South Africa: Rapid Change and Re-integration with the Global Community
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1. Introduction
The fundamental expansion and changes that have been sweeping world-wide through higher education during the past few decades has led to the academic profession rising to prominence on the higher education research agenda (see Wolhuter, 1997). South Africa has experienced momentous changes in the past 15 years. These changes have affected not only South African society, but the higher education sector as well, and by implication, the academic profession. Traditionally, the academic profession has not featured prominently on the South African higher education research agenda (see Wolhuter, 1997; Strydom and Fourie, 1999). As will be explained in this chapter, a thorough survey of the South African academic profession is therefore timely.

2. Historical Context (until 1994)
The first university in South Africa was the University of Good Hope, founded in 1873 under the auspices of the then British colonial administration. This university undertook no teaching, but prescribed syllabuses, conducted examinations, and awarded degrees for programmes taught at colleges, such as the South African College (Cape Town), and the Victoria College (Stellenbosch). Act 12 of 1916 made provision for the establishment of a federal examining university, to be called the University of South Africa (UNISA), located in Pretoria. In time, its constituent colleges became autonomous universities: University of Stellenbosch (1916), University of Cape Town (South African College, 1916), Witwatersrand University (1922), University of Pretoria (1930), University of Natal (1949), University of the Orange Free State (1950), Rhodes University (1951) and Potchefstroom University (1951). When its constituent colleges became independent
universities, UNISA became a correspondence university (1951). All these institutions were meant to cater for the White population.

Tertiary education for Black South Africans commenced in 1916, when the South African Native College was established in Fort Hare. This institution became autonomous in 1949, under the name of the University of Fort Hare. 1948 is a key date in the history of South Africa. In that year the National Party came to power. It implemented a programme of rigorous de facto and de jure racial segregation – “Apartheid” policies (a typical colonial set-up, de facto racial segregation had always been a characteristic of South African society). The advocates of Apartheid believed that the separation of the races (and the various ethnic groupings within the Black race) would enable each grouping to develop to prosperity upon the basis, and along the lines, of their own cultures. For this purpose, ten autonomous states (so-called “homelands”) were created within the borders of South Africa, for the various ethnic groupings. Each was to have its own government, school system, universities, etc. Consequently, such universities were created, each exclusively for students of the particular ethnic group.

The idea of separate, segregated education systems and universities was widely condemned among Black South Africans as inferior education designed to perpetuate inequality and White domination (see Karis and Gerhart, 1977; Nkomo, 1990; Christie, 1991, pp. 229-265). The South Africa government did not succeed in selling its policies to the international community either. After 1961 (when the country ceded from the British Commonwealth and became an independent republic), South Africa was subjected to a barrage of international sanctions and isolation measures directed at, for example, trade, economic, political, diplomatic, cultural, sports and other activities. With regard to universities, the international academic boycott was waged for three decades (1960-1990) as part of the international protest against the segregation policies of the South African government. Harricombe and Lancaster (1995, p. 30) note that this boycott included the following:

− a refusal of international scholars to travel to South Africa or to invite South Africans abroad;
− a refusal to publish South African manuscripts internationally;
− a refusal of international scholars to collaborate with South African scholars;
− a refusal by some publishers to provide access to information (e.g. books, software);
− a denial of South African participation at international conferences;
− a denial of access to South African academics by certain institutions abroad; and
− a refusal to act as external examiners for theses at South African universities.

(For a survey of the full extent and intensity of this academic boycott, the interested reader is referred to the publication of Harricombe and Lancaster, 1995).
Since the change of government and the new socio-political dispensation from 1994, South African academicians have been facing three sets of changes:
− a reintegration into the mainstream international academic community;
− one unintended effect of the international academic isolation was that South Africa had been kept aloof from changes taking place in the environment of academicians abroad, such as increasing managerialism, increased calls for accountability and increased measures of quality control;
− the exigencies of the new socio-political environment.
This new environment and its new demands is the focus of the next section.

3. The Changed Environment of the South African Academic Profession

In 1994, 342 years of White minority government in South Africa ended. A new political dispensation commenced, the basis of which was a new constitution with a Bill of Human Rights widely hailed as one of the most democratic and most progressive in the world. The ANC (African National Congress) took over as ruling party from the National Party.

3.1 A New Educational Dispensation in the Changed Socio-political Context

In the first years after 1994, the ANC formulated a new education policy, based upon the following principles: equalization of educational opportunities, desegregation, multiculturalism and democratization (see Wolhuter, 1999, p. 366). The aim of this policy was the economic development and modernization of South Africa.

