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Academic Salaries in Brazil[1]

Simon Schwartzman[2]

The higher education sector

Brazil has a highly differentiated system of higher education, with a relatively small number of well-endowed public institutions and a large number of private, for profit and philanthropic institutions. Brazil is a federation, with 27 states and more than 5 thousand municipalities, and some of the public institutions are maintained by the federal government, others by states, and a small number by municipalities (Schwartzman 2004).

Traditionally, higher education institutions were organized in the European tradition, with faculties providing legally valid diplomas in the learned professions of Medicine,

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[2] Institute for Studies on Labor and Society (IETS), Rio de Janeiro, simon@iets.org.br

Law, Engineering, Architecture and Dentistry, and later in new professions such as business administration, psychology, communications, pedagogy, and others. There are no college-type, undergraduate courses in the North American or English sense[3], nor a significant segment of post-secondary, vocational education. The oldest faculties date from the early 19th century, but the first universities date from the 1930s, organized as loose associations of semi-autonomous faculties (Schwartzman 1991). In the 1968, a new legislation introduced several features of the North American higher education, including regular master and doctoral programs, the credit system, the replacement of chairs by academic departments, and strengthening the role of the university rector. In the new model, academics would be affiliated not to a faculty, but to a department, according to their field of knowledge, and assigned to teach in the professional or graduate course programs as needed. However, the most traditional faculties maintained their autonomy, and, in the public perception, the main role of higher education institutions is still to provide degrees in the learned professions.

The 1968 reform led to two diverging trends. Until the sixties, teaching in a public faculty was mostly a secondary activity for prestigious professionals, who would earn most of their income from their practice as lawyers, medical doctors, dentists or engineers, and teach for the prestige and networking opportunities the university provided. After the reform, higher education teaching became a career in the civil service, with competitive salaries and other benefits for full-time employment and promotions based on seniority and academic criteria. Besides lecturing, higher education teachers were supposed to do research and extension work, and graduate education programs were created to grant the advanced degrees required for their careers (Balbachevsky and Schwartzman 2010). This was followed by the creation or expansion of several research support agencies, both by the national and state governments, which provide additional resources and income for academics in public

[3] In this text, we use "graduation" to refer to the first stage of higher education, level 5 in UNESCO's International Standard Classification of Education, ISCED 1997; and "post-graduation" to refer to the second stage, ISCED 6, which includes masters and doctoral programs. This would correspond, in the United States, to the "undergraduate" and "graduate" levels, a classification that is not appropriate to countries organized along the European pattern.

universities. They include the National Council for Scientific and Technological Development (CNPq), an agency within the Ministry of Science and Technology that provides fellowships and research grants; the Financing Agency for Studies and Projects (FINEP), also within the Ministry of Science and Technology, which provides support to large-scale projects and industrial innovation; and the Coordination for the Advancement of High Level Personnel (CAPES), an agency within the Ministry of Education which provides fellowships for post graduate studies and perform the assessment of postgraduate course programs. In the state of São Paulo, the State Foundation for Science and Technology (FAPESP) provides both fellowships and research support of different kinds, and many other states have similar institutions. Most of this professionalization of the academic careers took place in the federal universities and in the State of São Paulo, the largest and richest state in the Brazilian federation. Later, other states created also their own academic careers for their institutions.

This public system, however, did not grow fast enough to accommodate the expanding demand for higher education, which was mostly absorbed by private institutions (Durham 2004). Today, about 75% of the enrolment in higher education in Brazil takes place in private institutions. The limited growth of public institutions can be explained by two factors: their high cost, due to the relatively high academic salaries, and selective admission of students, based on *numerus clausus* and competitive entrance examinations for the different course programs in each university. This was very different from what has happening in most other Latin American countries, where the rule was open admissions and the lack of well-paid careers for the academic staff in public institutions.

Private institutions, however, could not adopt the same organization model and career patterns of the public ones. Public institutions are fully supported with budgetary resources, and legally forbidden to charge tuition; private institutions, with very few exceptions, cannot receive public subsidies, and depend on tuition to survive. Since public institutions attract the best-qualified students, coming usually from richer families, the private institutions have to cater to low-income sectors that cannot pay much. Most of their students have to work, and, because of that, most of their courses are provided in the evenings. They cannot afford do hire many full-time academics and provide the conditions for academic research. It is difficult for the private sector to teach

in fields requiring technical facilities, so it tends to concentrate in the social professions – administration, accounting, law, teacher education – instead of medicine, dentistry, engineering and other technically based fields. The Brazilian legislation still assumes that all higher education should be organized in universities, or eventually evolve into one, centered on high quality academic research and the Humboldt's ideal of integration between research and teaching. But in practice few institutions, even in the public sector, can meet the standards of what a research university should be.

