

Chapter 3

Brazilian Higher Education: Converging Trajectory Patterns in a Diverse Institutional Environment

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3.1 Introduction

Diversity is one of the most conspicuous traits of Brazilian higher education. In 2012 Brazil had more than 2.4 thousands of higher education institutions, to be found both in metropolitan areas and small towns around the country. While by law all these institutions are supposed to provide similar undergraduate instruction – all of them being entitled to grant bachelor degrees – the differences among them are immense. One relevant trait of Brazilian higher education is the crucial role played by the small undergraduate professional schools¹ scattered around all the country. These small schools comprise 83 % of all institutions and answer for 29 % of all undergraduate enrollments. Most of them are for-profit institutions. Many came to exist thanks to the past entrepreneurship of well-succeeded owners of private secondary schools. A few of them (29 institutions) have experienced strong growth in the last two decades and have been up-graded to the status of private universities. Most of the growth of the private sector in the last decade has been linked to the expansion of these large for-profit universities.² Beside this huge segment of for

¹Following the Continental Europe tradition, Brazilian bachelor degrees are also professional degrees. As such, these schools are entitled by the Federal Government to grant bachelor degrees in the areas they are recognized as having competence (in a very bureaucratic mode of appraisal). Usually they have just a small number of programs, thus they are known in Brazil as *Faculdade* (Faculty). Some of them, bigger and providing training for wider number of professions, are called *Federação de Escolas* (Federation of Schools).

²In fact, this is the fastest growing segment in Brazilian higher education. In just two years, from 2006 to 2008 its share in Brazil's undergraduate enrollments grew from 9.4 to 14.5 %. In 2012, the for profit universities were responsible for more than 30 % of all undergraduate enrollments in Brazil.

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profit institutions, the private sector also comprises a number of philanthropic universities (usually denominational universities) that are better institutionalized and well endowed. Overall, the private sector is responsible for providing education for 73 % of all undergraduate students in Brazil (for an overview of the Brazilian private sector, see Sampaio 2011).

In the public sector, the most usual institutional format is the university. Public universities are owned either by the federal government, the state governments or even by municipalities. Federal institutions are supervised by the Ministry of Education, while state and municipality owned institutions are supervised by the state governments. This difference may amount to almost nothing if the state is poor and depends on the help of the federal government. However, it may entitle strong autonomy to the university, if the state is rich and powerful.

While the public sector is responsible for only 27 % of all undergraduate enrollments, it answers for 42.3 % of all faculty positions in the country. More important, most of these positions are full-time contract. In fact, 80.1 % of all faculty positions in the public sector are full-time contracts. At the other extreme, among the private non-university segment, only 15.9 % of the faculty positions are full-time contracts. In Private universities, nevertheless, this figure experiences a small improvement in the last decade, reaching 37.2 % in 2012 (INEP 2013).

This chapter investigates how this diversity, constrained by uniform policies imposed by the government, shapes different trajectories among academics working in different kinds of institutions. Data for this study comes mostly from official sources, mainly the Brazilian Census of Higher Education, carried out annually by the Ministry of Education, and the information collected by CAP – the Changing Academic Profession network – in Brazil. As part of the network, a representative survey of the academic profession was conducted in Brazil in 2007. Under this survey, a sample of 1200 academics – representative for all the country's regions and sectors of higher education – were interviewed, collecting data for different aspects of their academic experience, training and trajectory.

3.2 Institutional Diversity Inside the Public and Private Sectors

Higher education in Brazil is not only diverse. It is also highly stratified. Even inside each sector one can find relevant differences among institutions. In the public sector, the major line of differentiation and hierarchy is the degree of the institution's commitment to graduate education, especially doctoral education (Balbachevsky and Schwartzman 2010; Durham and Gusso 1991). In the late 1960s, when graduate education was first recognized and started to receive support from the federal government,³ only a few public institutions were well positioned to take advantage of the existing incentives. At that time, these institutions were the only one to have

³For an overview of the Brazilian graduate education see Balbachevsky (2004).

a significant number of PhD holders among their faculty. Due to the commitment of these scholars, these institutions housed a large number of graduate programs. With a great number of Ph.D. holders, they also were able to capture most of the resources the Brazilian government was making available for science and technology projects in the 1970s (Schwartzman 2010). In this way, graduate education and research became fully institutionalized inside these universities. This is the reason I propose to classify these universities as “public research universities.” As noted before, their major distinguishing feature is their commitment to the graduate education, especially doctoral education: in none of them less than 30 % of their students are enrolled in graduate programs. In some, this proportion reaches 50 %. These institutions, plus a small but active number of the Federal Research Institutes, answer for more than 85 % of all doctoral degrees granted in the country.