Equal educational opportunities: One of the rallying points of the socio-political turmoil which preceded the 1994 political settlement was the segregated and unequal education system. In 1993 the gross tertiary education enrolment ratio in South Africa was 12.9 per cent (aggregate figure) (Wolhuter, 1998, p. 15). This aggregate figure masked big differences: for the different racial groups, the figures were as follows: Whites 50.4 per cent, Indians (i.e. South Africans of Indian descent) 30.4 per cent, Coloureds (South Africans of mixed-racial descent) 9.7 per cent, Blacks 11.1 per cent (Wolhuter, 1998, p. 15). This policy meant that universities had to gear themselves for a surge in Black student enrolments after 1994. A problem was that the Black primary and secondary schools of the pre-1994 era offered the worst quality education in South Africa. The unequal education system was dramatically illustrated by the differences in levels of governmental funding, teacher-pupil ratios, physical facilities, levels of enrolment, teacher qualifications and pass rates of the schools for the different race groups. For example, in 1993 government funding per pupil, was R1,659 in the case of Blacks, R2,902 in the case of Coloureds, R3,702 in the case of Indians and R4,732 in the case of Whites (Nkabinde, 1997, p. 44) (1993 exchange rate, 1 US $≈ R3.50). This meant a surge
of Black students from schools which ill-prepared them for tertiary study. The racial make-up of the South African population (total 44.8 million) is as follows: Whites 10 per cent, Indians: 2 per cent, Coloureds: 9 per cent, Blacks: 79 per cent (Steyn, 2007).

Desegregation: In 1994, the various racially based education systems and their administrations were collapsed into one national Ministry of Education. In the South African context, desegregation would be very much a one-way movement of Blacks from the historically Black educational institutions to the better endowed historically White educational institutions. This meant that the historically White institutions had to gear themselves for a much more diverse student body. Desegregation and equity also meant that the academic profession (traditionally very White male dominated, even at the historically Black universities) would have to change to reflect the demographic make-up of the South African population.

Multiculturalism: A criticism from the circles of the new rulers was that the pre-1994 education system was too Eurocentric, and that Africa’s cultural heritage was neglected. In very radical quarters it was felt that the message was preached that African cultures were inferior, and the most extreme critics alleged that curricula contributed to the subjugation of Blacks. Even curricula at university level were thus criticized (for example, see Jansen, 1991).

Democratization: The pre-1994 education system was also criticized as being too authoritarian and of therefore fostering a culture of submission. In response, the new government accepted the principle of democratization in education. This meant that all stakeholders (teachers, parents, workers, students, and the broader community) would participate actively in decision-making on education.

Development: The government pursued an ambitious set of national development goals by means of education. These goals include:

– economic goals: the eradication of poverty and the promotion of the country’s economic productivity and development;

– nation building: molding national unity in a country with a divided past; building a communal value system for a society characterized by democracy, equality, freedom, peace, justice, tolerance and stability;

– social goals: building a society free of racial, gender and other forms of unfair discrimination, creating a socially-mobile society and the removal of artificial hierarchies and obstructions in the way of progress.

Fourie (1999, pp. 275-296) summarizes the implications of this new education policy for higher education and for the academic profession in South Africa:

– democratization of institutional governance – institutions have traditionally been governed by a small number of top academics and management officers;

– increased access for financially and educationally disadvantaged students;

– restructuring the curriculum;
focusing on development needs in research and community service;
- the post 1994 socio-political environment required a move from the ivory tower that had traditionally characterized the academic profession in South Africa (cf. van der Berg as quoted by Steinberg, 1987, p. 16);
- redressing inequities in terms of race and gender in both student and staff profiles.

3.2 Reintegration into the Mainstream International Academic Community

The new political order which commenced in 1994 meant that South African academicians, after having been cut off from their colleagues abroad for some thirty years, were once again welcome at international conferences as visiting professors and as research collaborators world-wide.

3.3 The Force of International Trends Shaping a New Academic Environment

As mentioned above, one (unintended) effect of the international boycotts waged against South Africa was that universities remained relatively isolated from changes that affected universities elsewhere in the world. During the boycott years some radical changes took place abroad. These changes could, to a large extent, be traced back to the neo-liberal economic revolution which commenced in the 1980s and gained ever increasing momentum in the 1990s. The welfare state scaled down its range of activities and the capitalist or free market system was accepted globally. For the academic environment this meant the persistent denudation of academic autonomy as business principles such as accountability, quality control, managerialism and profitability were applied to the running of universities, and as governments (as the main sources of funds to most universities) assumed ever more say in the affairs of universities (Wollhuter and Higgs, 2006, p. 64). It should be mentioned that, apart from applying pressure to conform to governmental segregation policies, in the pre-1994 era universities in South Africa enjoyed a measure of autonomy probably unparalleled elsewhere in the world (Bundy, 2005). While management issues were the prerogative of a few incumbents at top management positions, academicians had full autonomy on academic matters. Even the renowned British comparativist, Edmund J King, an outspoken critic of the pre-1994 government’s policies, lauded the autonomy enjoyed by South African universities (King, 1979). After the advent of the new socio-political dispensation and after South Africa’s incorporation into the international mainstream, the South African academic environment was confronted with these changes not gradually as elsewhere in the world, but intensely and rapidly (Jansen, 2004; Bundy, 2005).

