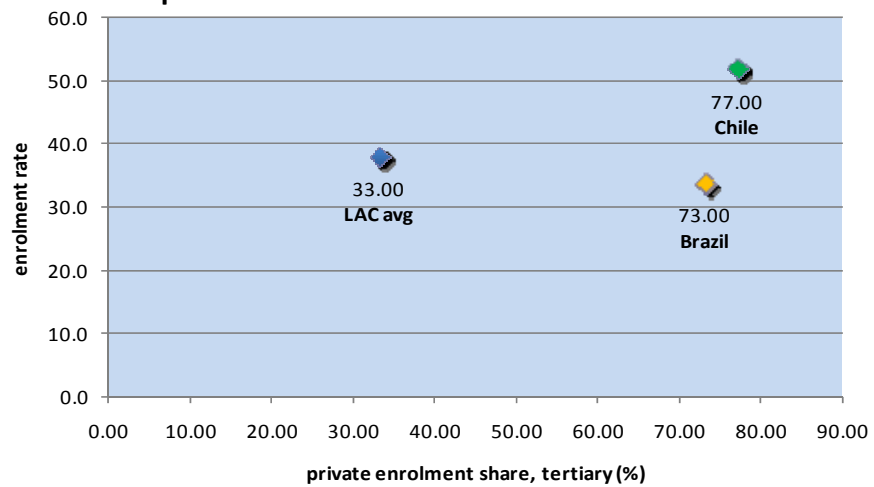
student aid

public spend on student aid vs. enrolment rate

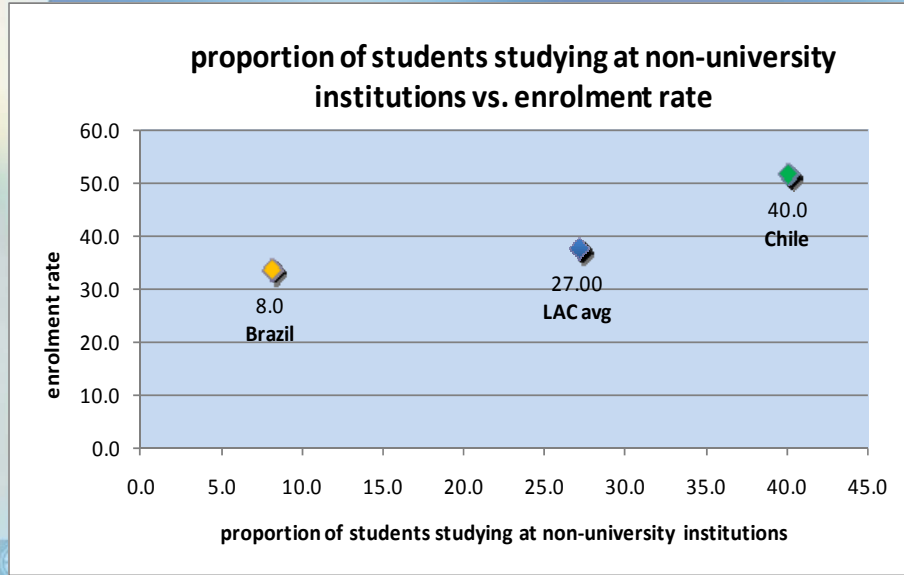


private enrolment

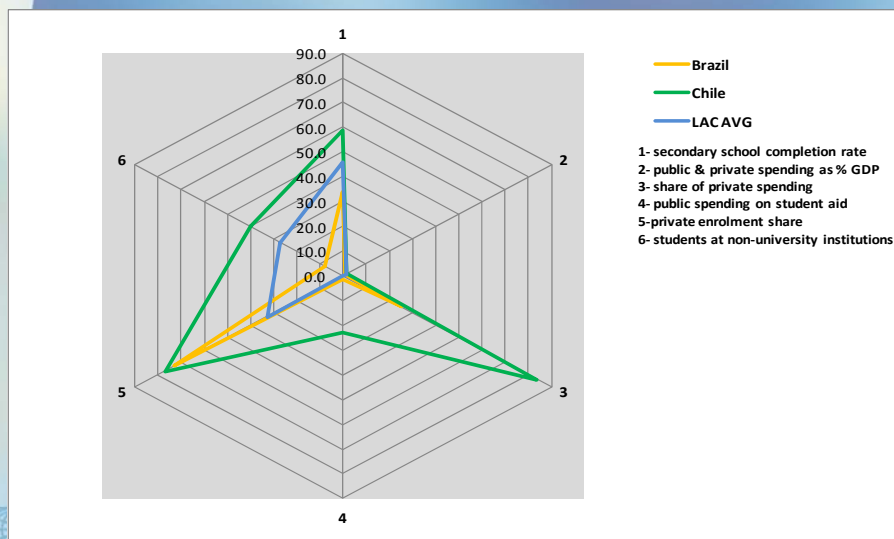
private enrolment share vs. enrolment rate



enrollment in non-university institutions



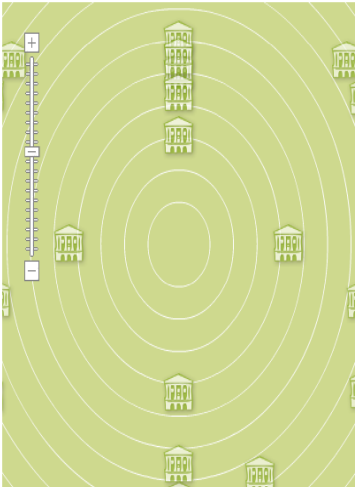
summary comparison of Chile, Brazil and LAC average



CHE ranking interactive website

Universities

You can only choose up to 10 indicators at once.



MY INDICATORS:
(S)= Student's judgements (F)= Facts (P)= Professor's judgements

Academic studies and teaching

- Contact between students (S)
