If ranking is the disease, is benchmarking the cure?

Jamil Salmi
Tertiary Education Coordinator
Berlin, 7 October 2010

outline of the presentation

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

Higher Education Evaluation & Accreditation Council of Taiwan

STRIVING FOR EXCELLENCE WITH FAIRNESS AND PROFESSIONALISM

QS TOPUNIVERSITIES

Ranking Web of World Universities

January 10

THE WORLD UNIVERSITY RANKINGS

CHE Centrum für Hochschulentwicklung

U.S.News & WORLD REPORT

Tertiary Education Commission
Te Amorangi Mātauranga Matua

Professor TOP LISTS 2009-2010

FT.com FINANCIAL TIMES

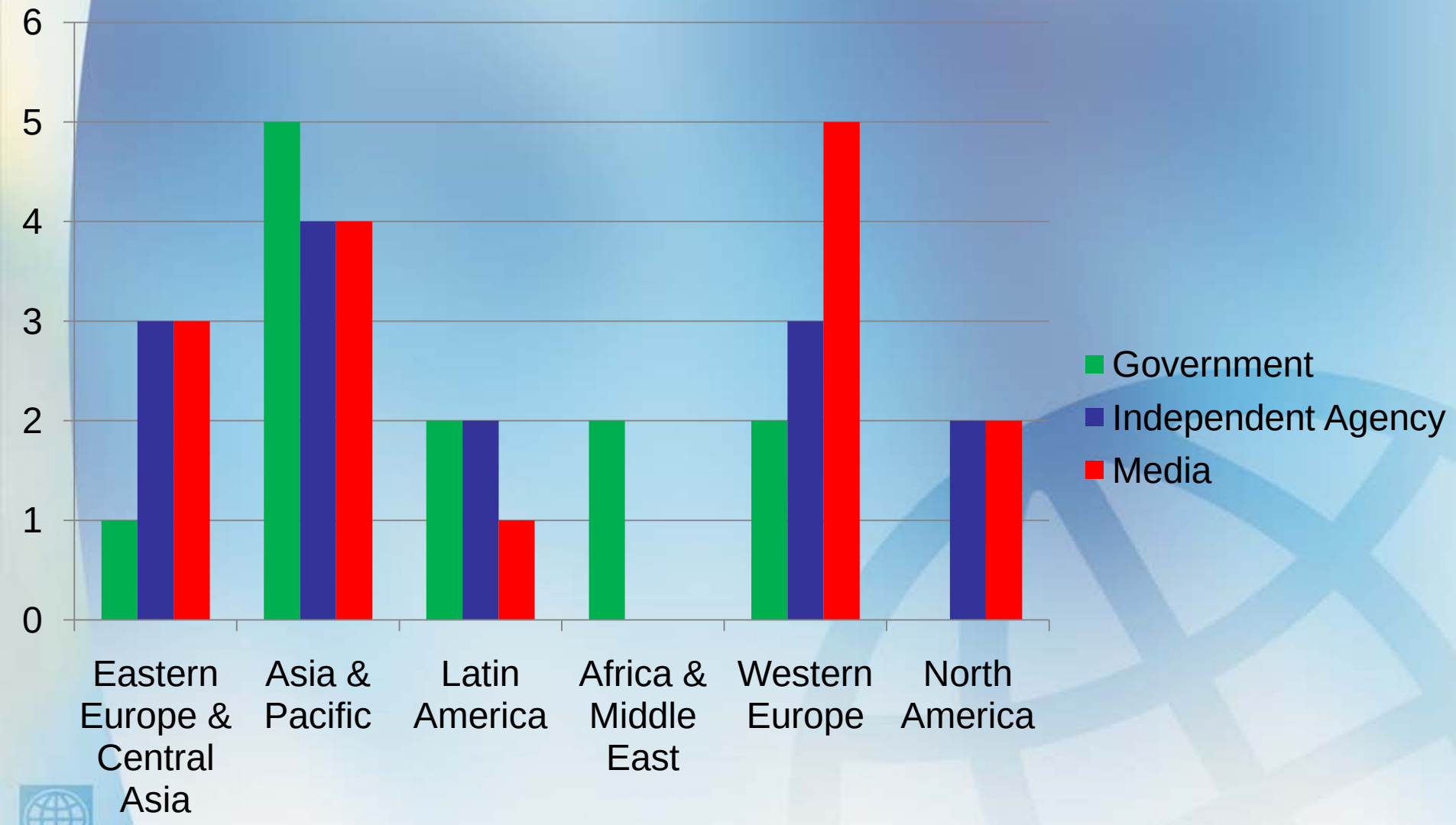
BusinessWeek online

Academic Ranking of World Universities

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)

who prepares the rankings?



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DIRECTIONS IN DEVELOPMENT
Human Development

The Challenge of Establishing World-Class Universities

Jamil Salmi

THE WORLD BANK

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

TIMES ONLINE

From The Times

May 14, 2008

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

(Ian Allen/The Times)

Red Queen effect

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?

GHOSTBUSTERS

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 Inform
Links de Interés
Futuro Laboral
El sitio www.futurolaboral.cl es un servicio de inform
pública desarrollado por el Sistema Nacional de informac
la Educación Superior (SIES) de la División de Edu
Superior del MINEDUC destinado a los estudiantes
enseñanza media y superior, sus familias, profesc
orientadores, académicos, medios de comunicación, emp
y empleadores.
Futuro Laboral actualmente informa sobre 85 ca
profesionales y 50 técnicas, que concentran más del 8

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

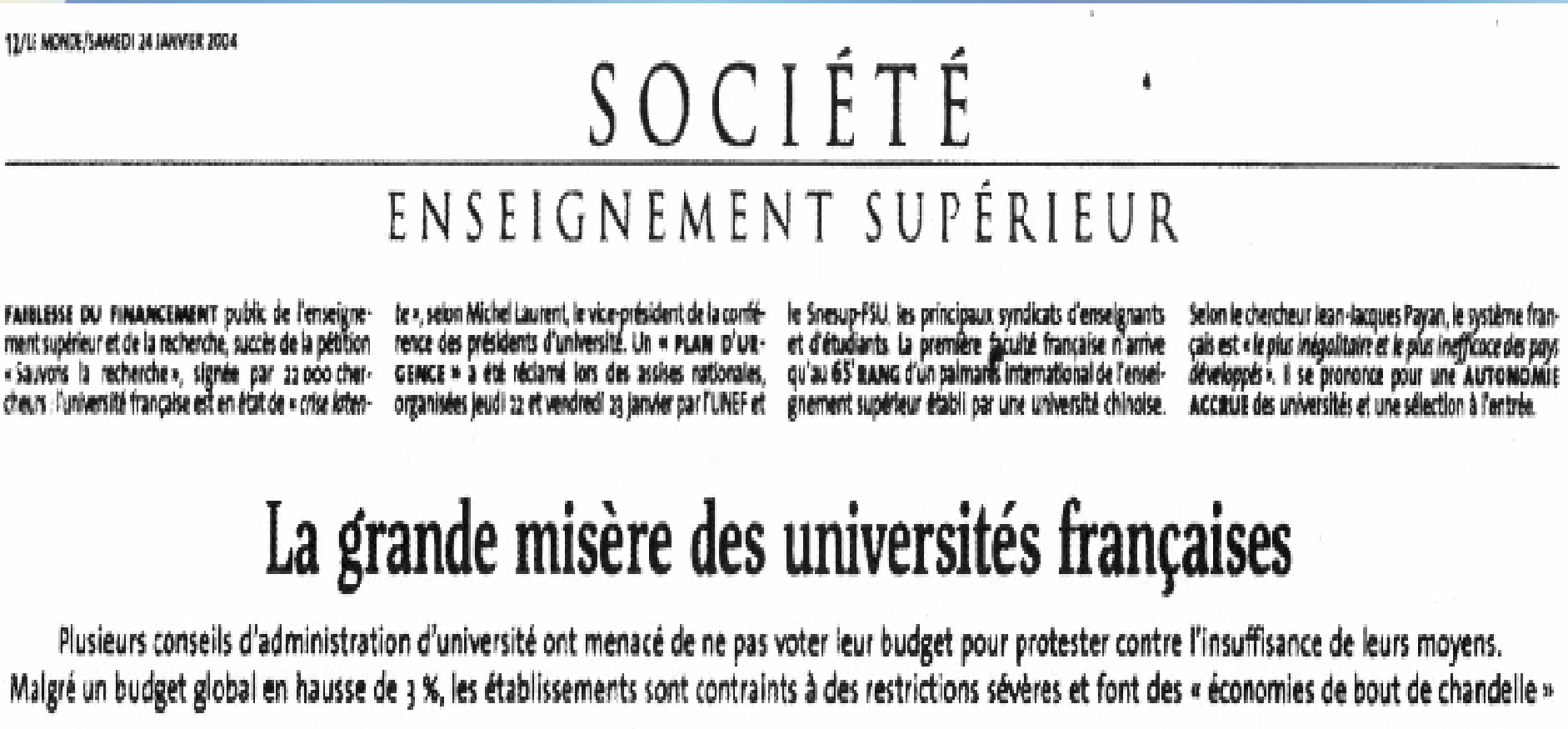
positive aspects at institutional level

- 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

national level



12/LE MONDE/SAMEDI 24 JANVIER 2004

SOCIÉTÉ

ENSEIGNEMENT SUPÉRIEUR

FAIBLESSE DU FINANCEMENT public de l'enseignement supérieur et de la recherche, succès de la pétition « Sauvons la recherche », signée par 22 000 chercheurs : l'université française est en état de « crise latente », 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 65e 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 inégalitaire et le plus inefficace des pays développés* ». Il se prononce pour une AUTONOMIE accrue des universités et une sélection à l'entrée.

