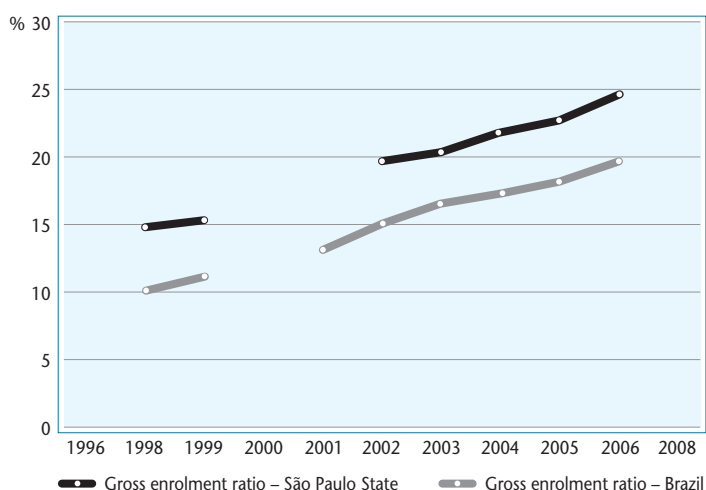


Undergraduate system

- Between 1999 and 2006, the gross enrolment ratio for higher education in Brazil rose from 11.2% to 19.3%. This corresponded to growth of 72%.
- Higher education gross enrolment ratios were higher in São Paulo State, rising from 15.4% in 1999 to 24.4% in 2006, but growth was lower (58%).

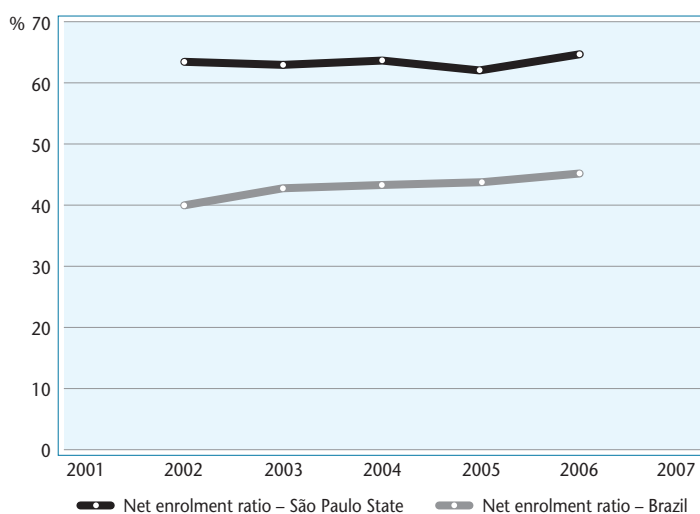
Brazil & São Paulo State: Higher education gross enrolment ratio, 1998-2006



Sources: INEP/MEC, Higher Education Census; IBGE, National Household Sample Survey (PNAD). Ratios could not be calculated for 1998, 2000 and 2001 because data on enrolments by age were not available for these years.

- One of the main reasons for Brazil's historically low higher education enrolment ratios is the existence of bottlenecks in primary and secondary education.

Brazil & São Paulo State: Secondary education net enrolment ratio, 2002-2006



Sources: INEP/MEC, Higher Education Census; IBGE, National Household Sample Survey (PNAD).

- In Brazil, the ratio of secondary school graduates to higher education places fell from 1.72 in 1999 to 0.80 in 2006, when the number of places offered became greater than the number of secondary school graduates.