The other public institutions are mostly devoted to undergraduate education, even when they also hold the status of university. Inside them, graduate education is a smaller enterprise and tends to be confined to the master level. Nonetheless, these institutions play a relevant role not only in undergraduate education, but also as a regional source of skills and knowledge. Thus, I propose to classify them as “regional public institutions.”

Inside the private sector differences are also huge. These differences are not linked to the institutional format, but are mostly produced by the kind of educational market targeted by the institution. A small number of well-known institutions target students coming from the wealthier families, willing to pay for good up-dated educational services. Some are new non-university institutions; some are old traditional Catholic universities and other denominational universities. In common, all these institutions have room for engaging a larger proportion of Ph.D. holders in their staff, and are willing to support the research engagement of their academic staff. For them, the academic credentials and research outputs are a source of differentiation and prestige. Besides undergraduate programs, these institutions also offer well reputed professional training programs, professional graduate education, as well as consultancy and advisory activities. I propose to classify these institutions as “elite private institutions.”

The great majority of Brazilian higher education institutions are confined to a kind of commodity-like market for mass undergraduate education, targeting children from poor families, usually older students searching to upgrade their credentials in the labor market. In this market the price charged for education is the most relevant differential. These institutions have no incentives to support a rich academic environment. Academics with PhD and research interest are a luxury these institutions can seldom afford. Most of them are small isolated professional schools, but some are huge teaching-only for profit universities. They may be called “mass oriented private institutions.”

These diverse environments create important differences regarding the conditions for academic work. Table 3.1 below explores some relevant aspects in this dimension.

As one can see, full-time contracts are the norm inside the research institutes and the public research universities. Research oriented institutions are also marked by a more competitive environment, calling for greater commitment from their faculty.

Table 3.1 Profile of working conditions and academic experience of Brazilian academics, by sector (percentages)

Type of institution					
Working condition and academic experience	Public research institutes	Public research universities	Public regional universities	Private elite institutions	Private mass institutions
Full-time employed	95.9	90.3	79.7	51.8	22.2
Have contract with another academic institution	16.3	7.1	14.5	24.0	39.0
Work experience outside the academic market	24.5	18.8	30.7	50.9	66.7
Have done research in the last 2 years	95.9	93.9	83.1	71.9	61.0
Have access to external support for research	73.5	57.9	30.1	27.5	8.6
Have academic products (last 3 years)	93.9	88.3	75.3	63.7	55.2
Have international research connections	65.3	37.6	22.0	27.5	9.0
Teach only at undergraduate level	15.4	46.1	62.5	64.0	92.9

Source: CAP Survey 2007/2008

The proportion of academics with working commitments outside their walls is small and the proportion of academics that are active researchers (doing research with external support and publishing) is high. Public regional institutions and private elite institutions have a more modest profile, but also do well in all dimensions considered here: they still have a good number of academics committed to the institution, and a fair proportion of active researchers inside their faculty. The most relevant difference between these two segments is the proportion of academics with work experience outside the academic market. Academics with this profile represent 50 % of the faculty employed at the private elite segment, but only 30 % at the public regional universities. This figure is not a surprise since institutions at the private elite segment usually boast their competence in providing excellent, market-fitted education, both at the undergraduate and graduate level. For them, faculty with sound up-dated experience in the job-market is an asset and not a failure. As expected, private mass oriented institutions provide the poorer academic environment: they usually operate with part-time paid instructors,⁴ many of them with working

⁴The most usual contract at the private sector is a part-time with payment according to work tasks, that may include teaching hours, coordination of programs, advising students and even doing some research.

commitments in other institutions or outside the academic market. Being teaching-only institutions, their academics usually have their teaching experience confined to the undergraduate level (for an overview of the conditions for teaching and research in different institutional environments in Brazilian higher education, see Schwartzman and Balbachevsky 2013).

3.3 Convergent Trajectories in a Diverse Institutional Environment

In spite of all differences discussed above, higher education in Brazil experienced strong convergent dynamics since the end of 1990s, produced by the regulatory bodies that supervise the entire system.