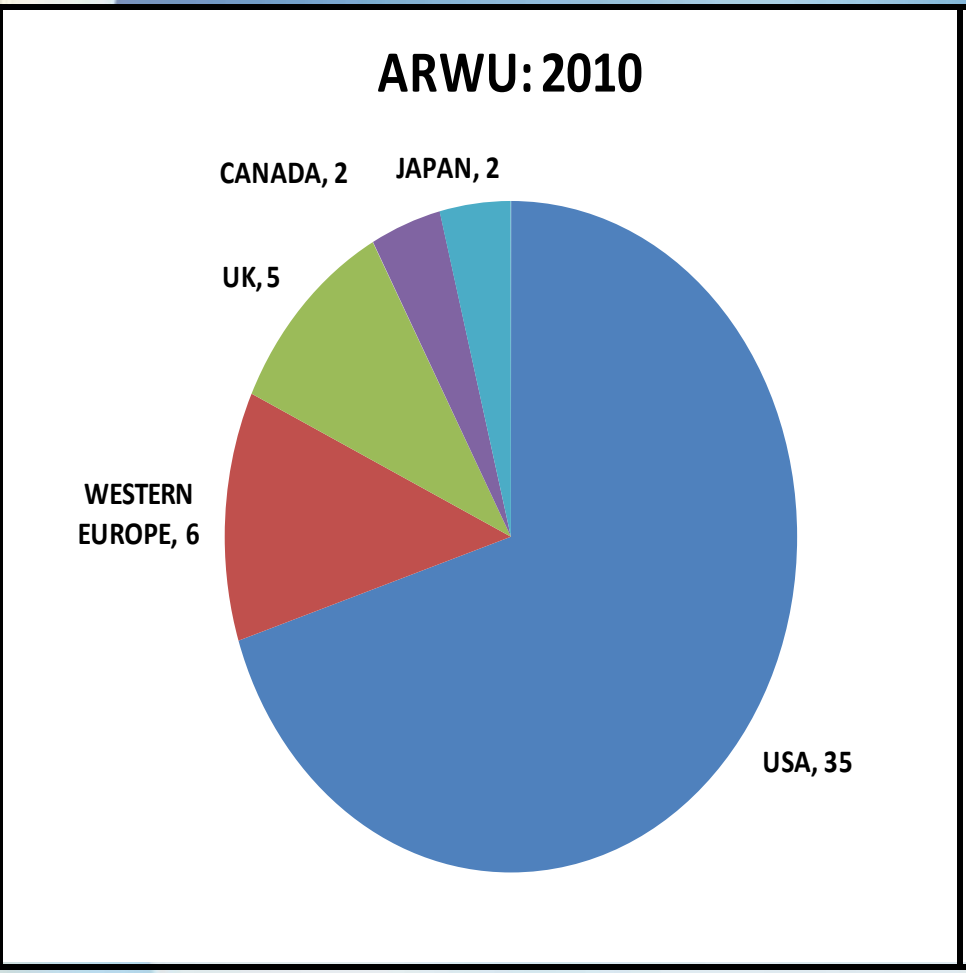
La grande misère des universités françaises

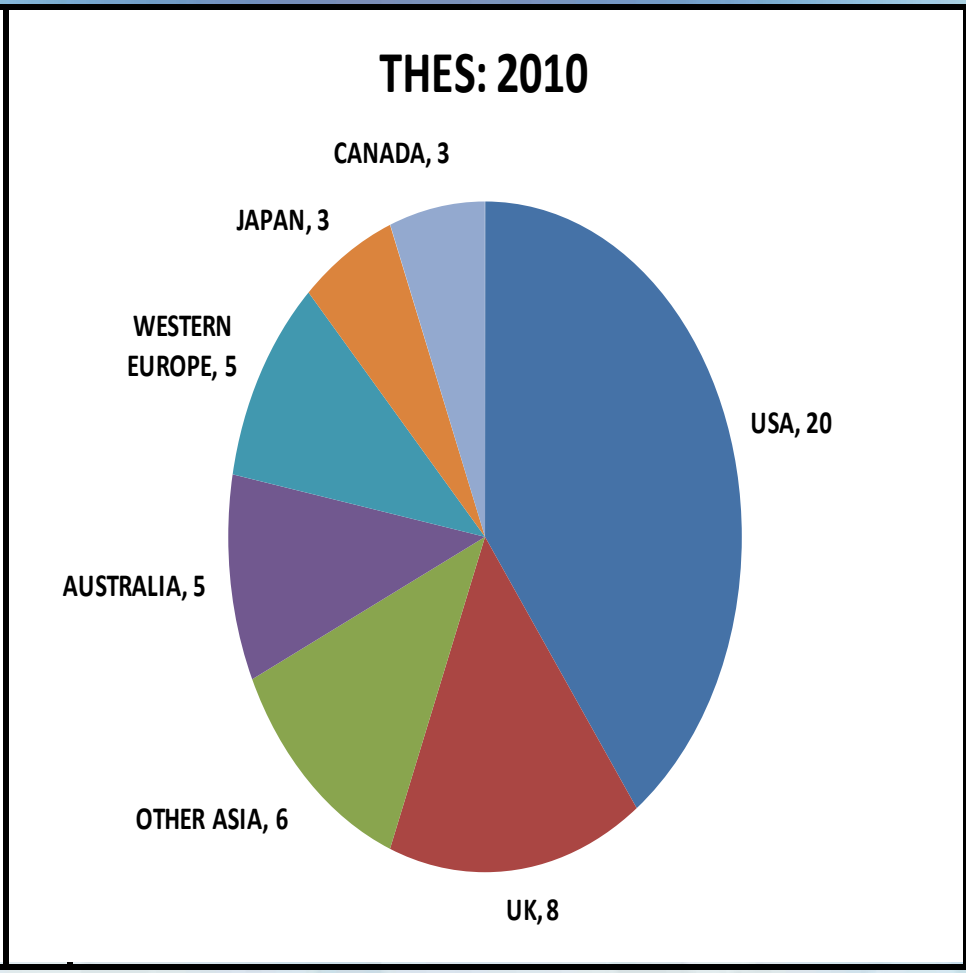
Plusieurs conseils d'administration d'université ont menacé de ne pas voter leur budget pour protester contre l'insuffisance de leurs moyens. Malgré un budget global en hausse de 3 %, les établissements sont contraints à des restrictions sévères et font des « économies de bout de chandelle »

outline of the presentation

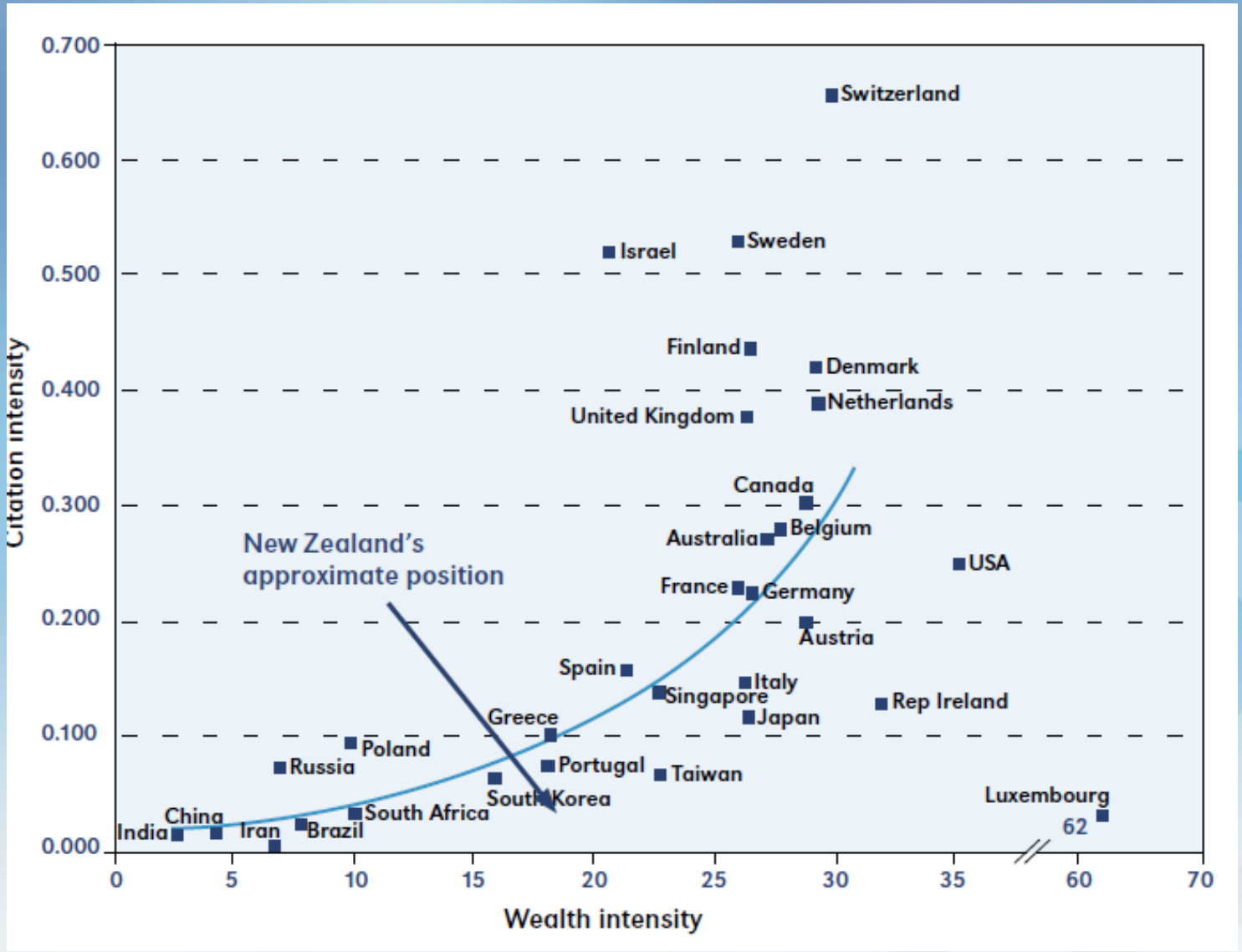
- uses and abuses of rankings
- **from ranking to benchmarking**

top 50 universities (2010)





