Session 6.5 - Expanding access to higher education and improving scientific research activities: can Latin America deliver on both?

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Going Global 2014

The conference for leaders of international education
29 April–1 May, Miami

Inclusion, innovation, impact

Higher Education in Brazil: the tension between expanding access and improving research

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Challenges for Higher Education in Brazil

- Expanding access
  - Despite the enormous effort in the last two decades, which saw undergraduate enrollment grow from 1.4 to 7.5 million, still only 15% of those in college age are enrolled in HEIs in Brazil
  - 75% of all enrollment occurs in private HEIs, of which 2/3 are for profit
  - Very low quality of public secondary education limits access of population of low SES
- Academic quality issues
  - Undergraduate education: results from the National Assessment System indicate that most of those graduating, especially from the private system, show very low skill levels
  - Graduate education: despite a very healthy growth pattern, it still lacks international insertion in many areas, high levels of regional disparities and mostly concentrated in the public HEIs
  - Research: despite constant growth in terms of output, still low level of international collaboration and relatively low impact (as measured by citations)
- Internationalization
  - Linguistic barrier still very strong
  - Very low levels of internationalization of faculty and students
  - Some areas show almost no international collaboration in research/exchange of scholars

Undergraduate and graduate expansion 1960-2012

- 1965 – Ministry of Education establishes the graduate education accreditation system
  - 35 programs: 11 doctorate, 26 master
  - 150,000 undergraduate students, 50% in public HEIs
- 2000 –
  - 1,420 masters and 865 doctorate programs
  - 60,000 masters and 33,000 doctorate students
  - 2.7 million undergraduate students, 33% in public HEIs
- 2012 –
  - 2,874 masters and 1,697 doctorate programs
  - 110,000 masters and 80,000 doctorate students
  - 6.7 million undergrad students, 25% in public HEIs
  - Sources: MEC/INEP, MEC/Geocapes, Elizabeth Balbachevsky (2005)