From the 1970s until early 1990s, the private and public sectors coexisted with almost no point of contact. Operating under different rules and with diverse goals, one sector almost ignored the other and recruited professionals in segregate markets: public institutions relied on their alumni and had the public graduate system for their needs in faculty's qualification. Private institutions also enlisted their academics among their alumni. In their market, faculty's academic credentials did not matter. Instructors working in the private sector were poorly qualified and completely ignorant of the rules of academic life.

This picture started to change in the middle of 1990s, when a new Education Act, the *Lei de Diretrizes e Bases da Educação* (LDB), was enacted. The new regulatory framework required the private sector to increase the proportion of academics with master's and doctorate. The regulatory pressure opened a new market for the young scholars coming from the ever-expanding public graduate system. At the end of the 1990s the opportunities for entry in the public sector were small, since the federal government strongly limited the number of openings as part of its fight against inflation.⁵ At the beginning of the 2000s, when the public sector started to hire young academics again, the whole picture was changed. The new openings attracted a large number of well-qualified young scholars formed during the 1990s and the 2000s.

The data collected by the CAP survey provides relevant indication of the new and more demanding environment the new generation of scholars faces. First, considering the span of time elapsed between when the would-be academic finishes the undergraduate studies and when he/she secures the first position in a higher education institution, the data shows that this gap is widening.

Table 3.2 below provides information on this dimension controlled by the academic's institutional affiliation and the year when she/he obtained her/his first position as an academic (academic cohort).

⁵At the end of the 1980s, the annual inflation rates in Brazil had reached the stoning level of 480%. To control the public expending was one of the main instruments used by the government in the successful program launched in 1994 to control inflation.

Table 3.2 Time (in years), for Brazilian academics, elapsed from achieving the bachelor degree and being appointed to the first academic position by type of institution and academic cohort^a

Type of institution	Academic cohort ^a	Mean	Std. deviation
Public research institutes	Before 1990s	2.19	3.97
	1990s	5.9	4.72
	2000s	10.67	4.24
	Total	4.71	5.30
Public research universities	Before 1990s	2.68	4.02
	1990s	6.81	5.04
	2000s	8.00	5.64
	Total	4.60	5.04
Public regional universities	Before 1990s	1.70	5.57
	1990s	5.96	5.35
	2000s	5.51	4.33
	Total	4.16	5.65
Private elite institutions	Before 1990s	2.49	5.07
	1990s	5.76	5.11
	2000s	9.18	7.12
	Total	4.83	5.96
Private mass institutions	Before 1990s	1.00	6.72
	1990s	6.01	6.24
	2000s	7.67	6.76
	Total	5.55	6.98
Total	Before 1990s	1.95	5.37
	1990s	6.07	5.66
	2000s	7.57	6.34
	Total	4.92	6.12

Source: CAP Survey 2007/2008

^aMost of the international literature (Altbach 1991) uses the year of the doctorate as a reference to establish the academic's cohort. In this paper, the cohort is defined by the year of his/her first employment as academic in a higher education or research institution, as reported by the academic in the survey

The data shows that, on average, the younger generation needs more time after finishing the undergraduate studies before being acceded to an academic position. This is true for academics employed in all types of institutions. For the older generation, those that started their career before the 1990s, the table presents a very different pattern: in all institutions the gap is much shorter. Older academics, even from the research oriented institutions, reported a very short period of delay, some of them being accepted as academics even *prior* to finishing the undergraduate studies.

Another aspect of the convergent dynamics present in the Brazilian academic market is the relationship between graduate education and employment. Brazilian graduate education recognizes three different kinds of degrees: the specialization degree, the master degree and the doctoral degree. Specialization is a professional

degree, deemed to offer alternatives of post-graduate studies for professionals working in the general market. Its main objective is to create opportunity for a deeper understanding of selected aspects of the professional training, and develop competences needed by the professional labor market. Master and doctoral programs have a more academic orientation. The master degree is supposed to be an intermediate stage in the training for the academic life, while the doctoral degree finishes the academic training. This conception holds true including in professional fields like law and engineering.⁶ Master's and doctorate candidates are students, and thus they may have access to scholarships, but have no contract or academic responsibilities to the university outside attending the courses and writing their dissertation. In order to successfully conclude the master and the doctoral studies, candidates are supposed to attend a prescribed set of courses and to present a thesis in a public defense before a board of examiners – three in the case of a master degree, and five for the doctorate.