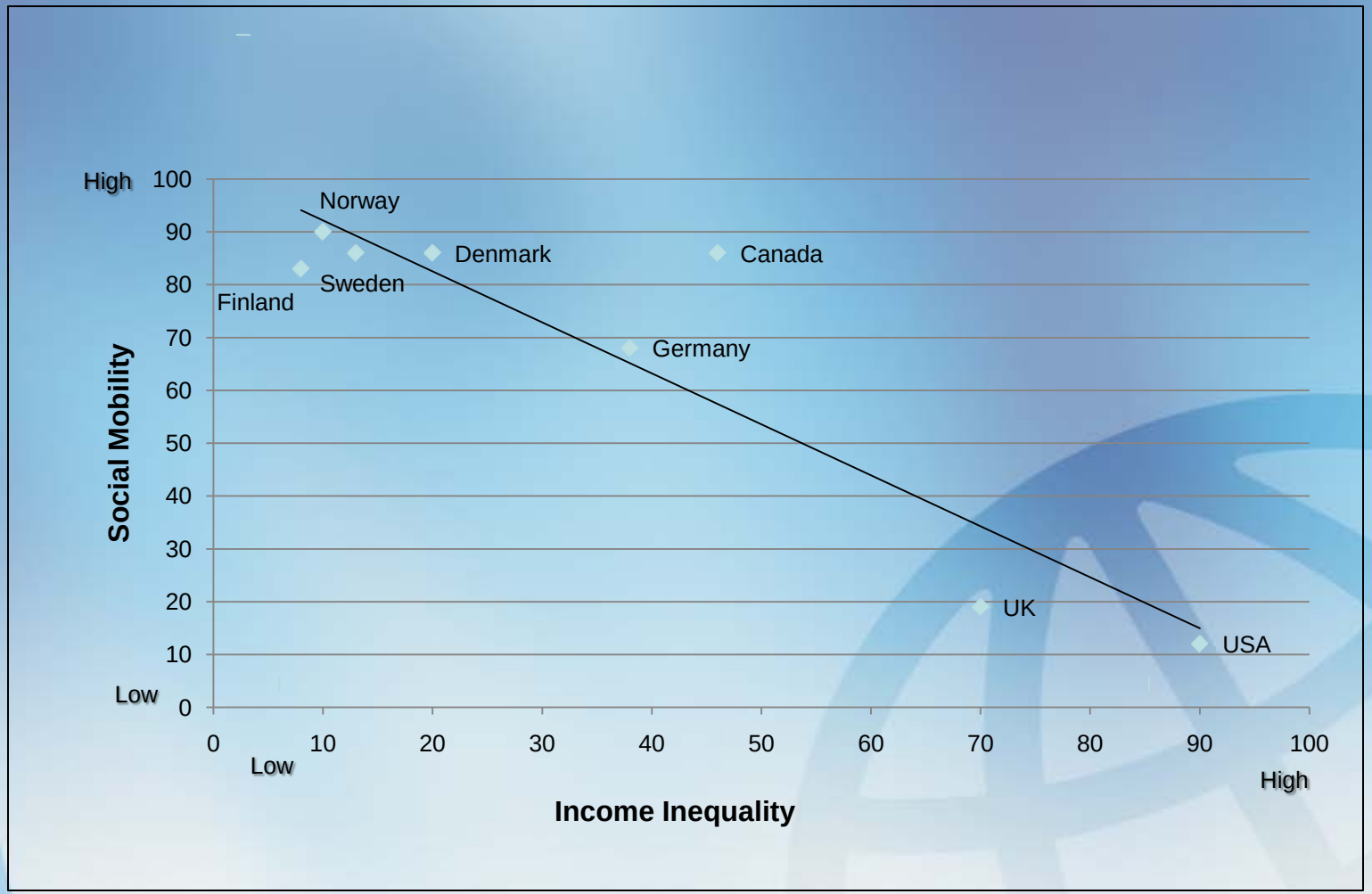
size effect


Citation intensity
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
Switzerland
Israel
Sweden
Finland
Denmark
Netherlands
United Kingdom
Canada
Belgium
Australia
USA
New Zealand's approximate position
France
Germany
Austria
Spain
Italy
Singapore
Rep Ireland
Japan
Greece
Poland
Russia
Portugal
Taiwan
South Korea
Luxembourg
62
China
India
Iran
Brazil
South Africa
0
5
10
15
20
25
30
35
60
70
Wealth intensity

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)

what the rankings lens does not allow us to see

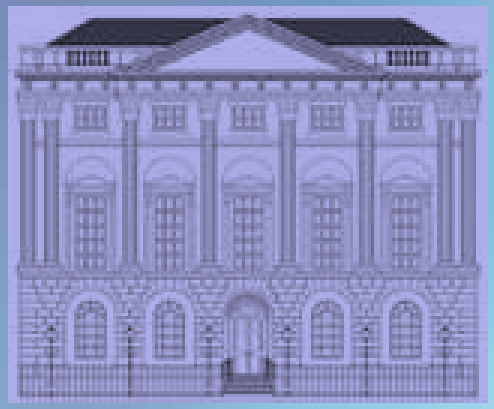
- overall performance of tertiary education systems
- access vs. equity
- quality and relevance
- institutional differentiation
- contribution to local economic and social development (human capital vs. patents)

‘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)

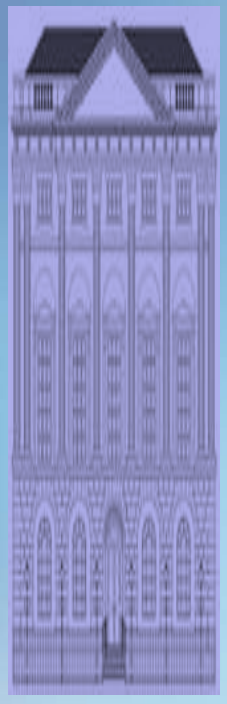
outline of the presentation

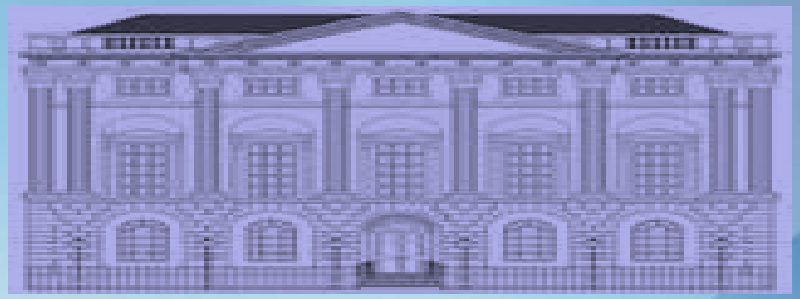
- uses and abuses of rankings
- from ranking to benchmarking
- **benchmarking tertiary education systems**

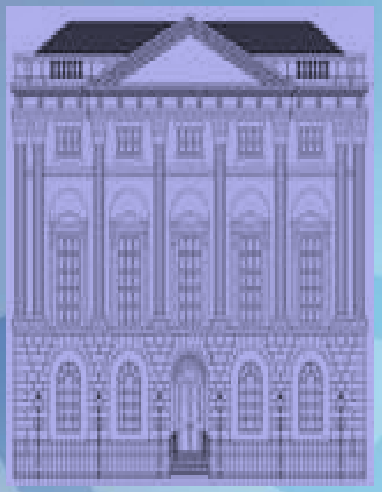
cross-country comparisons help put things into perspective

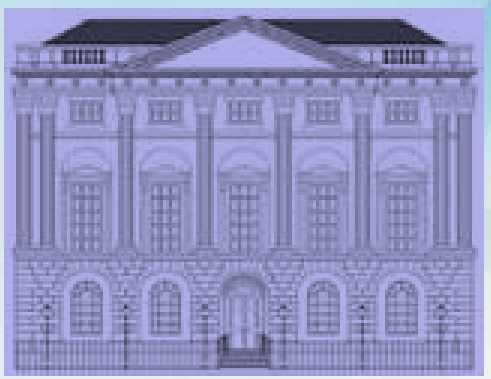


multi-dimension comparisons enriches the diagnosis









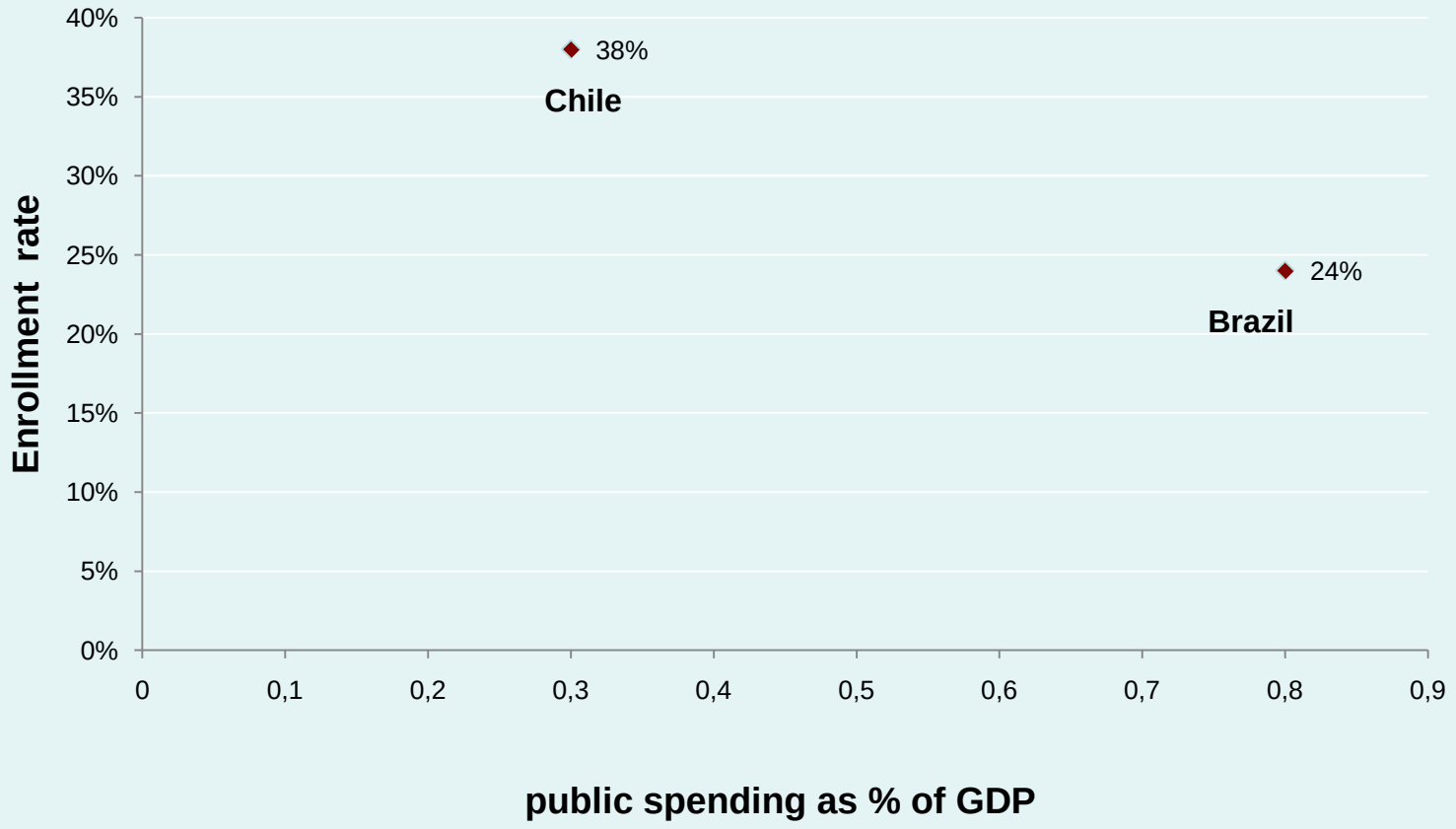
what is benchmarking?