PhD degrees and publications – 1991-2011

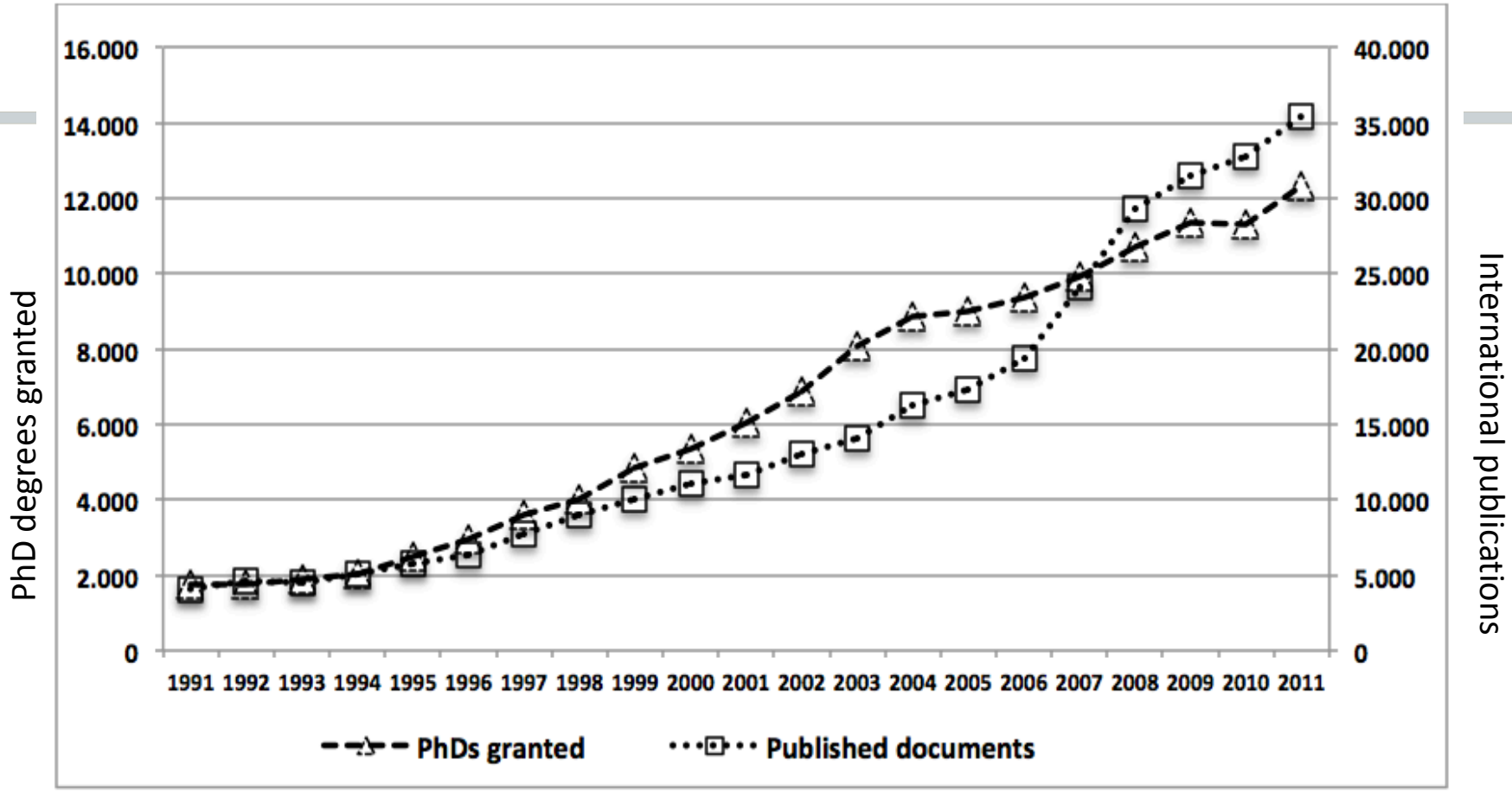


Figure 2 - PhDs granted (left axis) and internationally published documents (right axis), 1991-2011. Sources: Ministry of Science and Technology and InCites, Thomson Reuters.

From: Brito Cruz & Pedrosa, Past and present trends at the Brazilian research university. In: Building success in a global university, Amrhein & Baron, Lemmens, Berlin, 2013.

Relative impact factor and Publications/100,000 pop

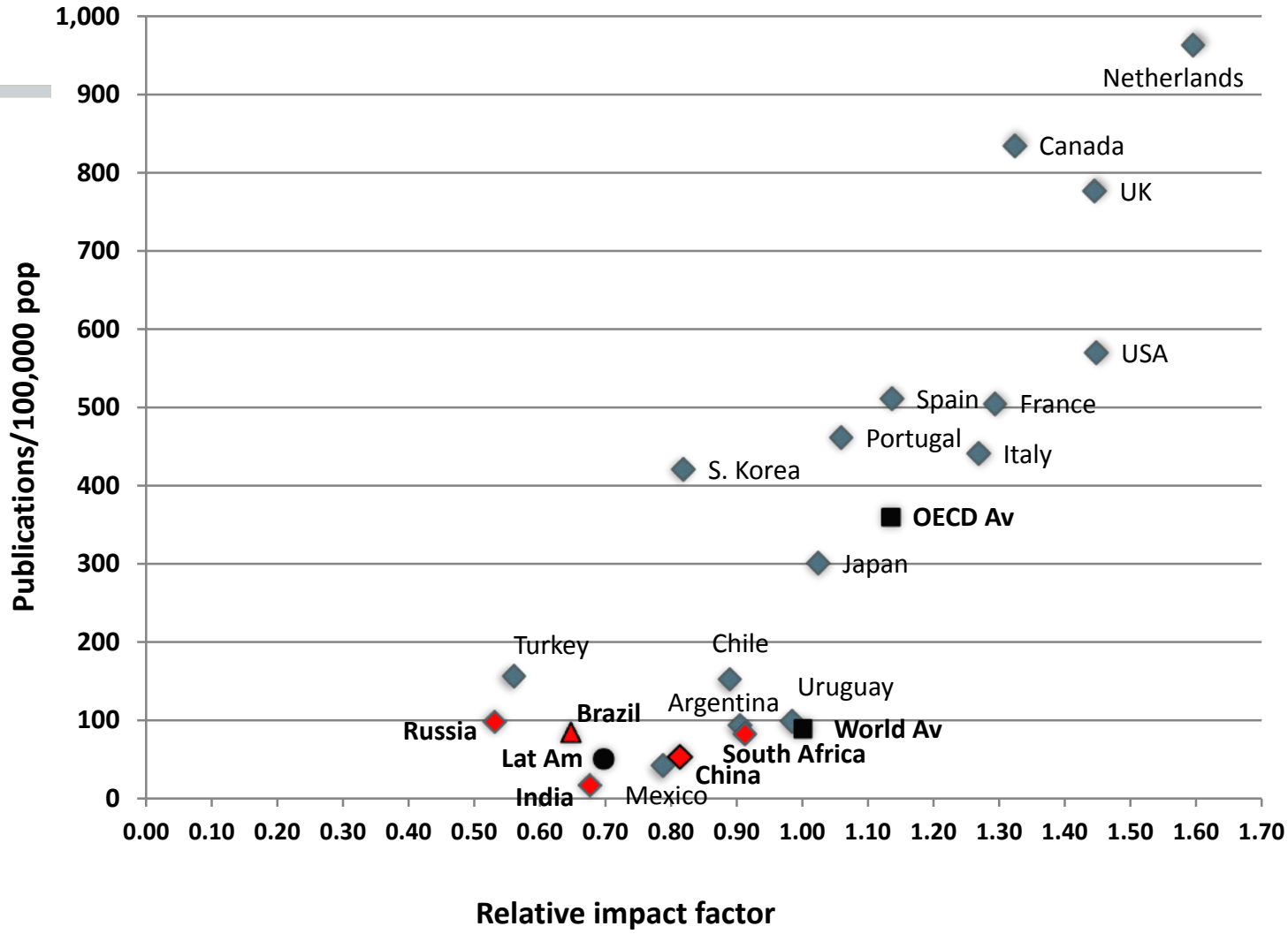
2008-2012 InCites/ThomsonReuters (Fapesp)