Currently, the legislation allows for the existence of three main types of institutions: fully autonomous universities, with graduate education and research; autonomous "university centers", with no graduate education and research, but, supposedly, good quality teaching in different fields; and isolated faculties, with limited autonomy to create new courses and expand admission. Formally, there is no difference in the standing of the degrees provided by these different types of institutions, once they are allowed to function. There are also a small number of technical institutes supported by the federal government, but Brazil never developed an extended system of technical, shorter higher education programs such as the French *Institutes Universitaires de Technologie.*

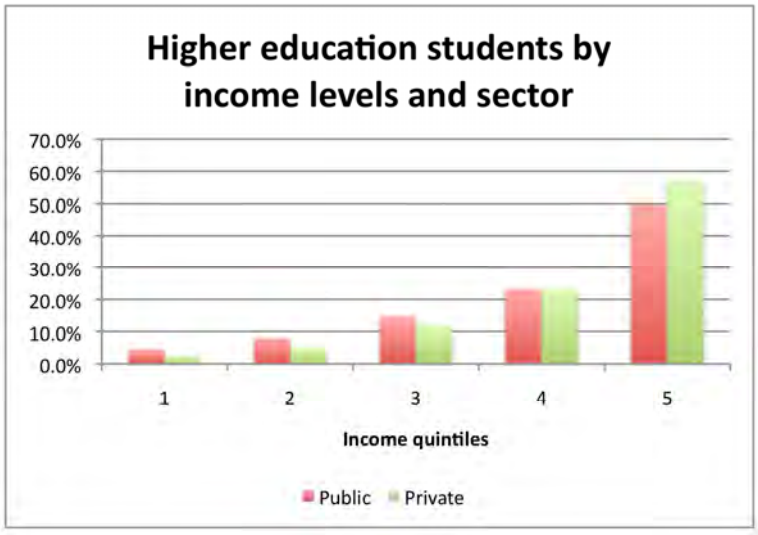
In recent years, this picture has been changing in many ways. In the public sector, the federal government has been pressing the public institutions to admit more students and to open evening courses. There is a program to give additional resources for federal universities willing to expand[4], many institutions are introducing quotas for low income or minority students, and private universities are granted tax exemption if they admit a certain number of low income students for free[5]. The quality of public higher education is uneven, some observers believe it is falling, and some private institutions are starting to compete with the public ones by providing high quality and expensive education, and paying internationally competitive salaries for academic staff,

[4] This is the "Support Program for the Restructuring and Expansion of Federal Universities"(Reuni), http://reuni.mec.gov.br/index.php?option=com_content&view=article&id=25&Itemid=28 , accessed August 22, 2010.

[5] This is the program "University for All" (Pouni), http://siteprouni.mec.gov.br/ , accessed August 22, 2010.

particularly in the fields of business administration and economics. In the past, most private institutions were small, family owned institutions; more recently many have been absorbed by large private companies, some of them with no previous tradition in education services, which provide barebones, low cost teaching education to large number of students in different parts of the country. Most of the students in Brazilian higher education come from upper income groups, and, differently from some years ago, there is a tendency for the public sector to admit more students from low-income sectors in less competitive careers, and for the private institutions to cater more to the richer ones.

Figure 1 - Higher Education graduation students by income level and sector[6]



There are two main sources of information on Brazilian education. One is the National Institute for Education Research of the Ministry of Education in Brasilia (Inep)[7]. Inep performs regular census of basic and higher education, collecting data from the institutions, and is also in charge of the main assessment systems for basic, secondary and higher education. The second is the Brazilian Institute for Geography and Statistics

[6] Source: National Household Survey (Pnad) 2008.

[7] http://www.inep.gov.br , accessed on August 22, 2010

(Ibge), Brazil's census office[8]. Besides the decennial demographic census and other statistics, Ibge carries a yearly National Household Sample Survey (Pnad), which collects education, employment and other information from a sample of about 100 thousand households. The data of these two sources diverge somewhat, but, since they bring different types of information, both will be used in the text that follows.

Table 1 – Higher education in Brazil – Institutions and enrolment, by type of institution and sector[9]

Institutions and Enrolment in Brazilian Higher Education						
Enrolment	**Private**		**Public**			
	Non-profit	**For profit**	**State**	**Federal**	**Municipal**	**Total**
University Center	312,599	384,896			23,110	720,605
Faculty	205,049	1,328,864	43,403	1,394	54,178	1,632,888
Federal Technical Institute				40,935		40,935
University	839,642	735,041	446,832	600,722	63,341	2,685,578
Total	1,357,290	2,448,801	490,235	643,051	140,629	5,080,006
Institutions	**Private**		**Public**			
	Non-profit	**For profit**	**State**	**Federal**	**Municipal**	**Total**
University Center	56	63		5		124
Faculty	324	1,487	46	4	50	1,911
Federal Technical Institute	0	0		34		34
University	57	29	36	55	6	183
Total	437	1,579	82	98	56	2,252

Source: INEP, Higher Education Census, 2008

Table 1 provides the main figures of higher education in Brazil according to the Ministry of Education. In 2008, there were 2.252 institutions, 90% private, and 5.1 million students in regular graduation degree courses, 75% of which in private institutions. Of the institutions, 183 had university status, and 1,911 were isolated, non-university faculties. The size of these institutions varies enormously. A small, isolated faculty would have about 1.7 thousand students on average; a university, 15 thousand. The largest private universities, with locations scattered in many cities, may have above two hundred thousand students; the largest public university, the University of São Paulo, has about 55 thousand graduation and 25 thousand post graduation students in 11 locations.