- Counselling (S)
- Courses offered (S)
- E-Learning (S)
- Study organisation (S)
- Teaching evaluation (S)

Equipment

- IT-infrastructure (S)
- Library (S)
- Library - computer workstations
- Rooms (S)

International orientation

- Support for stays abroad (S)

Job market and career-orientation

- Job market preparation (S)
- Practice Support (S)

Overall opinions

- Overall study situation (S)
- Reputation for academic studies and teaching (P)
- Research Reputation

Research

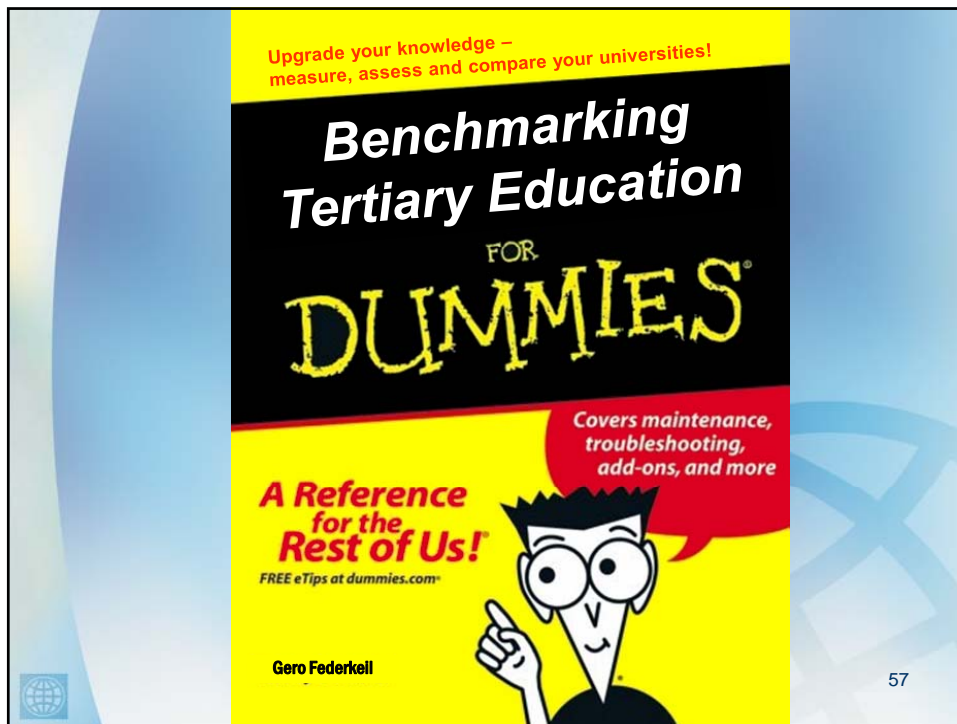
- Many internationally visible publications (F)
- many doctorates (F)
- many publications (F)
- much third party funding (F)