Publications:

at least one of authors is from country/region

Relative impact factor:

number of citations per paper relative to the world average



Sources: InCites (Thomson Reuters), World Bank

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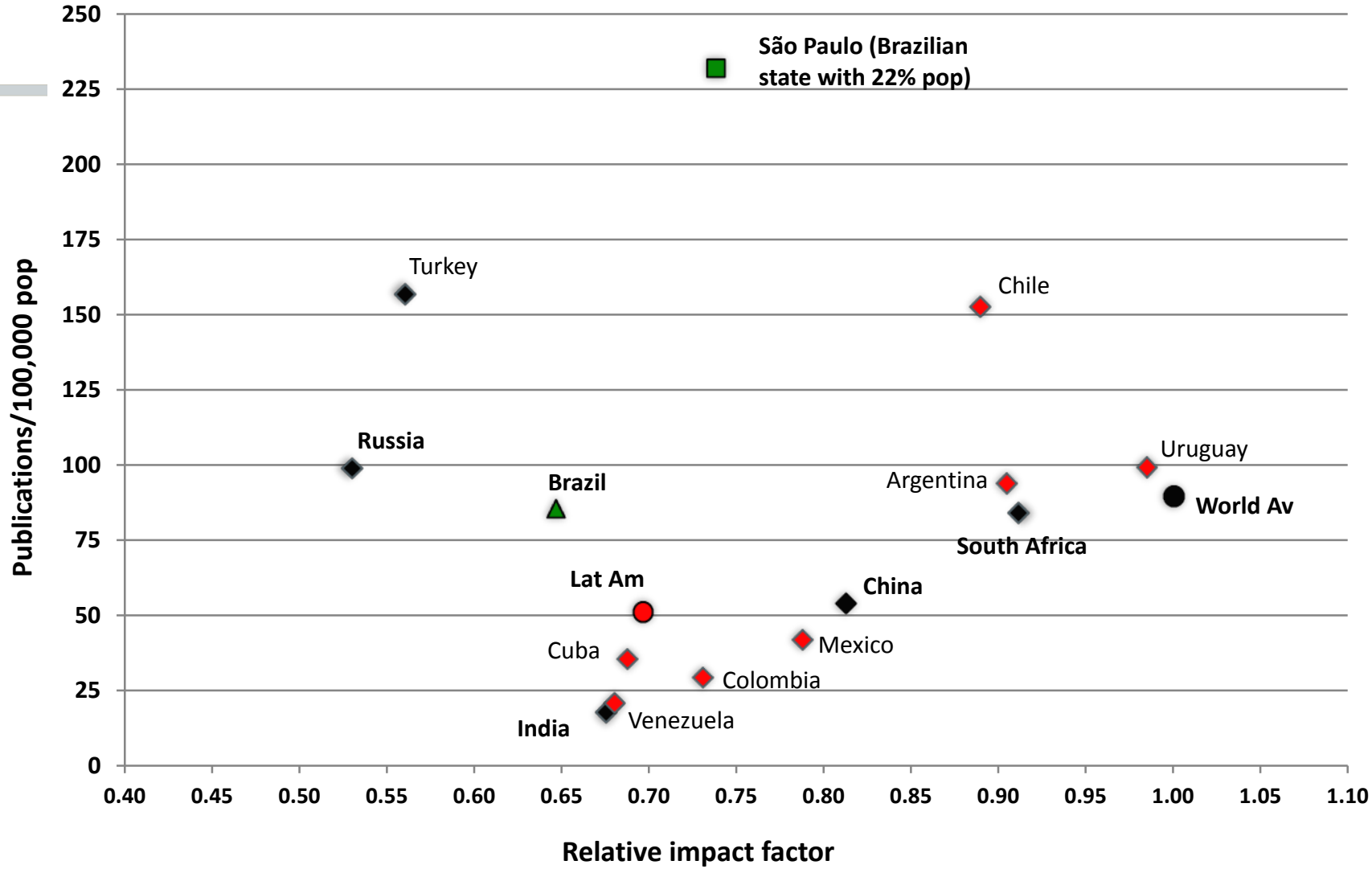
2008-2012 - InCites/ThomsonReuters (Fapesp)



Sources: InCites (Thomson Reuters), World Bank

Faculty at the federal universities by highest degree and share of fulltime employment

	Total	MSc		PhD		Fulltime faculty	
		N	Share	N	Share	N	Share
Brazil	78,774	20,965	26.6%	47,302	60.0%	67,149	85.2%
North	7,841	3,062	39.1%	3,154	40.2%	6,457	82.3%
Northeast	22,927	6,864	29.9%	11,910	51.9%	18,471	80.6%
Southeast	25,046	5,224	20.9%	17,664	70.5%	22,271	88.9%
South	14,088	3,466	24.6%	9,319	66.1%	12,341	87.6%
Centerwest	8,872	2,349	26.5%	5,255	59.2%	7,609	85.8%

Source: HE Census data, 2011, INEP/Ministry of Education.

At the three São Paulo state universities, over 95% of faculty have a doctorate degree
BUT
only enroll 7% of all undergraduate students in the state

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Thank You!

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