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

purpose

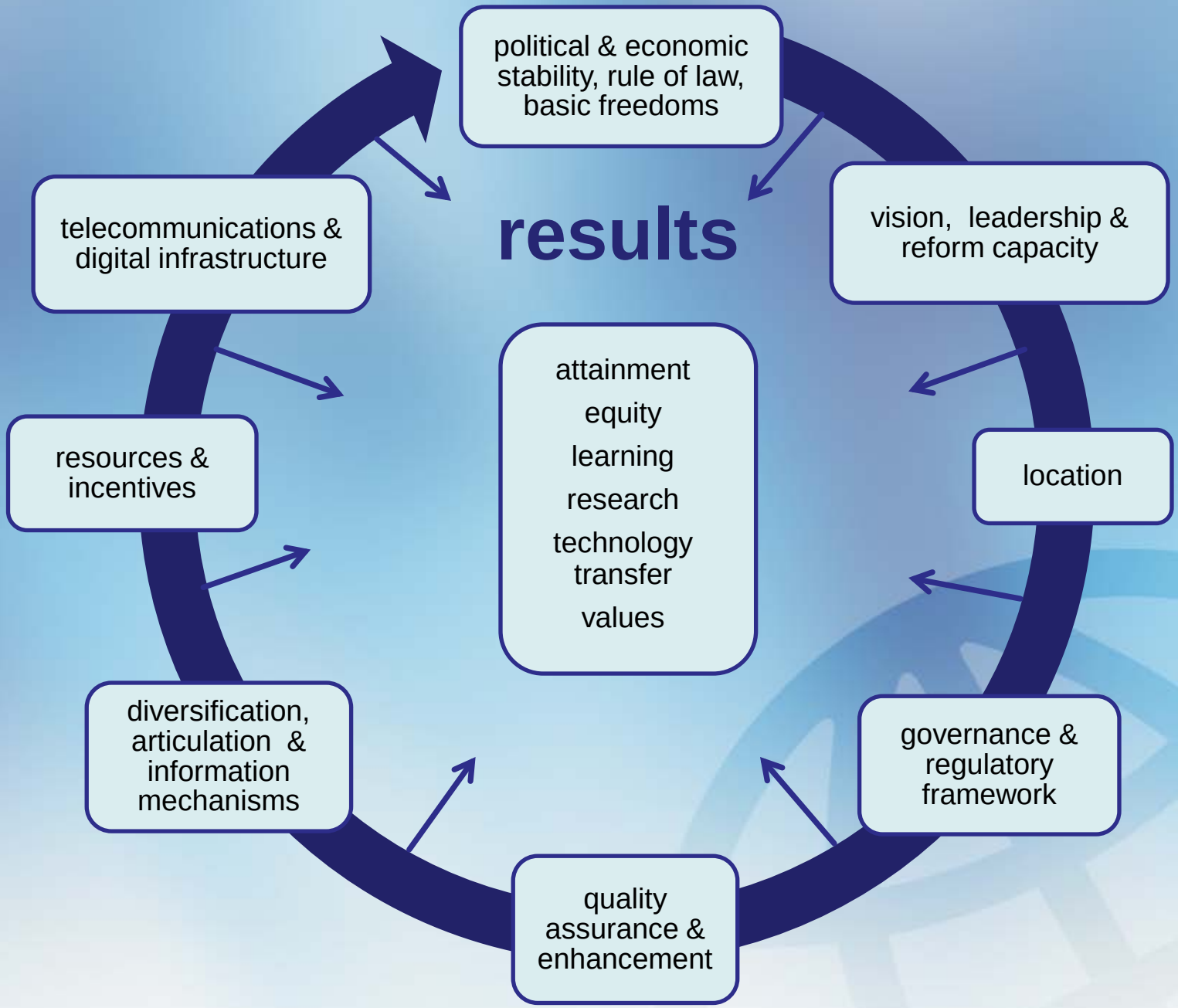
- improving performance
  - diagnosis (identification of areas for improvement)
  - definition of specific corrective interventions
  - no consensus on what countries should do to improve their performance
  - wide variations in system performance with similar funding levels and common country characteristics

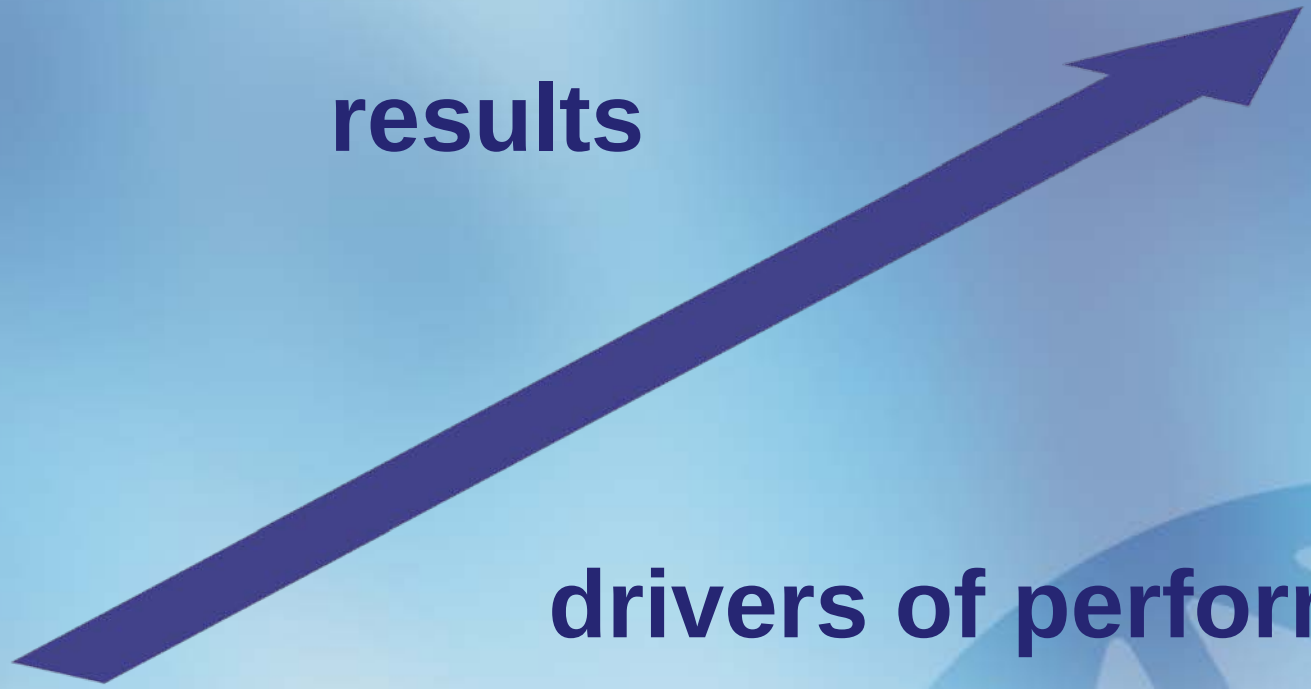
comparing Brazil and Chile



elaborating the theoretical framework

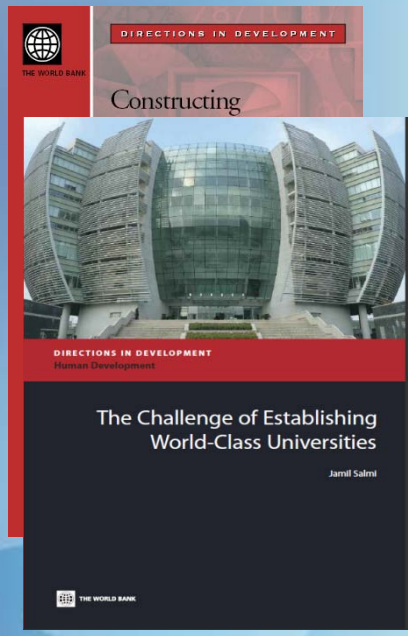
- distinction between performance and health of system
  - how good are the system's actual outcomes?
  - does it operate under conditions known to lead to high performance?
- definition of outcomes / outputs / results
- identification of determinants and causality relationships
  - informed by empirical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

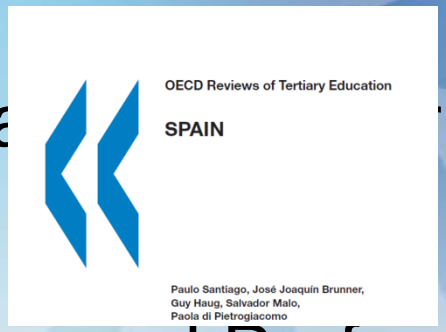

political & economic stability, rule of law, basic freedoms
vision, leadership & reform capacity
location
governance & regulatory framework
quality assurance & enhancement
diversification, articulation & information mechanisms
resources & incentives
telecommunications & digital infrastructure
results
attainment
equity
learning
research
technology transfer
values


2010
results
drivers of performance
2000

justification for conceptual framework

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





three types of indicators

quantitative	• objective measure
qualitative - observed	• objective description
qualitative - interpreted	• value judgement

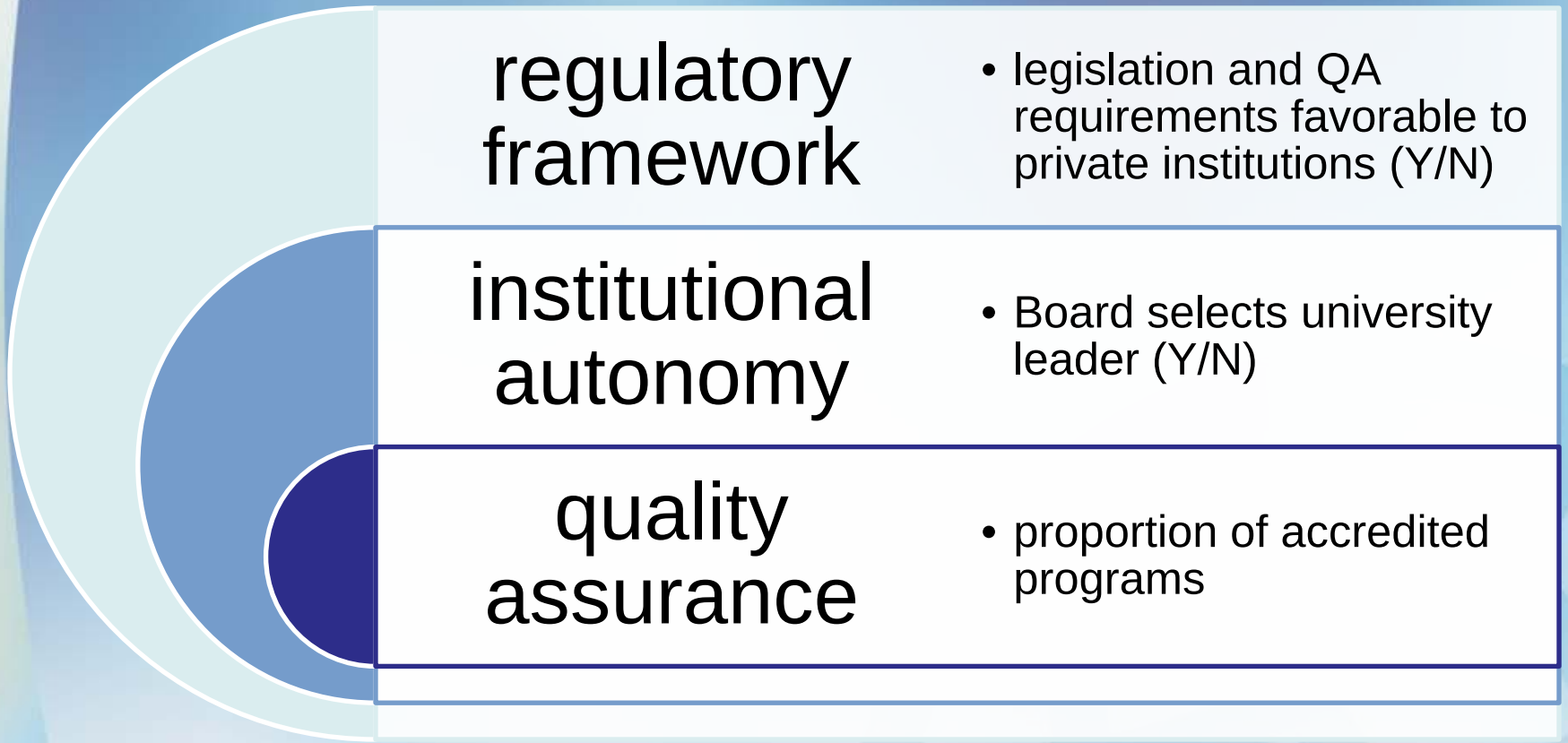
examples of indicators (results)

attainment	• proportion of the working-age population (25-64) with a tertiary degree
achievement gap	• proportion from highest quintile over proportion from lowest quintile
quality	• 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