[8] http://www.ibge.gov.br , accessed on August 22, 2010

[9] Includes only students in graduation studies, not post-graduation or extension.

Data on post-graduate education are collected by a different agency in the Ministry of Education, Capes[10]. In 2009, there were 88,286 students in MA programs, 53,237 students in doctoral programs, and 9,122 students in professional MA degree programs (Table 2). Of the 150 thousand post-graduate students, 80% were in public universities, one third of them in the State of São Paulo. There are also some postgraduate degree programs granted by public research institutes that are usually not classified as higher education institutions, such as the Institute of Applied and Pure Mathematics in Rio de Janeiro (INPA), the Brazilian Center for Physics Research or the Oswaldo Cruz Institute in public health.

Table 2 – Post-graduate education in Brazil: students and degree programs, by level and type of institutions

Post- Graduate Education in Brazil: students and degree programs, by level and type of institutions					
Students					
	MA	**Doctoral**		**Professional**	**Total**
Federal	46,628	28,569		3,234	78,431
State	23,522	19,486		1,396	44,404
Private	17,585	5,163		4,253	27,001
Municipal	551	19		239	809
Total	88,286	53,237		9,122	150,645
Course programs					
	MA	**Doctoral**	**MA/Doctoral**	**Professiona**	**Total**
Federal	568	22	792	97	1,479
State	210	18	416	33	677
Private	262	0	172	109	543
Municipal	14		2	4	20
Total	1,054	40		243	1,337
Soruce: Ministry of Education /CAPES					

These data from the Ministry of Education do not fully coincide with those of the National Household Sample Survey (Pnad). The 2008 survey identified 6.2 million students at the graduation level, 1.1 million more than the Ministry of Education; and 326 thousand post-graduate students, half of them in private institution, about twice as much as those reported by the education authorities. One explanation for the differences is that the survey may include persons who consider themselves students, but are not currently enrolled in an institution. The larger number of post-graduate students is probably due to the inclusion of students in non-degree, specialization or MBA type programs which are not regulated and do not enter the Ministry of

[10] http://www.capes.gov.br , accessed on August 22, 2010

Education official statistics. Specialization courses, to be characterized as such, need to meet some formal requirements, including a minimum of 360 teaching hours, but otherwise are not regulated nor validated by the education authorities. There are also "training" courses, with a minimum of 180 teaching hours, which may also count as postgraduate education and are accepted by some higher education institutions as academic credentials.

The public universities, with full-time staff, post-graduate education and institutionalized research, are closer to the conventional university model than most private institutions, which provide mostly evening graduation courses, with limited or no research, and part-time staff. Since the public institutions are today just a minor sector in the Brazilian higher education, and there is no indication that the private sector will eventually become like the public ones, it would be misleading to consider them as the national pattern. In this paper, therefore, we will refer to the higher education as whole, as far as the existing data allow us, taking into considerations the large differences among these sectors.

The academic profession

The same way as for students, both the Ministry of Education and the National Household Survey provide information about the academic profession. From the Ministry of Education it is possible to learn about their formal qualifications, and, from the Household Survey, about their salaries.

Table 3 - Academic posts and contracts in higher education

Academic posts(*) in Higher Education Institutions				
	full-time	**part-time**	**per hour**	**Total**
Private	40,774	50,431	128,317	219,522
Public	91,608	18,756	9,004	119,368
Total	132,382	69,187	137,321	338,890
(*)- The same person can have two or more part-time posts				
Source: Ministry of Education, Higher Education Census 2008				

The Higher Education census counts the number of teaching posts per institution, but does not say whether the same person holds posts in different places. There were, in 2008, 338.9 thousand higher education teaching posts in the country, or about 15 graduation students per teacher, with large variations among sectors: 10.6 students per

teacher in the public sector, and about 17,3 in the private sector. Besides, 76% of the academics in public institutions had full-time contracts, against just 18% in the private sector.