Town and University

- Higher education sport (S)
- low rent (F)
- small university location (F)

view rank groups in greyshades »

conclusion

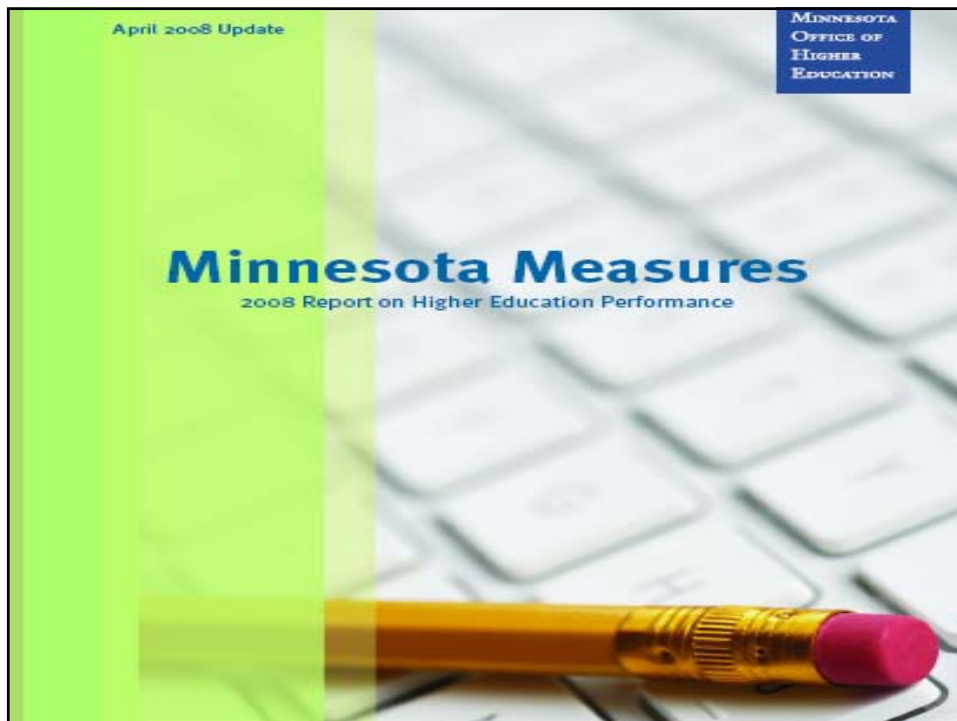
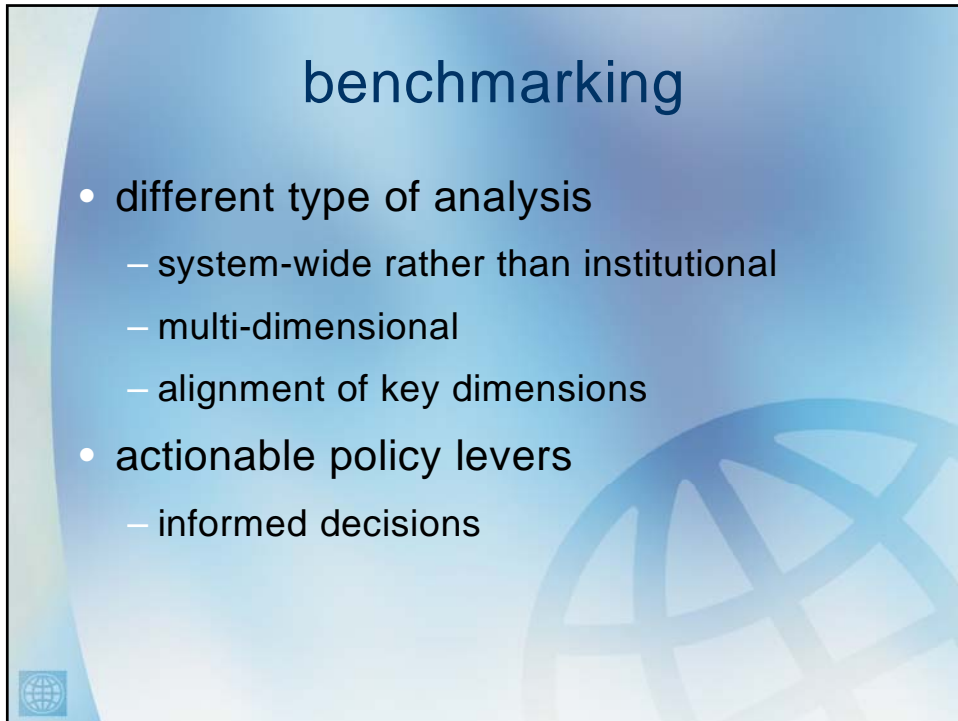