Brazil, like many other emerging countries around the World, has always been plagued by shortcomings derived from a small pool of academically competent candidates from which to recruit faculty for its higher education institutions. Nevertheless, the last decade witnessed relevant changes in this dimension in all type of institutions, as can be seen in Table 3.3, below:

In this table, the first column reports the academics' average gap between finishing the first graduate program (a master or a specialization program) and being accepted as an academic staff in a higher education institution. The second column reports the average gap between finishing the doctorate and the first appointment as academic. Negative numbers mean that the first appointment occurred before finishing the level of training considered. As one can see, for the older cohort graduate education typically was an experience that came "after" the first academic position. While in research oriented institutions the gap between starting the academic career and finishing the first graduate program was small, a bit more than 2 years on average; for academics employed at the more undergraduate oriented institutions, this gap was significantly bigger (from 4 to 7 years on average, depending on the type of institution).

The table also shows that the 1990s was a turning point inside the public sector. Since then, requiring at least a master degree of the candidates for an academic position became a common exigency. In the 2000s the requirement of a doctoral degree also became usual in the public sector.

In the 2000s the regulatory framework regarding the faculty's academic credentials imposed by the government became more stringent. As a result, pressures for attending graduate education became widespread in all segments, and more and

⁶Since 1998, Brazil also recognize a professional master program. Professional master programs is supposed to combine a strong academic core with a professional training. Academics linked to this kind of master program are supposed to have a good academic profile (measured by their academic outputs) and be reputed as good professionals. These exigences make the professional master's program more demanding than the traditional academic one. This seems to be the main reason for the small number of professional master's programs (395 programs in 2013), when compared to the traditional academic model (2894 programs in 2013).

Table 3.3 Time (in years), for Brazilian academics, elapsed between being accepted to the first academic position and receiving the first graduate degree, and between first academic position and finishing the doctorate

Type of institution	Academic cohort	First graduate degree		PhD	
		Mean	Std. Deviation	Mean	Std. Deviation
Public research institutes	Before 1990s	-2.04	5.72	-10.62	7.39
	1990s	2.80	3.93	-1.2	4.87
	2000s	7.55	3.32	2.22	1.30
	Total	.96	6.23	5.7	8.21
Public research universities	Before 1990s	-2.96	6.74	-12.39	6.56
	1990s	1.91	4.78	-5.52	4.64
	2000s	4.32	4.93	.86	2.54
	Total	-.59	6.57	-9.0	7.12
Public regional universities	Before 1990s	-3.95	6.72	-15.81	6.49
	1990s	.52	5.37	-6.27	4.21
	2000s	2.02	3.60	.20	2.11
	Total	-1.03	6.22	-10.41	7.73
Private elite institutions	Before 1990s	-4.63	8.70	-14.46	8.16
	1990s	-.82	4.83	-7.58	3.84
	2000s	3.23	5.49	-.90	2.34
	Total	-1.92	7.49	-9.77	7.87
Private mass institutions	Before 1990s	-7.43	7.91	-19.48	6.73
	1990s	-.26	5.34	-6.61	3.45
	2000s	2.01	4.28	-1.20	3.11
	Total	-.96	6.67	-9.78	8.36
Total	Before 1990s	-4.52	7.52	-14.56	7.35
	1990s	.25	5.26	-6.21	4.24
	2000s	2.48	4.44	-.40	2.85
	Total	-.98	6.66	-9.48	7.83

Source: CAP Survey 2007/2008

Note: Negative values indicate academic career began prior finishing the graduate degree considered

more academics started seeking academic credentials in order to improve their opportunities. This movement created different patterns of response inside each segment. At the more research oriented institutions, holding a doctoral degree became almost mandatory and increasingly a necessary condition to successfully apply to an academic position. At the public regional universities and at the private elite institutions, holding a lower graduate degree became the almost universal condition, and holding a doctoral degree was recognized as a differential that highly improve the odd in favor of the candidate applying for an academic position. Pressures for some kind of graduate degree are also widespread inside the private mass oriented segment. In this segment, even older academics are being pushed to attend graduate programs.