A full-time contract usually means 40 hours of work a week, which can be dedicated to teaching, research, and class preparation. Part-time contracts can be half time or less, for teaching and other activities; per-hour contracts pay only for the number of classes actually delivered by the teacher, not allowing time for class preparation or office hours. In public universities, full-time contracts are usually, but not always, exclusive dedication contracts. A full-time contract without exclusive dedication means that, outside his 40 hours in the institution, the teacher can have a private practice, teach in the evening in another place, or do external consulting. In principle, none of these external activities are allowed for those with exclusive dedication.

Qualifications

In federal universities, the academic career comprise five ranks – auxiliary, assistant, adjunct, associate and full professor (*auxiliar, assistente, adjunto, associado, titular*). Each of these ranks, up to full professor, is divided into four levels. In principle, access to a university career should require a doctor's degree and to pass an open formal competition ("*concurso*"). However, in federal institutions, a doctor's degree is not required for the first two ranks. In the past, many teachers with just a graduation degree were hired through provisional contracts, which were later transformed into permanent appointments. Promotion up to associate level is done by seniority and also by the acquisition of post-graduate degrees; promotion to full professorship, in principle, should also depend on passing an open competition.

In the state universities of São Paulo the ranks are auxiliary, assistant, doctor professor, associate and full professor (*auxiliar, assistente, professor doutor, associado, titular*). A doctor's degree is required for the doctor professor's rank. To be promoted to associate professor, it is necessary to pass a *livre docência* exam, a reminiscence of the German *privatdozent* exam; to be promoted to full professorship, it is necessary to be approved in an open competitive exam. Other states have similar careers, except for *livre docência*, which is a peculiarity of the São Paulo institutions.

Most private institutions do not have formal careers, but salaries are paid according to the academic degree owned by the faculty member. The Ministry of Education collects information on formal degrees, but not on academic ranks.

Table 4 - Academic qualifications of higher education teachers, by type of institution

Academic Degrees by Type of Institution						
	no university degree	graduation degree	specialization	MA	doctor's degree	Total (N)
Public university	0.0%	11.9%	12.8%	27.1%	48.1%	100.0%
Private University	0.0%	11.0%	28.2%	40.9%	19.9%	100.0%
Municipal University Center	0.0%	9.5%	37.2%	36.9%	16.3%	100.0%
Private University Center	0.0%	9.9%	34.1%	43.2%	12.8%	100.0%
Public Faculty	0.0%	7.8%	36.8%	38.3%	17.0%	100.0%
Private Faculty	0.0%	9.2%	44.4%	38.0%	8.3%	100.0%
Public Technlogical Center	0.6%	15.8%	30.7%	38.4%	14.4%	100.0%
Total (N)	0.0%	10.6%	29.6%	35.9%	23.8%	100.0%

Table 4 gives the distribution of Brazilian higher education teachers by academic qualification and type of institution[11]. Although, in principle, it is necessary to have a doctor's degree to teach in higher education, only 23.8% of the teachers have it, ranging from 48.1% in public universities to 8.3% in private faculties and there are still a few teachers without a higher education degree at all. The best situation is in the public universities in the state of São Paulo, with 86% of the academic staff with doctor's degrees. This situation is usually interpreted as a provisional condition, to be corrected as the qualifications of Brazilian academics improve, and the old generation is replaced by the new. In the meantime, lesser degrees, such as masters, specialization and training certificates, are accepted by the institutions as academic credentials. Currently, Brazilian universities graduate about 10 thousand Ph.D.s a year, a very significant number, but still small compared with need to fill in the 287 thousand teaching positions still staffed by under-qualified personnel. Moreover, since private, low cost teaching institutions are not able to pay for full time staff with advanced degrees, this picture is not likely to change in the foreseeable future.

Academic contracts

Public universities in Brazil are part of the civil service, and both teachers and administrative staff are subject to national rules and regulations regarding the civil service. All academic contracts require public posting of positions, and the applicants

[11] The figures in this table differ from the previous one because of missing information.

have to submit their curriculum, give a formal lecture and go through a written examination assessed by a committee with persons from within and outside the department. For federal universities, the Ministry of Education establishes the number of postings available for each institution. Beyond that, the universities are free to carry on with the selection process according to some standard practices such as public competition and external examiners. Once admitted, it is almost impossible for the teacher to be dismissed, except for gross violation of the law. Promotion takes place regularly according to seniority and the acquisition of additional academic credentials. For full professorship, an open competition is required again, but in most cases there is just one candidate, a senior associate professor, for the post. Salaries are the same according to rank in all federal universities, and there is no allowance for individual salary negotiations. Benefits include a 13th Christmas salary (mandatory in all regular employments in Brazil), 45 days of paid vacations and generous retirement benefits. Many universities pay also private health insurance to their staff, or special access to their own university hospitals and medical services. Until some years ago, teachers could retain their full salary after retirement. However, some changes have been introduced in recent years, reducing this value depending on the time the person occupied the position, his age and other factors. The universities can also grant extended leaves for the teachers to complete their MA or Doctoral degrees in other institutions, and sabbatical leaves every five years.