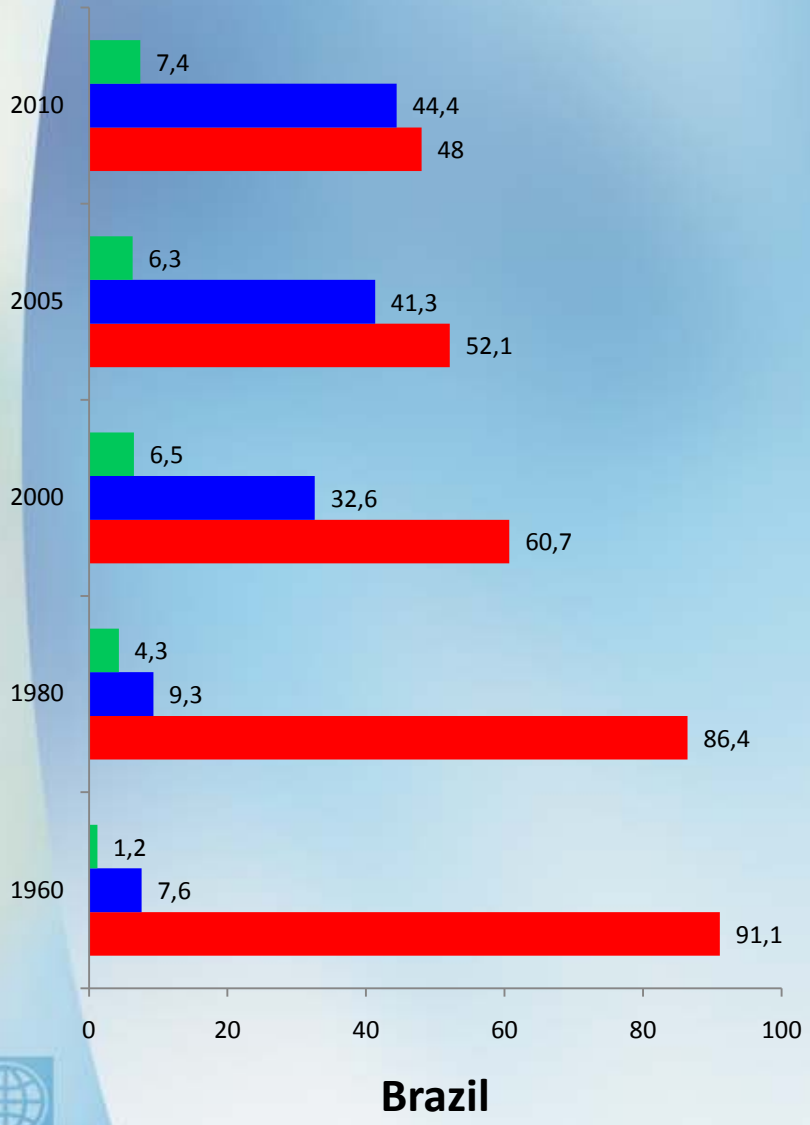
examples of indicators (system health)



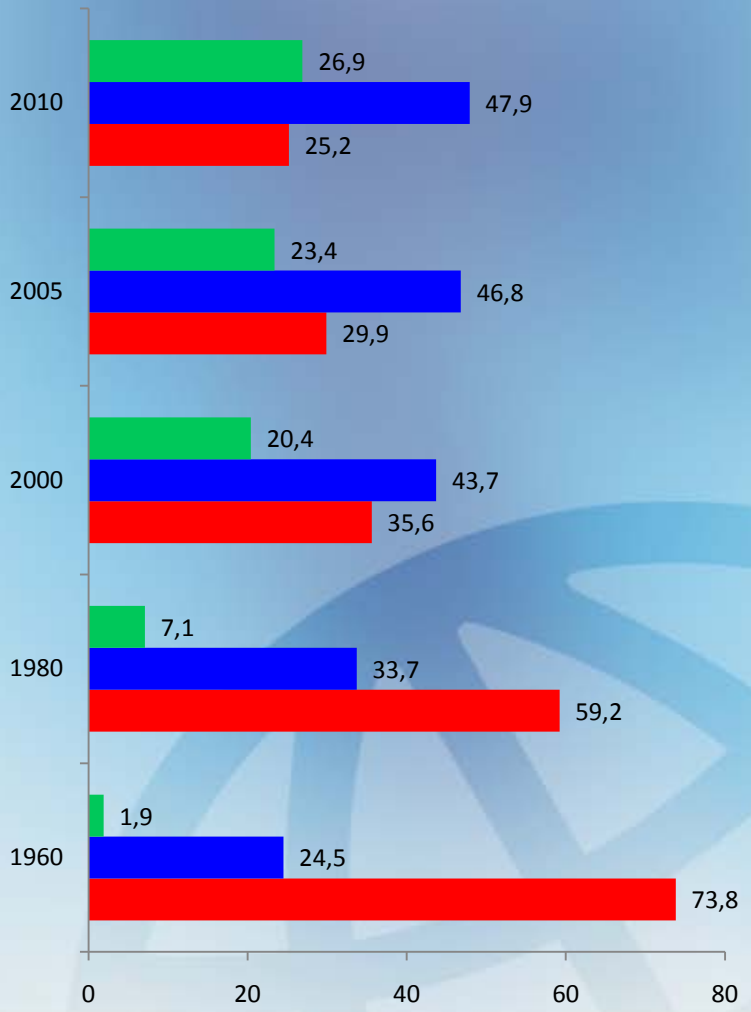
examples of indicators (system health)

financing	• investment in tertiary education as proportion of GDP
allocation mechanisms	• proportion of public funds allocated with performance criteria
resource utilization	• average cost of a graduate