In fact, the data collect by the CAP survey in Brazil provides evidence of the superposition of two different movements: the widespread demand for academic credentials for the younger generation, coupled with the pressure over the older academics for attending graduate education. Academics from research oriented institutions reported to be younger when finishing their first graduate program (on average, 27 year old). Also the distribution of their answers to this question is more concentrated, which is congruent with the hypothesis that for these academics attending graduate studies at the beginning of the career is a long established demand. The answers given by the academics from the public regional universities and the elite private institution are distributed in a wider range and are a bit skewed toward the older age. This figure is congruent with a situation where graduate studies are required from new academics while, at the same time, pressures are being put upon the older academics for attending graduate programs. Among the academics in private mass oriented segment, the average age for finishing the first graduate degree is 30 year old, The distribution of the answers are wider and more skewed toward the older age, which is consistent with a situation where attending a graduate education is an exigency imposed over older academics that have already long experience in lecturing at the undergraduate level.

The data presented in the preceding pages provide clues for describing the effects off convergent dynamic that hold true for all the different types of institutions. In order to answer to the pressures created by the new regulatory framework for upgrading the institutions' academic credentials, a new value is being put on academic qualification. For the younger generation, there is a need to hold a post-graduate degree in order to successfully apply for an academic position. For the older academics there is a pressure to go back to school in order to secure their positions and improve their odds for promotion and access to other benefits. Nevertheless there are some interesting differences in the pattern of recruitment in different kinds of institutions that will be explored below.

3.4 Access to the Academic Market

With such a wide diversity of institutions and sectors present in the Brazilian higher education, one should expect for diverse trajectories leading to access to different niches inside the academic market. The data collected by the CAP survey provide some clues regarding this dimension. First of all, one should note that mobility is low inside the Brazilian academic market. In the CAP survey, 43 % of respondents answer that the institution where they have been interviewed is their first academic position, and other 32 % indicated that in the past, they worked less than 5 years in other institutions before being accepted to their present institution. There are no significant differences between academics from all segments. This pattern of response holds true even when one takes a close look at the academics from the older cohorts (the ones that have entered to the academic market prior the 2000s). The only exception is to be found among the older cohort of academics from the

private mass oriented segment. Here almost 75 % of the academics from the older cohort (the ones that secured the first academic position prior 1990s) declared they have worked more than 5 years in another institution prior entering the present institution. Also, when asked if they are considering a move to another institution, 68 % of all respondents gave a negative answer. This figure is higher among the academics at the research universities (80 %), and a bit lower among those employed at the private mass oriented segment.

With so low mobility, the relevant evidence to understand the differences in the paths that lead to an academic position in each segment must be searched elsewhere. The CAP survey uncovers some clues. First of all, one should note how segregated is the pattern of recruitment inside the public sector. Table 3.4 below shows that the sector where the academic got his/her bachelor degree is one of the most relevant information for predicting his chances of securing a place in the public sector. In fact, more than 80 % of all academics employed at the public sector have attended bachelor programs at the public sector.⁷ What is more relevant, at the top academic institutions (the public research universities) 50 % of all academics have done their bachelor degree “at the same institution” she/he is employed at the present.

Many studies of higher education in developing countries emphasize the inbreeding problem, which is the tendency of an institution to form its own faculty (Horta et al. 2010). While there are some evidences of this problem also in Brazil,

Table 3.4 Brazilian academics’ sector of undergraduate studies and degree of diversification of the graduate training by type of institution (percentages)

Type of Institution						
	Public research institutes	Public research universities	Public regional universities	Private elite institutions	Private mass institutions	Total
Sector of the bachelor degree						
Public	89.4	85.8	79.7	45.5	39.7	57.9
Private	10.6	14.2	20.3	54.5	60.3	42.1
Total (n)	47	127	217	134	446	971
Graduate experience						
Always in the same institution	14.6	33.8	17.8	30.8	8.5	18.0
Some experience outside the institution	61.0	47.9	77.1	60.2	89.7	74.8
Some experience abroad	24.4	18.3	5.1	9.0	1.8	7.1
Total (n)	41	142	236	133	390	942

Source: CAP Survey 2007/2008

⁷This information is even more impressive if one consider that the public sector answers for only 25 % of all undergraduate enrollments.

the pattern found does not fit into the usual definition of inbreeding that takes as reference the institution where the academic attained his/her PhD degree. In the case of Brazil, due to the large size of Brazilian graduate system, the inbreeding problem is being attenuated in recent years. Nevertheless, our data provide some clues regarding the informal rules presiding the selection of new academics for the public sector, specially in research oriented universities. The data shows that, despite that the law regulating the procedures for the selection of new academics imposes public open contests, in most universities informal rules are in effect, allowing for a relevant bias favouring the institution's alumni.