Besides the basic salary, actual remuneration may include benefits related to academic degrees and current or past administrative activity. Full-time, exclusive dedication academics cannot have other regular employment, but may receive research fellowships and additional payment for research and technical activities done within the university. Many public universities have established autonomous foundations which are used to sign research and technical assistance contracts with public and private agencies and firms that pay additional money for researchers involved in their projects. This practice is not allowed in other branches of the civil service, but has been tolerated in the universities. Finally, the actual income of an academic may be increased by court decisions regarding alleged acquired rights affected by changing legislation

Table 5 – Nominal Academic salaries in Federal Universities in Brazil, 2010 (Full-time, exclusive dedication)

Academic salaries in Federal Universities in Brazil, 2010					
	Graduation	Training	Specialization	MA	Doctor degree
Full professor	4,786.62	5,221.96	5,580.63	7,818.69	11,755.05
Associate 4				7,448.09	11,424.45
Adjunct 4		3,945.91	4,241.00	5,793.14	7,913.30
Assistant 4	3,275.82	3,525.01	3,730.17	4,985.00	
Auxiliary 1	2,814.48	3,001.80	3,190.30		
Values in Brazilian reais (1 US$ = R$ 1.75)					
Source: Ministy of Education					

Table 5 gives the range of monthly salaries for academics in full-time, exclusive dedication contracts in federal universities – it goes from about 20 to 87 thousand dollars a year (multiplying the monthly salary by 13). Note that there is not much difference in salaries between full and associate professors. In the past, full professors did not have to have a doctoral degree, but now it is a requirement in most cases. State universities have their own payment scale. In the state of São Paulo, the corresponding range is from R$ 3.435,00 to R$ 10.216,96 per month, or between US $25 and US$ 76 thousand a year. The admission procedures, promotion rules and benefits in state universities are similar to those of the federal government.

Although the pay scales are the same in all federal universities, there is no national academic career; each person is attached to the institution where he works. One consequence of this system is that there is very little mobility of teachers from one institution to another, and no mechanisms for the public universities to compete for talent in the country or abroad. There are resources for paying visiting professors for short periods, but it is almost impossible for a public university to hire a foreign born academic for its permanent staff, since foreigners cannot enter the Brazilian civil service.

To understand both the considerable benefits and the rigidity of working contracts of teachers in public institutions, it is necessary to consider the characteristics of the academic profession in Brazil. This profession is formed by four clearly differentiated groups of people (Schwartzman and Balbachevsky 1996). The more traditional and smaller group is formed by liberal professionals – lawyers, medical doctors, engineers – that earn most of their income from their private practice or outside jobs, and for whom

teaching in higher education is a secondary activity. They may teach in private institutions, but also work part-time in public institutions, as it happens with many of the professors in the more prestigious public law schools. Some of them may hold full professorship without having acquired a doctor's degree. A second, small group is formed by academics who were able to complete their doctoral studies in a prestigious institution, often abroad, and consider themselves to be academic researcher in the first place. The third group, which makes the bulk of the teaching staff in public institutions, is composed by persons who depend wholly from their university job, have a specialization or a master degree, seldom a doctorate, and see themselves mostly as public employees. The fourth group is made by those whose main source of income comes from teaching part time in private institutions, without stable contracts and often working in one or more places.

It is the political organization and mobilization of the third group that explains many of the features of the teaching careers in public institutions in Brazil. They are organized in powerful unions, both at the national and regional levels, such as the National Docent's Union of Higher Education Institutions (Andes)[12] and the Docent's Association of the University of São Paulo (Adusp)[13]. These unions are associated with Brazil's Laborers' Party (PT), of President Luis Ignácio Lula da Silva, and can influence and have veto power on the legislation and actions from the education authorities that may affect the interests of their affiliates. They oppose anything that they may consider the "privatization" of public universities (including charging tuition for students, individual salary negotiations or competing in the market for research grants), or that can threaten the stability and the contract benefits of their members. They oppose any policy that may differentiate the teachers' income in terms of their performance, except through seniority or formal academic credentials. For instance, in the 1998, (during the government of Fernando Henrique Cardoso, with the current opposition party, PSDB in power) the Ministry of Education introduced an additional premium in the teacher's salaries according to the number of classes given each month. This was a "gratuity", in

[12] http://www.andes.org.br/ , accessed August 22, 2010

[13] http://www.adusp.org.br/index.php , accessed August 22, 2010

the sense that it was a temporary payment that could be stopped if the teacher taught fewer classes, or upon retirement. In 2005, the unions demanded and were able to transform this additional payment into a permanent part of their salaries.