comparing Brazil and Chile's attainment



Brazil

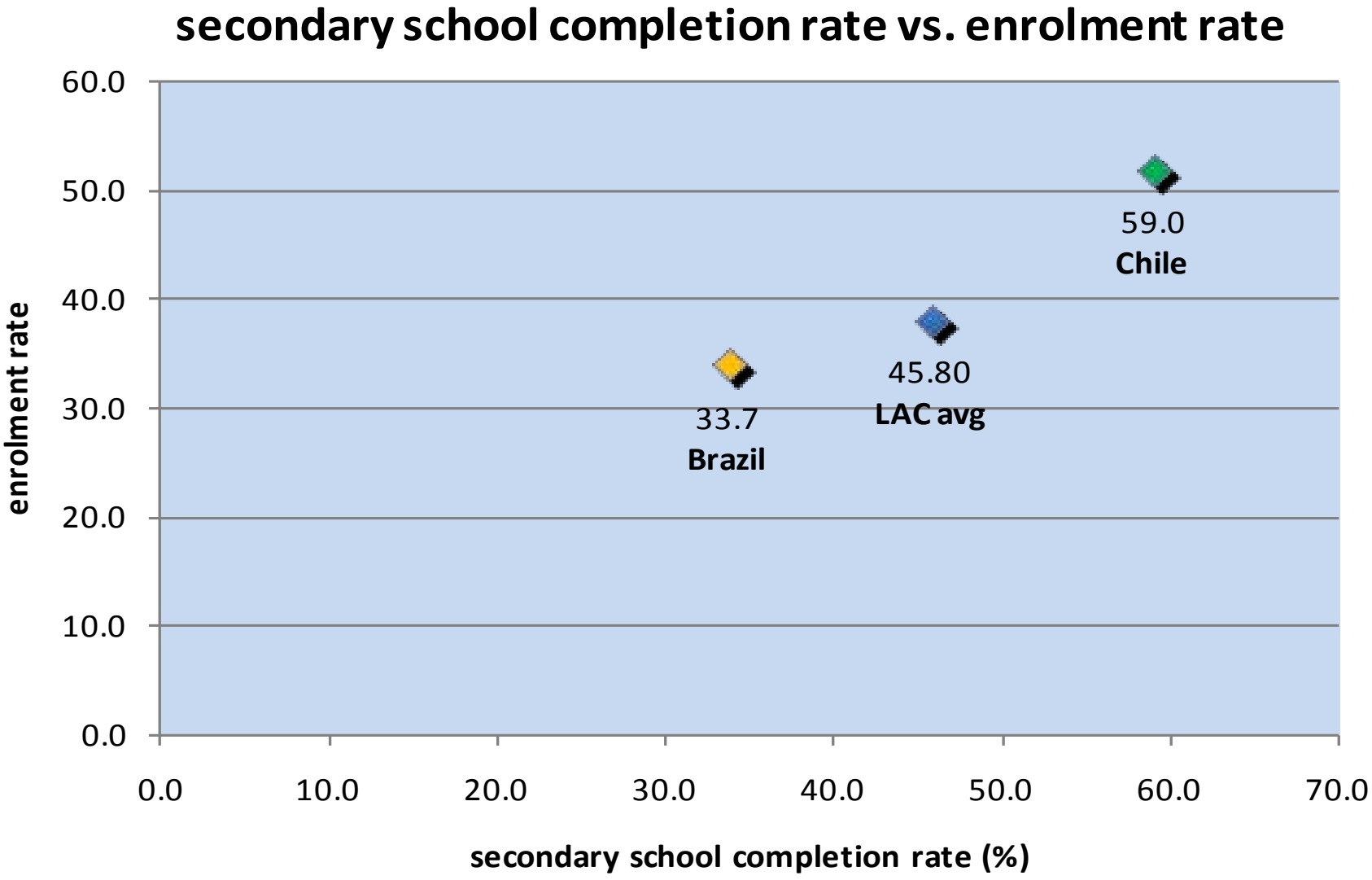


Chile

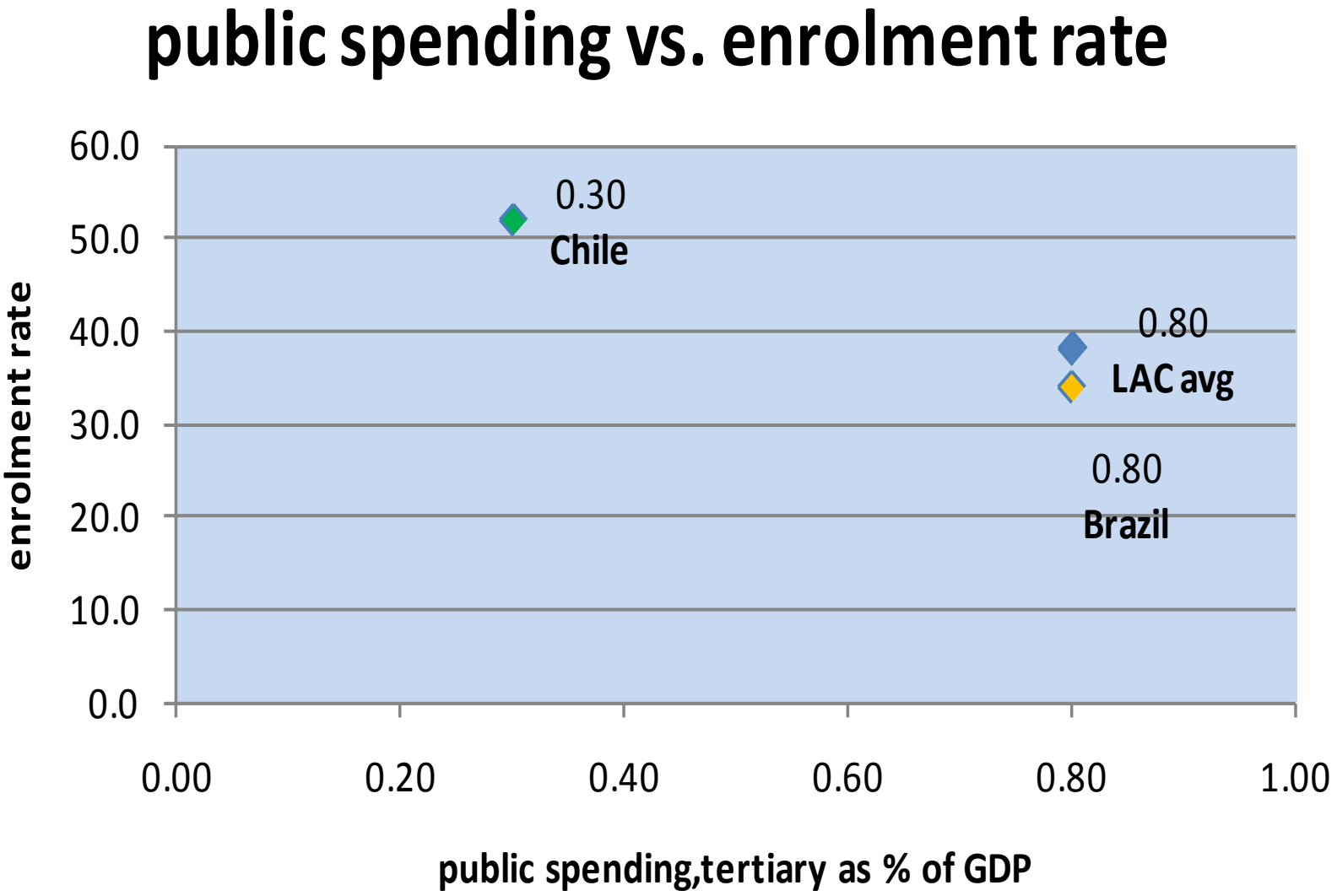
key drivers of enrolment

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) (%)