When one considers the academic's experience at the graduate level, the pattern presented above doesn't change a lot (Table 3.4, above). On the whole, 34 % of the academics working at the best universities have done all their graduate studies at the same university they are now working. This figure drops to 18 % at the public regional universities, but is up to 30 % among the academics employed at the private elite institutions. These figures are influenced by the pattern of concentration of graduate education in Brazil described above. Even so, the pattern is impressive and provides clues of how strong is the segmentation in the academic market in Brazil.

Figure 3.1 below explores how the above mentioned dimension has changed over time and inside each segment of higher education. This figure presents the graduate

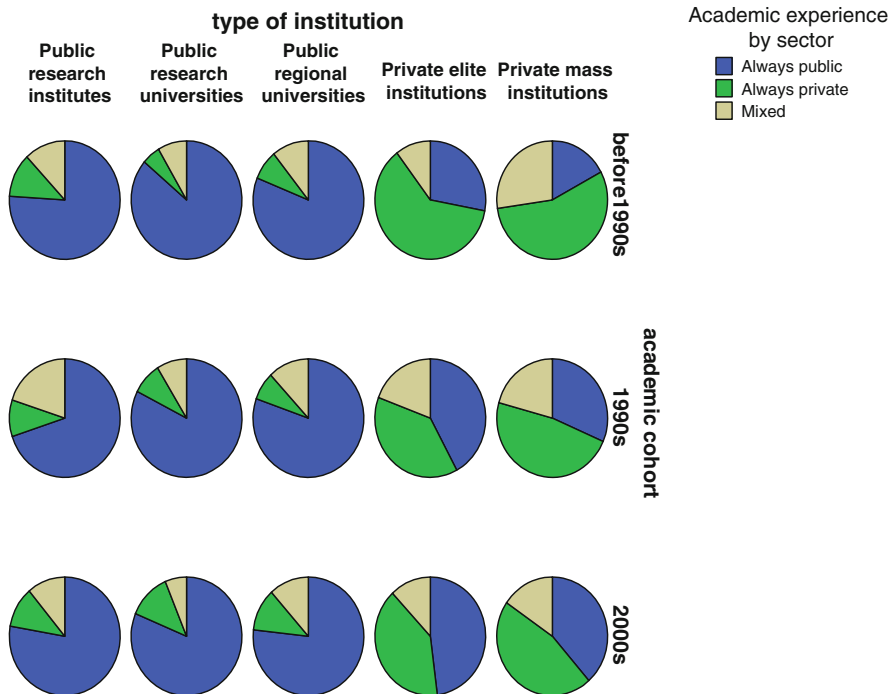


Fig. 3.1 Academic experience at graduate studies by type of institution and academic cohort (Source: CAP Survey 2007/2008)

experience of academics from all segments considering the sector where different degrees were earned and when the academic entered to the academic market.

The figure above shows that while the public sector still favors academics that attended by graduate programs inside the same sector, private institutions experience an impressive movement of opening positions for academics formed by the public sector. While conditions of contract and work inside this sector are still very poor, the new profile of academics recruited by these institutions sustain the expectation that the private sector in Brazil may experience new tensions and opportunities for change in the future. This prognosis is specially strong in institutions of the private elite sector.

The patterns presented above explain one interesting tendency of the Brazilian academic profession, already analyzed in another paper (Schwartzman and Balbachevsky 2013), which is the increased priority given by the Brazilian academics to research. Both in the 1992 survey conducted by the Carnegie Foundation, and in the 2007 CAP survey, we asked academics whether their priority was on teaching, on research, or both. Comparing the distribution of responses from the two surveys, it is possible to find a significant increase, among all academics, in the priority given to research between those years. In the public research universities, in 1992, 52.8 % of all academics declared that their priorities were in research. In 2007, this figure increased to 61.9 %. Among the academics from the regional research universities, the figures went from 38.8 % to 51.7 %. In the elite private institutions, in 1992, 46.0 % of the academics declared that research were their priority, and 49.7 % gave the same answer in 2007. Even at the mass private sector 29.9 % of the academics in 1992 declared that research was their priority. This figure raised to 38.4 % in 2007.