lessons

- thirst for information, culture of transparency and accountability
- rankings = one among many QA and accountability
- international comparisons help to stimulate a healthy debate on main challenges

benchmarking

- different type of analysis
 - system-wide rather than institutional
 - multi-dimensional
 - alignment of key dimensions
- actionable policy levers
 - informed decisions



clear goals

Building Minnesota's world-leading status in the knowledge economy requires setting goals for HE and measuring results.

Governor Tim Pawlenty

- GOAL ONE** | Improve success of all students, particularly students from groups traditionally underrepresented in higher education.
- GOAL TWO** | Create a responsive system that produces graduates at all levels who meet the demands of the economy.
- GOAL THREE** | Increase student learning and improve skill levels of students so they can compete effectively in the global marketplace.
- GOAL FOUR** | Contribute to the development of a state economy that is competitive in the global market through research, workforce training and other appropriate means.
- GOAL FIVE** | Provide access, affordability and choice to all students.



benchmarking

Research Expenditures as a Proportion of Gross Domestic Product by State and Country

| | 2000 | 2001 | 2002 | 2003 | 2004 |
|--------------------------|------|------|------|------|------|
| Top 3 States | | | | | |
| New Mexico | | | | | 8.0% |
| Maryland | | | | | 6.3% |
| Massachusetts | | | | | 5.2% |
| Minnesota | 2.3% | 2.6% | 2.6% | 2.8% | 2.7% |
| Rank | 17 | 16 | 14 | 15 | 14 |
| National average | 2.7% | 2.7% | 2.5% | 2.6% | 2.4% |
| Peer States ^a | 2.7% | 2.7% | 2.5% | 2.5% | 2.5% |
| OECD Countries Average | 2.2% | 2.3% | 2.2% | 2.3% | 2.3% |
| Top 3 Countries | | | | | |
| Finland | | | | | 3.5% |
| Japan | | | | | 3.1% |
| Korea | | | | | 2.9% |

Source: The National Science Foundation (national data), Organisation for Economic Cooperation and Development (international data).
 Note: In order to scale the measure across states, the indicator was divided by gross domestic product by state which is provided by the Bureau of Economic Analysis.

China's National Talent Development Plan (2010-2020)



benchmarking

- different type of analysis
 - system-wide rather than institutional
 - multi-dimensional
 - alignment of key dimensions
- actionable policy levers
 - informed decisions
 - avoiding complacency (like rankings)