- Oversupply of places was due to growth of the private sector, in which the ratio fell from 2.27 in 1999 to 0.91 in 2006.
- The ratio of secondary school graduates to higher education entrants also fell in São Paulo State. In the private sector, the ratio fell from 1.70 in 1999 to 0.63 in 2006.
- In São Paulo State, the public sector offered one place for every 14.2 secondary school graduates in 1999 and for 8.54 in 2006.
- The situation is therefore paradoxical: Brazil's higher education gross enrolment ratio remains lower than for all other Latin American countries, yet at the same time the proportion of secondary school graduates who enter higher education is extremely high — higher, in fact, than for many developed nations — 81% in São Paulo State and 71% in Brazil. In addition, there is a large percentage of unfilled places, mainly in the private sector.
- An examination of differences in access to higher education by income group shows that enrolment ratios are similar to those of developed countries for students in families earning more than twice the minimum wage per person, and equivalent to Central Europe for those earning four to five times the minimum wage.
- In 2003, 16% of all students in public higher education institutions were in the group earning the minimum wage or less. The proportion for private higher education institutions (HEIs) was half of that, i.e. 8%.
- It is not true that private-sector HEIs are attended largely by students from lower-income families while most students in the public sector are from relatively wealthy families. In fact, the proportion of students from lower-income families is higher in public-sector HEIs than in private-sector HEIs; conversely, the proportion of wealthier students is higher in the private sector than in the public sector.
- Strategies adopted in Brazil to boost enrolment ratios in higher education include measures to increase the number of free places, both directly in the public sector and through government financing for more grant-aided places in the private sector. The two solutions are not mutually exclusive.
- In the public sector, the ratio of secondary school graduates to places in HEIs has fallen, although it remains much higher than in the private sector. In São Paulo it fell from 14.2 in 1999 to 8.5 in 2006. In Brazil, where the ratio is lower and more stable, it fell from 7.0 in 1999 to 6.2 in 2006.
- The federal government began offering grants for private-sector undergraduates in 2005 via the ProUni programme, which may explain why enrolments in private-sector HEIs did not fall in the period, as they were expected to.
- Even this second solution faces obstacles linked to social inequality. An income ceiling and minimum score in the National Secondary School Exam (ENEM) were set as criteria for awarding ProUni grants. Initially these criteria meant that there were more grants available than eligible applicants and the income ceiling was therefore raised in order to use all the places available.
- The source of this problem is that the number of poor students who complete secondary school with good enough marks to be acceptable to HEIs is insufficient, even though the academic requirements for admission to private-sector HEIs are not as stringent as they are in the case of public-sector HEIs.
- Private-sector HEIs accounted for 74.6% of tertiary enrolments in 2006 in Brazil, up from 65.4% in 1999. In São Paulo State, they accounted for 86.6% in 2006, up from 84.6% in 1999.
- The predominance of private-sector HEIs in total tertiary enrolments is greater in São Paulo State than in Brazil overall. This appears to be associated with two factors:

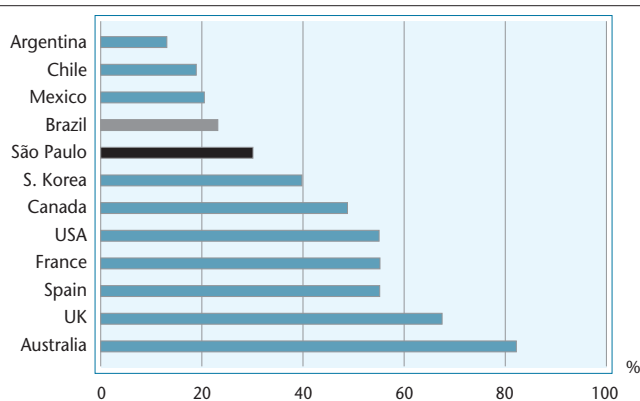
- The proportion of wealthier families who can afford private education is higher in São Paulo State than in Brazil overall and demand is therefore greater. Private-sector HEIs began expanding in this state and growth spread to other parts of Brazil once most of the demand had been met there. The limits to this expansion in the private sector in São Paulo State would now appear to have been reached.
- Federal HEIs account for a far smaller proportion of the sector in São Paulo State than elsewhere in Brazil. In 2006, HEIs funded by the federal government were responsible for 12.2% of total enrolments in Brazil, making it the largest provider of public tertiary education. In São Paulo State, in contrast, federal HEIs accounted for only 0.7% of enrolments while state HEIs accounted for 7.8%, or almost 12 times more. Thus another salient feature of public higher education in São Paulo State is its almost total dependency on state and municipal HEIs.
- The number of higher education graduates in São Paulo State was 239,601 in 2008.