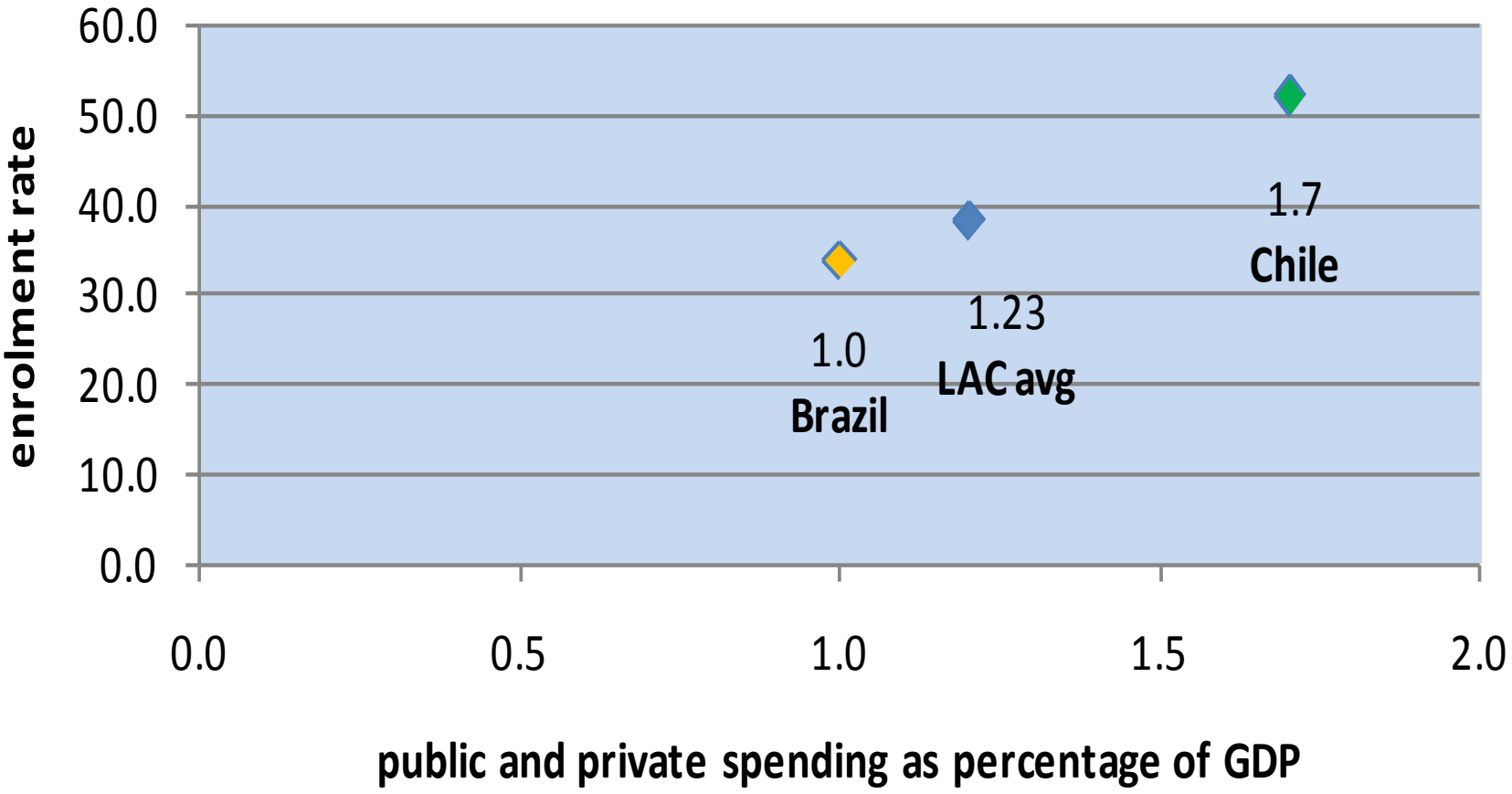
secondary school completion rate



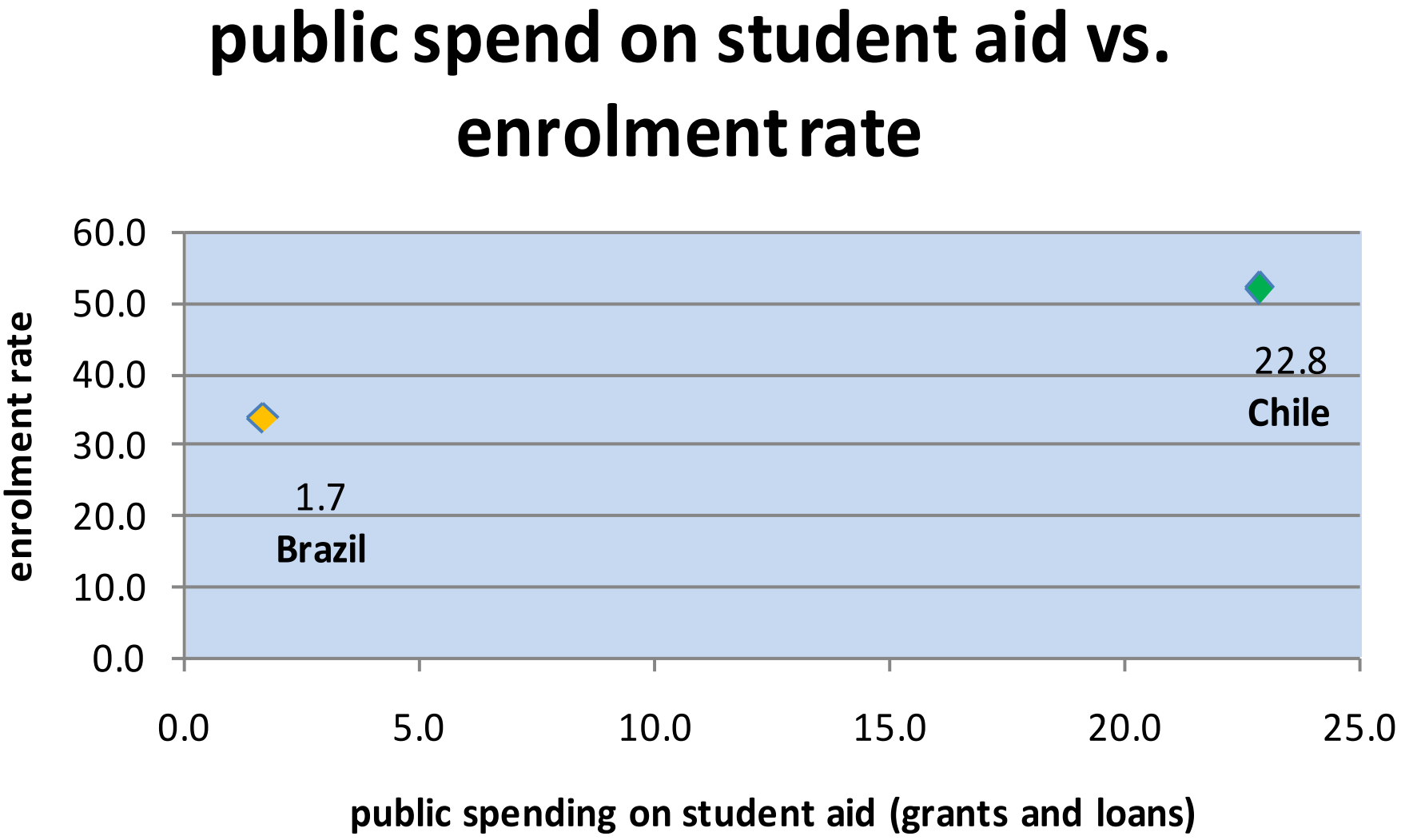
public spending



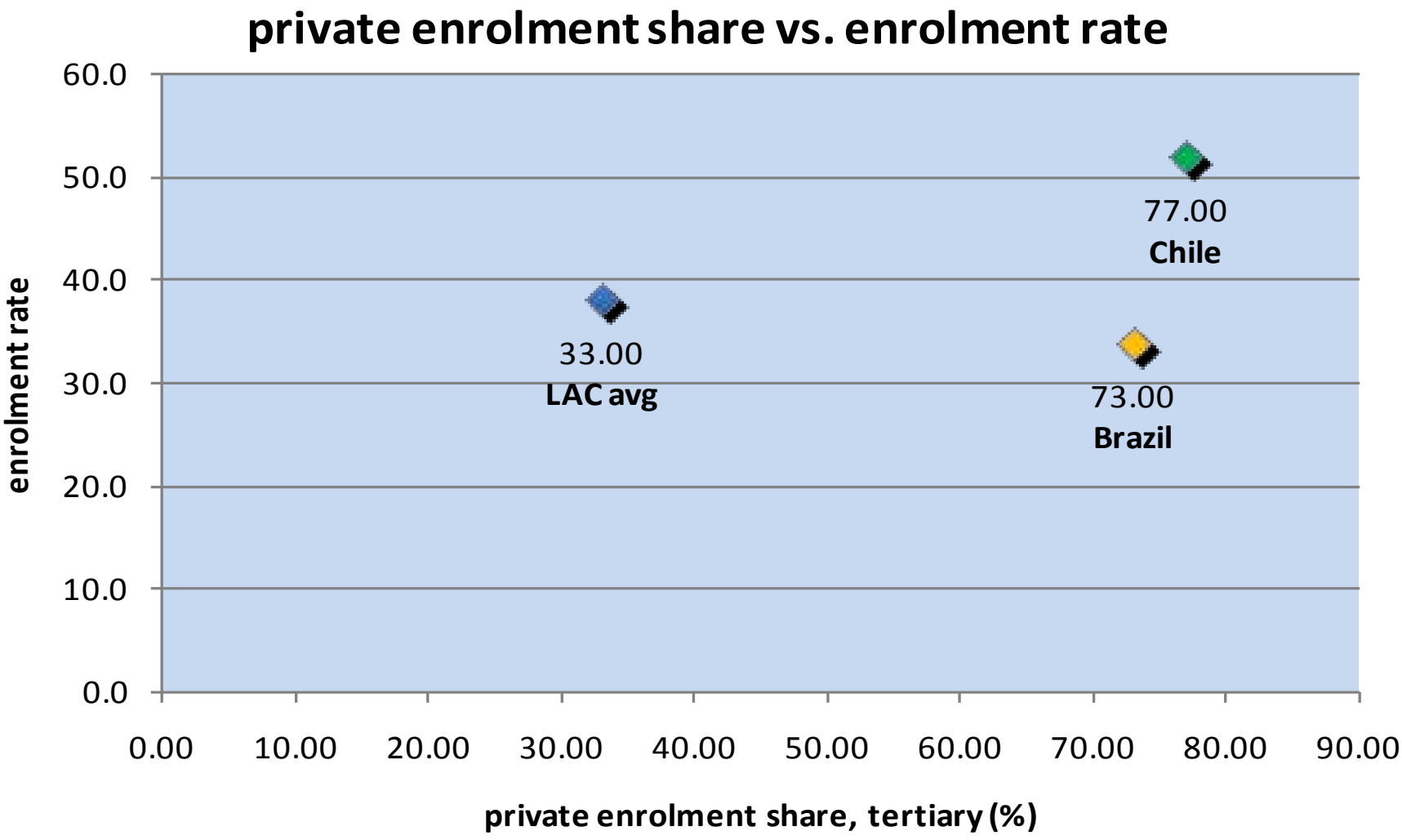
public and private spending as % of GDP vs. enrolment rate



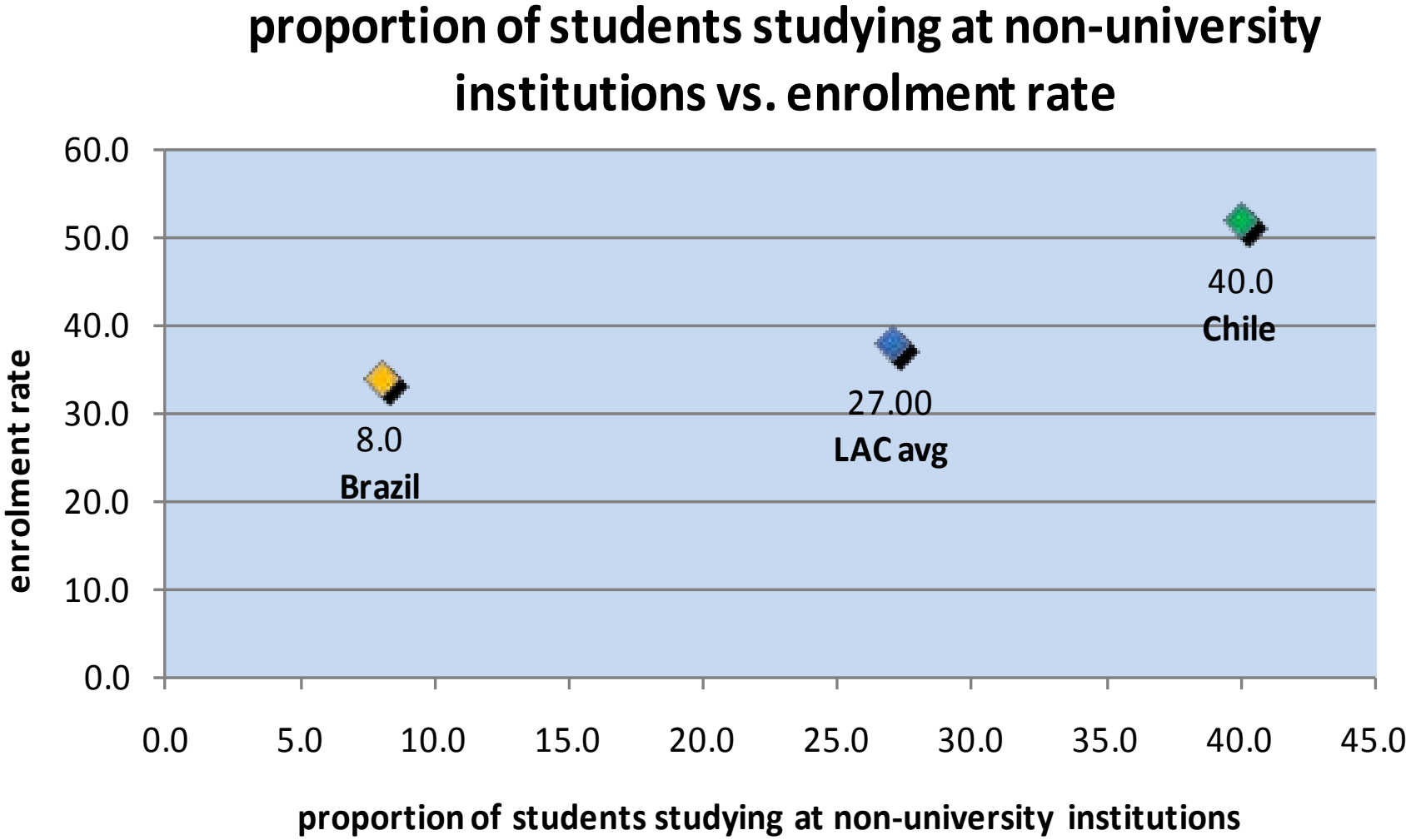
student aid


public spend on student aid vs. enrolment rate
enrolment rate
60.0
50.0
40.0
30.0
20.0
10.0
0.0
1.7
Brazil
22.8
Chile
0.0
5.0
10.0
15.0
20.0
25.0
public spending on student aid (grants and loans)