For those in the second group, who can get additional benefits from research grants, affiliation with their academic association is more relevant than affiliation with the unions, but their interests usually coincide, except when the unions try to curtail the freedom the researchers have to administer their grants or to get additional income from consulting. The National Council for Science and Technology provides every year about 6 thousand "research productivity grants" which can add up to 1.5 thousand dollars a month, tax free, for university professors who apply for it with a research plan, which is usually not accessible to the other three groups.

The fourth group is made up mostly by those that work in private institutions. This is the largest group. They work more, earn less, and have less political clout. Most private higher education institutions work with part time or hourly contracts for their academic staff. In both cases, contracts are regulated by the Brazilian legislation for private labor contracts. Even if the payment is made according to the number of hours taught, it is necessary to have a formal working contract if it is not an occasional job. This legislation requires one-month vacation and an additional "Christmas" salary for all labor contracts in the country. Both the employer and employee have to contribute with about 10% of the salary to the national social security fund, which allows for retirement after 30 years of work for women and 35 years for men, or at ages 60 and 65, for an amount that is at most about 3 thousand reais a month (US $ 1.7 thousand dollars) or less depending on the previous income. Besides, employers have to make a monthly deposit for each employee in a government fund ("working time warranty fund") that can be used if the person loses his job, retires or in some other special occasions. The employer is free to dismiss the employee at any time, having to pay an indemnity that is proportional to the duration of the contract. There is no tenure, and the employee does not lose his retirement time or the amount deposited in the warranty fund. So, mobility is much easier in the private than in the public sector, both from the employer and the employee points of view. In some institutions, the teachers have access to a private health plan, but this is not mandatory.

Most private institutions do not publish their salary levels and career paths, if any. However, an informal enquiry among several private institutions showed that they pay between 20 and 50 reais per hour taught, depending on the teachers' formal degree. This means, for a 20 hour, part time job, between 260 and 590 US dollars a month, but many teachers work only 12 or even less hours per week in an institutions, which means that they have to work in different institutions or to combine teaching with other professional activities if they want their ends to meet.

Table 6 - Mean income of teachers in higher education

Mean income of teachers in higher education				
	Main work	**all activities**	**% main**	**number of cases**
Public sector, civil servant	R$ 4,358.80	R$ 4,967.37	87.7%	65,756
private sector, regular contract	R$ 3,442.72	R$ 4,201.20	81.9%	98,835
all public sector	R$ 3,762.73	R$ 4,271.81	88.1%	96,000
all private sector	R$ 3,209.21	R$ 3,911.95	82.0%	112,026
Total	R$ 3,447.17	R$ 4,062.51	84.9%	208,026
Source: PNAD 2008				

Table 6 presents the main data on income based on the National Household Survey for 2008, as informed by the respondents in the sample. The figures refer to monthly income in Brazilian reais in 2008. The estimated number of teachers in the survey is much is smaller than the figures reported by the Higher Education census – 96 thousand in the public sector against 119 thousand in the census, and 112 thousand in the private sector against 219 thousand in the census. One possible explanation for the differences is that the census gives information on posts, while the household survey gives information on people that may hold one or more teaching posts; and there may be also sampling errors. As one could expect, this difference is much higher in the private sector, where part-time contracts are the rule.

The data show also that, although most teachers in public institutions are civil servants, and most of those in the private sector have private working contracts, there are many exceptions to these rules. About 17% of those working in the public sector do not have a regular job, and 12.6% are hired according to the private law legislation. We do not have more information about the kind of jobs they hold, but they may be, for instance, post-graduate students working as research or teaching assistants, or replacement teachers with temporary contracts. In the private sector, about 9% of the teachers do not have a regular working contract. Incomes of those in the public sector are higher

than those in the private sector, and incomes of those with regular contracts are higher than those without these contracts. We can also see that, for the civil servants in the public sector, their main salary represents 87.7% of their income from all activities, while, for those with regular contracts in the public sector it is only 82%, with another 18% coming from other sources. One fourth of the teachers hold civil servant status earn additional income from a secondary job; for those with private law contracts, 32% do. This proportion is likely to be still higher, given the propensity of persons not to fully report the income earned outside their main job.