São Paulo State: Higher education graduates by administrative jurisdiction, 2008

	No.	%
	239,601	100
Public	31,553	13.2
Federal	1,599	0.7
State	18,684	7.8
Municipal	11,270	4.7
Private	208,048	86.8
For-profit	148,436	62.0
Community/faith-based/philanthropic	59,612	24.9

- A point that stands out particularly in the statistics on higher education graduates in São Paulo State is that only 0.7% attended federal HEIs. This proportion for Brazil was 11%.
- In São Paulo State, the number of higher education graduates in 2008 corresponded to 33% of the total number of 25-year-olds. This is a much higher proportion than in Argentina (13%), Chile (19%) or Mexico (21%).

Brazil, São Paulo State & selected countries: Higher education graduates as percentage of 25-year-olds, 2008



Post-graduate system

- In 1996, there were 333 doctoral programmes in São Paulo State and 277 in the rest of Brazil. In 2006, São Paulo State had 446 programmes and the rest of Brazil had 708.
- Master's programmes expanded along similar lines, but the expansion began sooner. In 1996, São Paulo State had 420 master's

programmes while the rest of Brazil had 739. By 2006 the gap had widened, with the total number in the rest of Brazil reaching 1,430 and the number in São Paulo State rising to only 592.

- Most post-graduate courses in São Paulo State are offered by state universities. In 2006, Universidade de São Paulo (USP), Universidade Estadual Paulista (Unesp) and Universidade Estadual de Campinas (Unicamp) offered 340 doctoral programmes, which in aggregate had 16,033 students, corresponding to 79% of the state's total. USP alone had 203 programmes and 9,235 students, more than half the total. Unesp had 79 programmes and 2,808 students. Unicamp had 58 programmes and 3,990 students.
- These three state universities in São Paulo State offered 370 master's programmes: USP offered 207, Unesp 103, and Unicamp 60. The numbers of students enrolled in these programmes in 2006 were 9,070, 3,287 and 3,097 respectively.
- Doctoral students enrolled at state universities in São Paulo State accounted for 79.9% of the total number of doctoral students in São Paulo State and 35.4% of the total enrolled in Brazil in 2006.
- Federal universities in São Paulo State offered 53 doctoral programmes in 2006: Universidade Federal de São Paulo (Unifesp) offered 38 and Universidade Federal de São Carlos (UFSCar) offered 15. These universities also offered 39 and 21 master's programmes respectively. In addition, six doctoral programmes and six master's programmes were available at the National Institute of Space Research (INPE); and three doctoral programmes, four master's programmes and a vocational master's programme were available at Instituto Tecnológico da Aeronáutica (ITA). Thus the federal contribution comprised 62 doctoral programmes all told, with 2,113 enrolled students.
- There were 92 private HEIs in São Paulo State in 2006. Thirty were universities. Only nine offered doctoral programmes. One of these was Pontifícia Universidade Católica de São Paulo (PUC-SP), with 1,335 students in 16 courses, corresponding to about half the total number of post-graduates programmes offered by the private sector.
- In São Paulo State at end-2006 the number of students enrolled in doctoral programmes in agrarian sciences, biological sciences, exact sciences, earth sciences, health sciences and engineering totalled 13,421. Enrolments totalled 6,668 in doctoral programmes in human sciences, applied social sciences, linguistics, languages and literature, and arts.
- São Paulo State had 13,720 students enrolled in master's programmes in natural sciences in 2006, and 10,996 students enrolled in programmes in human sciences.
- The salient points with regard to grants awarded to post-graduate (master's and doctoral) students by public agencies between 1996 and 2008 are as follows:
 - The proportion of post-graduate students financed by grants from the Office of Coordination for the Improvement of Higher Education Personnel (CAPES) rose from 11.6% to 14.9%;
 - The proportion awarded grants by the National Council for Scientific & Technological Development (CNPq) fell from 20.1% to 11.3%;
 - The percentage supported by FAPESP rose from 7.5% to 15.5%.
- Considering that in 2008 there were 20,752 doctoral students and 27,464 master's students in São Paulo State, the ratio of grants to students was approximately 42% for the former and 41% for the latter.
- In 2008, 4,824 doctoral degrees were awarded in São Paulo State, or 45% of the total awarded in Brazil, and 9,959 master's degrees, or 30% of the total for Brazil.