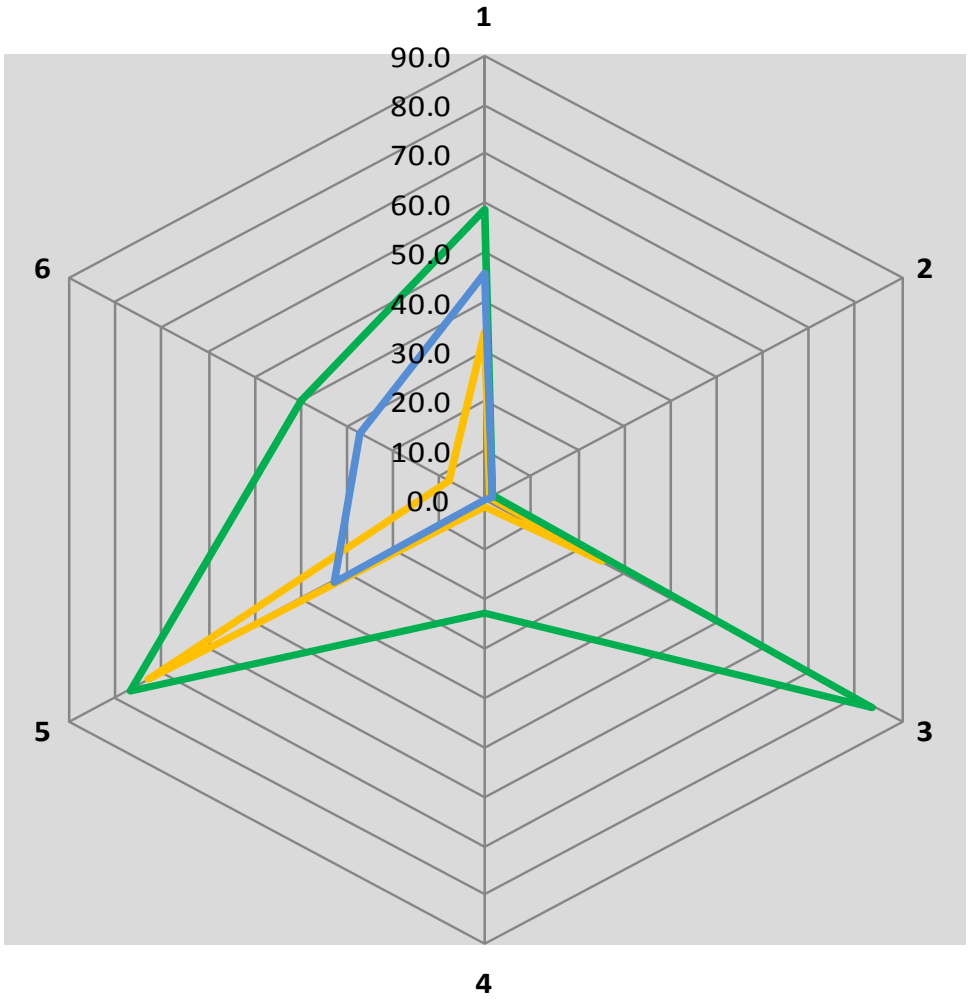
private enrolment



enrollment in non-university institutions



summary comparison of Chile, Brazil and LAC average

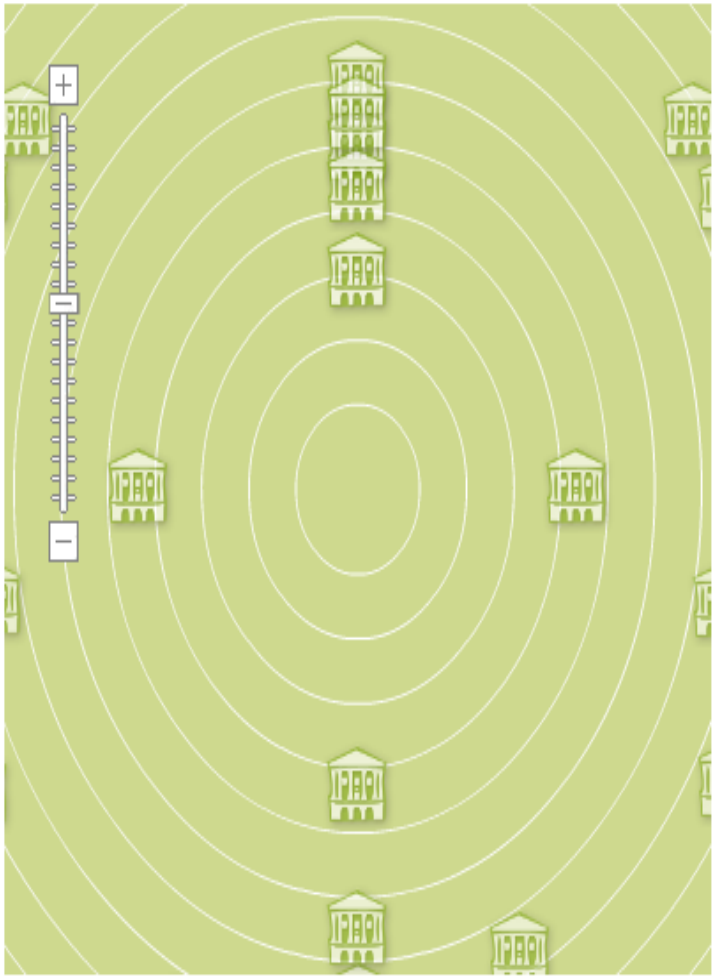


1- secondary school completion rate
2- public & private spending as % GDP
3- share of private spending
4- public spending on student aid
5-private enrolment share
6- students at non-university institutions

CHE ranking interactive website

Universities

You can only choose up to 10 indicators at once.



MY INDICATORS:

(S)= Student's jugdements (F)= Facts (P)= Professor's judgements

Academic studies and teaching

- [x] Contact between students (S)
- [x] Counselling (S)
- [x] Courses offered (S)
- [x] E-Learning (S)
- [x] Study organisation (S)
- [x] 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)
- [x] Reputation for academic studies and teaching (P)
- [x] Research Reputation

Research

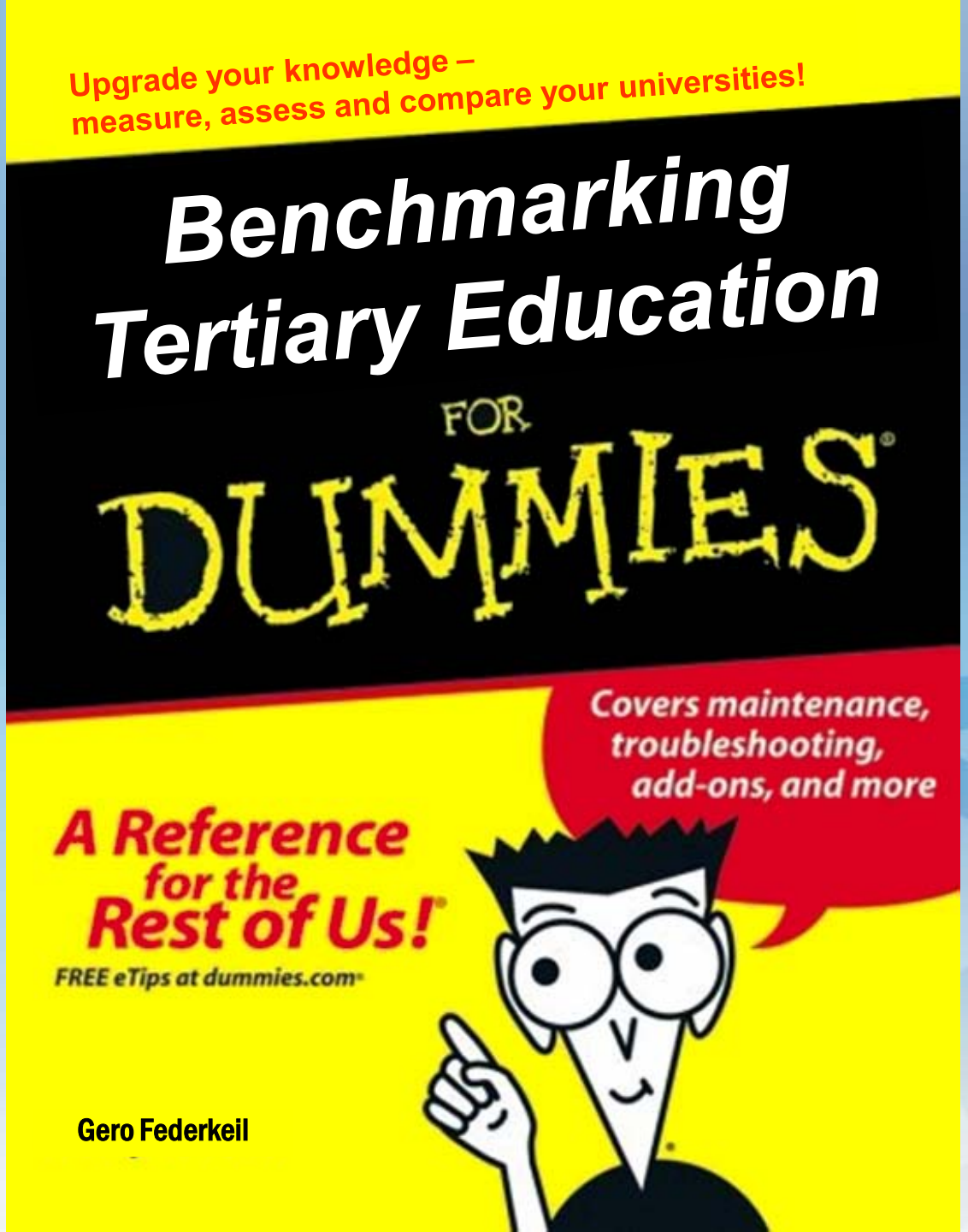
- [x] Many internationally visible publications (F)
- [x] many doctorates (F)
- [ ] many publications (F)
- [ ] much third party funding (F)

Town and University

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

view rank groups in greyshades »

conclusion


Upgrade your knowledge –
measure, assess and compare your universities!
Benchmarking
Tertiary Education
FOR
DUMMIES
Covers maintenance, troubleshooting, add-ons, and more
A Reference for the Rest of Us!
FREE eTips at dummies.com
Gero Federkeil

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

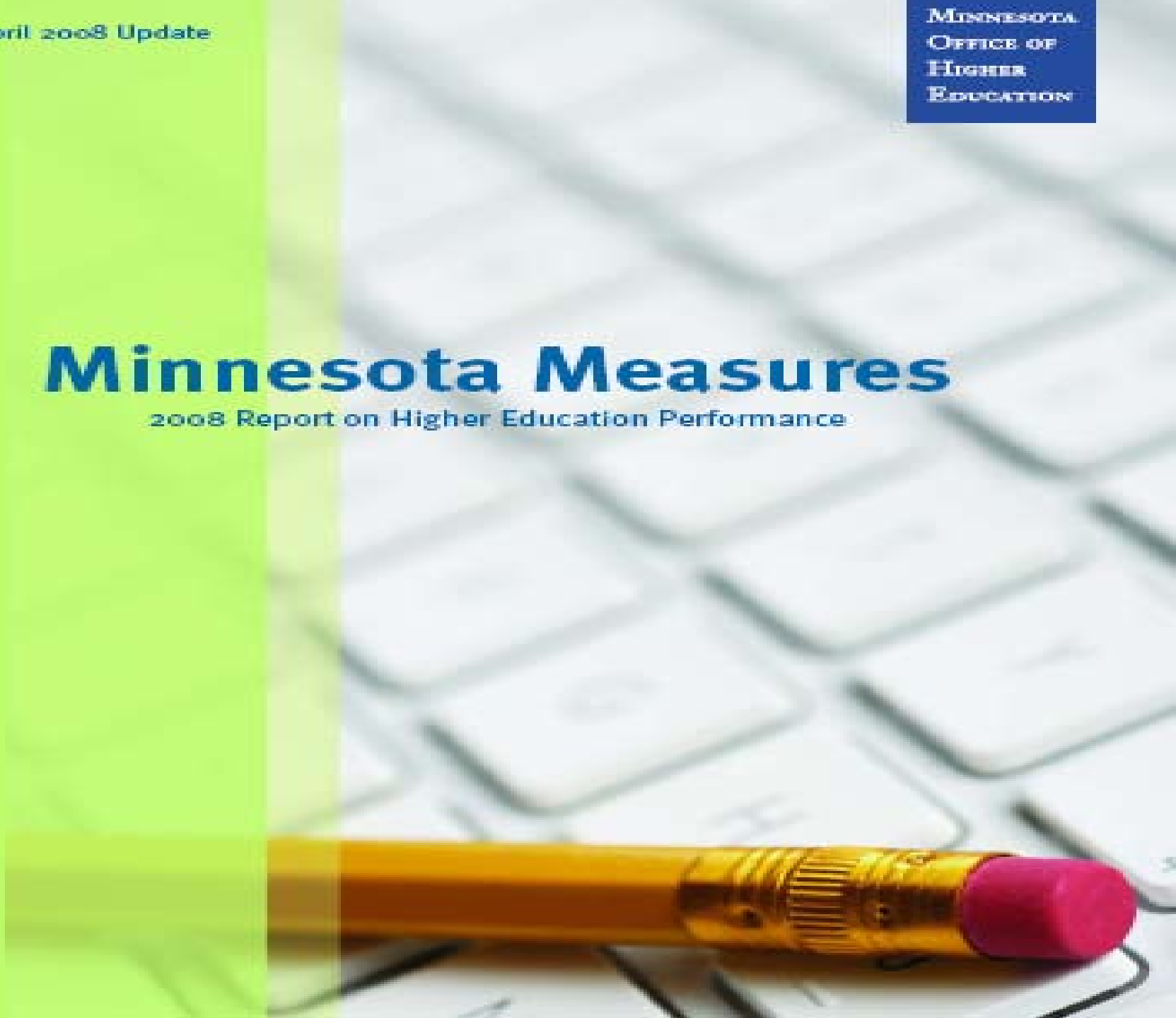
- different type of analysis
  - system-wide rather than institutional
  - multi-dimensional
  - alignment of key dimensions
- actionable policy levers
  - informed decisions

April 2008 Update

Minnesota Office of Higher Education

Minnesota Measures

2008 Report on Higher Education Performance



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[5]	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.