This increase happens in all types of institutions, and it is an evidence of a new academic ethos are becoming dominant in Brazil. An ethos that poses strong priority in research and lower emphasis on teaching. The decrease in the number of academics declaring to give priority to teaching is an evidence that the notion that academics should do research has become dominant in Brazil, even in contexts where, in practice, research does not really take place in any significant scale. In part, this is related to the sheer growth of proportion of academics with doctoral degrees; but it also expels a situation where teaching as a priority is losing its legitimacy, even if the system as a whole is focused in teaching. Nevertheless, to state that one's priority is research does not say much about how this research is being done, and how intense is one's research work. The CAP data shows that, as expected, in each type of institution academics with doctorate tend to be more involved in research. However, the profile of the institution also matters. As shown at the beginning of this paper, the conditions of work from one type of institution to another differ enormously. These conditions of work create relevant constraints for the way an academic fulfils her/his aspirations as a researcher. For example, while 69.5 % and 58 % per cent of the doctorate holders working in research institutes and research universities, respectively, reported success in securing external resources for their research; this proportion drops to 40.4 % among academics with doctorate working in regional universities. It is only 29.8 % among their colleagues of the

elite private institutions. Among the Ph.D. holders working in the private mass oriented sector, only 15.3 % reported access to external support for their research. These figures are even more expressive if one have in mind the fact that in Brazil higher education institutions, both public and private, are not supposed to support the expenses related to research. Traditionally, resources for academic research in Brazil, even for attending Conferences and Seminars, come from grants given by Federal and State level Science Councils and, to a lesser degree, from private foundations and enterprises. Thus, without access to external support, research is a small-scale and isolated endeavour, often with no production related to it, which means that these academics, even when holding a doctoral degree and doing research are de facto conducting their academic life parted from their peers.

This example illustrates how the converging patterns described above are diverted inside the institutional micro-environment, contributing to create new tensions and pressures for change inside all institutions. However, one should note that these tensions are particularly present inside the public regional institutions and inside the private elite institutions. In these institutions the new profile of academics recruited in recent years are at odds with the institution's priorities and patterns of governance (Balbachevsky and Schwartzman 2011).

3.5 Conclusions

This chapter has provided an overview of the more relevant dynamics shaping the changes in patterns of recruitment faced by academics in different sectors of the Brazilian higher education.

As noted at the beginning of the chapter, one relevant trait of Brazilian higher education is its intense diversification. In Brazil, diversification is brought by the huge presence of the private sector and the diverse types of institutions present in both the public and private sectors. In the public sector, the differential institutional commitment to research and graduate education is the main source of diversification. In the private sector, differences in the markets target by the institutions reinforces differentiation. While most of Brazilian private higher education institutions are confined to a kind of commodity-like market, where the prices charged for education are the main differential, the first two decades of the new century witness the emergence of a new dynamic sub-sector of elite oriented private institutions.

While in the past different sub-sectors tended to develop different strategies for recruiting new academics, the new regulatory framework created by the Brazilian Education Law of 1997 introduced convergent dynamics in all higher education. The new dynamics poses a premium in holding a graduate degree and, inside the public sector, holding a doctoral degree constitutes a relevant advantage. The academic market in Brazil became more competitive since early 2000s. The growth of a well-structured graduate system minimizes one relevant problem Brazil shares with many emerging countries, which is inbreeding. Nevertheless, some old traits are still in place in the Brazilian academic market, in particular, the data provides

interesting clues regarding the pattern of segregation that presides access to the most selective academic market, which is the academic positions inside the selected circle of public research universities. The data from CAP shows that inside these institutions informal rules for selecting their new academics tend to favor their alumni.

In spite of these traditional forces, the chapter also documented a number of changes and new dynamics that are reconfiguring the Brazilian landscape. These patterns of change have been reconstructed considering two different dimensions: first, there is the changing relationship between access to graduate studies and access to the academic market and, second, there is the changing pattern of inbreeding produced by the institution's strategies for recruiting new scholars. The results are impressive. While in past graduate education were a consequence of being accepted as academic in the public sector, now, holding a graduate degree is perceived as a pre-requisite for access to academic market, either in the public institutions, or in the elite private institutions and, to a growing degree, also in the mass oriented private sector.

As said before, in the past institutions of public and private sectors used to recruit their academics in segregated markets. However, this picture is not true anymore. What will be the outcome of these changes both for the public sector and mostly for the private sector is still an open question. The answer depends on the institutions' ability to reap on the competences brought by the new generation, and on the quality of the policies to be adopted by the government to support and enhance the new opportunities created by these changes.

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