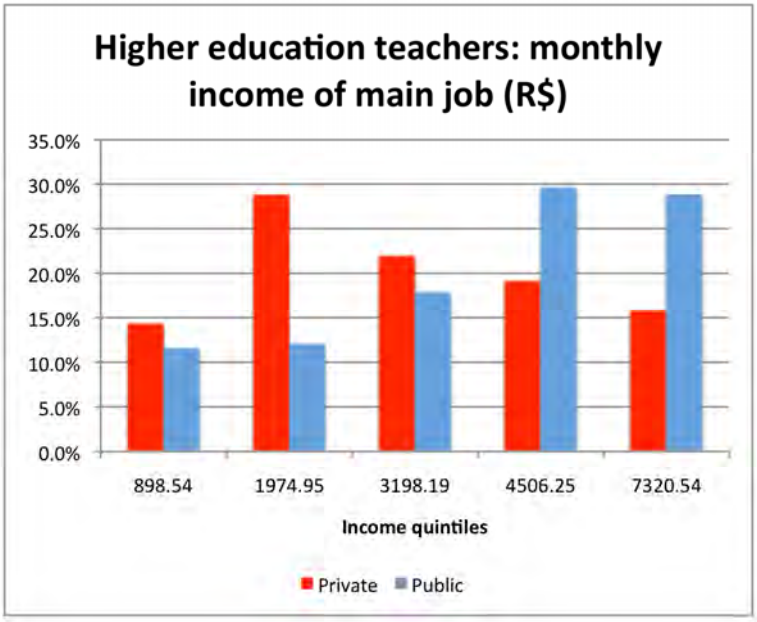


Figure 2 - Monthly income in private and public contracts

Figure 1 compares the distribution of salaries of teachers in public institutions, with civil service contracts, with those in the private sector, with labor market contracts. Each column corresponds to one fifth of the income distribution for the teachers. For the lowest 20%, the mean monthly income is R$ 898,54; for the upper 20%, the mean monthly income is R$ 7,320.54. We can see that 43% of the teachers in the private sector are in the first two quintiles, while 58.5% of those in the public sector are in the two highest groups.

Table 7 – Mean income of persons with higher education, by selected education groups (income from main job)

Mean income of persons with higher education, by selected occupation groups	Mean income
Employers	6,356.13
Medical Doctors	5,836,52
Analysts, operation engineers	5,290.66
System analysts	4,044.02
Teachers in higher education, public sector	3,762.73
Managers	3,710.33
Dentists	3,692.37
Administrator, business adviser	3,542.71
Agronomist	3,502.74
Accountant	3,458.64
Police officer	3,365.51
Lawyer, attorney, judge, prosecutor	3,296.23
Teachers in the private sector	3,207.21
Architects, civil engineers	3,082.18
Total with higher education	2,780.04
Monthly salaries in Brazilian reais (US $1.00 = R$1.75)	

Table 7 compares the higher education teacher salaries with those of other selected groups with higher education. To be a higher education teacher in Brazil means to have income above average for persons with higher education. For those in the public sector, the income is not as good as those of medical doctors, top level engineers and those in business, but is better than other, less prestigious occupations. Earnings for those in the private sector are closer to the average for persons in higher education, near architects, civil engineers and data processing specialists.

Activities

More detailed information on the working conditions of Brazilian academics can be obtained from the International Comparative Survey on the Academic Profession, carried on in Brazil in 2007 (Balbachevsky and Schwartzman 2009; Balbachevsky et al. 2008). The sample of 1,200 respondents included academics in public and private institutions, as well as in non-university scientific research centers and institutes. For the analysis, the respondents were divided on five strata, based on the characteristics of the institutions in which they work – public, research intensive universities; other public universities; private, elite institutions; other private institutions; and research institutes.

Table 8 – Hours worked per week in different activities, by type of institution

Hours worked per week in different activities, by type of institution						
Type of institution	Public, research intensive	Public, other	Private, elite	Private, others	research institutes	Total
Teaching (preparation of instructional materials and lesson plans, classroom instruction, advising students, reading and evaluating student work)	17.11	19.82	21.17	22.76	12.03	19.87
Research (reading literature, writing, conducting experiments, fieldwork)	12.84	9.14	9.3	5.86	20.41	9.36
Extension (services to clients and/or patients, unpaid consulting, public or voluntary services)	2.78	2.6	3.55	2.17	1.09	2.53
Administration (committees, department meetings, paperwork)	5.41	4.77	6.34	3.24	6.09	4.64
Other academic activities (professional activities not clearly attributable to any of the categories above)	3.03	2.36	2.17	2.73	2.24	2.54
Total respondents	195	614	60	270	53	1,192
Source: CAP Project, 2007						

Half of the time of the teachers is devoted to teaching and related activities, with the heaviest teaching load taking place in private institutions. Research-related activities consume half of the time in research centers, but less than 6% in private institutions. The third activity is administrative work, about 5% of the time; and other activities take another 2 to 3% of the time.

In public universities, full-time contracts assume that the teachers spend half of his time in research. As Table 8 shows, the percentage reported by the teachers is closer to 10 hours, or 25% of the time, except in research institutes. Still, there are many indications that only a fraction of those reporting to do research are actually engaged in research activities. Table 9 shows that, in the private sector, most teachers have a secondary job, and even among those in the public sector, 18.3% have an additional job, either in another teaching institution, a non-governmental organization or work in private practice.

Table 9 – Percentage holding second jobs

Percentage holding second jobs						
	Institutions					
	Public, research intensive	Public, other	Private, elite	Private, others	research institutes	Total
Has another work or job	18.3	30.7	50.6	66.5	24.5	45.7
Kind of Secondary work:						
Other teaching or research institution	6.6	14.5	24.0	39.2	16.3	24.7
Company	2.5	6.4	7.0	18.9	2.0	19.8
Non-governmental orgnization	4.6	5.1	6.4	7.8	2.0	6.2
Autonomous, self-employed	6.6	11.8	21.6	19.8	2.0	15.2
Source: CAP Project						

Given the expectation that all academics should do research and publish, the number of persons reporting to have done research and published is relatively high in all groups. However, Table 10 shows that there are large differences in the nature of the research activity of different groups. In the research centers and research-intensive universities, research is done with outside funding, more articles are published in international publications and in peer review journals, and international collaboration is more frequent. In non-research public and private institutions, external funding is much more limited, most of the publications are in Portuguese, and international cooperation is much more reduced.

Table 10 - Characteristics of research performed

Characteristics of research perfomed, by type of institution					
	Public, research intensive	**Public, other**	**Private, elite**	**Private, others**	**research institutes**
Number of academic articles published in the last three years	6.51	4.19	2.46	3.28	7.43
% of research with outside funding	59.2%	29.9%	24.9%	13.1%	40.0%
Never Published in a language different from the language of instruction at your current institution	28.5%	57.9%	29.7%	71.9%	19.6%
Never co-authored with colleagues located in other (foreign)countries	71.8%	85.5%	91.9%	94.2%	51.0%
Never published in a foreign country	37.2%	68.1%	45.9%	84.3%	25.5%
Never published in a peer reviewed journal	41.6%	54.0%	40.5%	75.9%	19.6%
Source: CAP Project					

Conclusions

This overview of the academic salaries in Brazil shows that there are two main types of higher education institutions in the country, public and private. Public institutions are owned the government and supported with budgetary funds; private institutions may be for profit or not, and depend mostly on tuition fees. Within the public sector, it is possible to distinguish research-intensive institutions from those that are mostly teaching places. There is very little research in private institutions, but it is also possible to distinguish a small number of private, elite institutions, catering to high-income groups, and a large sector of low cost, teaching only institutions, which makes the bulk of higher education in Brazil today.

The salary conditions of teachers working in public and private institutions are very different. Salaries in the public sector are higher, there are more fringe benefits, and

lower working load. Most contracts are full-time, but the teachers have also the possibility or earning additional income by participating in research projects, doing consultancy and other activities, even when their work contract is for exclusive dedication. Teachers in public institutions cannot be fired or move to other institutions, and promotion is mostly by seniority and acquired credentials. Salaries are the same for all federal universities, and for all state university in state, and cannot be negotiated individually. It is very difficult for a non-Brazilian to enter the university career in a public institution, although it is allowed by legislation.

In the private sector, most contracts are part time, income is lower, and teachers have to work in more than one place to make ends meet. In all institutions, there is the assumption that teachers in higher education should do research, but, in practice, most of those in non-research institutions do not get external support for their projects, and are not linked to international research networks.

Compared with other groups with higher education, teachers in public institutions are relatively well off, while teachers in private institution, although earning relatively less, are still above the country's average income for persons with higher education degrees.

References

Balbachevsky, Elizabeth, and Simon Schwartzman. 2009. The academic profession in a diverse institutional environment: converging or diverging values and beliefs? In *The changing academic profession over 1992-2007: international, comparative and quantitative perspectives*, edited by U. o. H. s. R. I. f. H. Educatio and H. U. s. R. I. f. H. Education. Hiroshima: Hiroshima University Press.

———. 2010. The Graduate Foundations of Research in Brazil. *Higher Education Forum (Research Institute for Higher Education, Hiroshima University)* 7 (March):85-100.

Balbachevsky, Elizabeth, Simon Schwartzman, Nathalia Novaes Alves, Dante Filipe Felgueiras dos Santos, and Tiago Silva Birkholz Duarte. 2008. Brazilian Academic Profession: some recent trends. *The Changing Academic Profession in International Comparative and Quantitative Perspectives, RIHE International Seminar Reports* 12 (September):327-344.

Durham, Eunice. 2004. Higher Education in Brazil: public and private. In *The Challenges of Education in Brazil*, edited by C. Brock and S. Schwartzman. Oxford, UK: Triangle Journals, Ltd.

Schwartzman, Simon. 1991. *A space for science the development of the scientific community in Brazil*. University Park: Pennsylvania State University Press. Original edition, Formação da comunidade científica no Brasil, 1979.

———. 2004. Equity, quality and relevance in higher education in Brazil. *Anais da Academia Brasileira de Ciências* 26 (1):173-188.

Schwartzman, Simon, and Elizabeth Balbachevsky. 1996. The academic profession in Brazil. In *The international academic profession: portraits of fourteen countries*, edited by P. G. Altbach. Princeton, N.J: Carnegie Foundation for the Advancement of Teaching.