In 1995 the National Qualifications Act (Act 58 of 1995) was promulgated. Following developments in other parts of the world, such as Britain and Australia, this act made provision for the development of a National Qualifications Frame-
work (NQF) (see Boughey, 2004, p. 7). The NQF is a structure in which all qualifications in education can be placed in a network providing for a comprehensive system of lifelong learning for all (see Steyn, 2000). The aim of the National Qualifications Act, as well as the NQF, with its goals of equivalence, quality, standards-setting and portability, is the attainment of both equity and efficiency in the education system. Although the National Qualifications Act and the NQF were well received by many sectors of industry and commerce, this was not the case when it came to the higher education sector. In this instance, criticism was leveled by the higher education sector which was related to the autonomy traditionally enjoyed by institutions of higher education and the academics working in them (see Boughey, 2004, p. 12).

Institutions of higher education are required to register their qualifications on the NQF. To have their qualifications registered, higher education institutions need to have their quality certified by the Higher Education Qualification Committee (HEQC), established under the auspices of the Council of Higher Education – a body appointed by the Minister of Education in terms of the Higher Education Act. All these represent a significant curtailment of the autonomy that the academic profession had traditionally enjoyed in South Africa.

Webster and Mosoetsa’s (2002) empirical study concluded that managerialism has had a seriously negative effect on the South African academic profession.

The Higher Education Act (Act 101 of 1997) gave the Minister of Education sweeping powers over institutions in the higher education sector, including universities (see Republic of South Africa, 1997). This represented a radical break with the past. Warner (2004) notes that curtailing university autonomy has been a common practice in the history of universities in Africa during the decolonial period, as governments harnessed universities to achieve their objectives. In 2001, the Minister of Education effected a transformation of the higher education system in South Africa. Two major reforms were involved. The first had to do with the change from a binary to a unitary higher education system. Traditionally, South Africa had two types of higher education institutions, namely universities and technikons (see Bunting, 2002, pp. 61-63). The mandate of the universities was advanced teaching and research, while that for the technikons was the training of high-level technical human resources. However, with the Minister of Education’s 2001 reforms, technikons were transformed into technical universities, thereby elevating them to the status of universities. The second major reform involved reducing the number of higher education institutions in South Africa from 36 to 24. This was done by merging institutions, especially historically Black institutions with historically White institutions.
4. The South African Academic Profession: Results of the Carnegie Investigation

The first major international investigation into the academic profession was the Carnegie International Survey into the Academic Profession of the early 1990’s, which covered fourteen countries: Australia, Korea, Japan, Hong Kong, Brazil, Chile, Mexico, the United States of America, England, Germany, the Netherlands, Sweden, Russia, and Israel. This survey led to numerous publications, among others The International Academic Profession: Portraits of Fourteen Countries (P. G. Altbach, Princeton, Carnegie Foundation, 1996). The survey covered countries on all the continents, with the exception of Africa, which has always been conspicuously absent in the scientific debate on the academic profession which followed the Carnegie investigation. At the time when the survey was conducted, South Africa was still subjected to the international academic boycott. The authors applied the Carnegie survey to the South African academic profession during 2002 (i.e. a time lag of nearly a decade after the survey was conducted in the other countries).

The survey covered the following aspects of the South African academic profession:
- biographic details;
- teaching activities;
- research activities;
- community service;
- international dimensions;
- relationship with institutional management; and
- relations in the higher education society.

Biographic details: Of the returned questionnaires 47 per cent were completed by females and 52 per cent by males (1% of respondents declined to disclose their gender). This division comes closer to the national aggregate male/female composition of the academic profession in South Africa (see UNESCO, 1999), which shows that the sample could be regarded as representative. The average age of male and female respondents was respectively 43.6 and 43.2 years.

Male and female respondents were employed for 13.8 and 9.8 years respectively in higher education. South African higher education institutions distinguish between the following academic ranks: junior lecturer, lecturer, senior lecturer, associate professor and professor. The questionnaire accorded to these ranks respectively the numbers 1 to 5; and added another category, for respondents in management positions. The average male response was 3.9 and the average female response 2.8.

The above portray the South African academic profession as having a relatively young profile. The proportion of female academicians is comparatively high. In
the other countries in which the survey was conducted the percentage of male faculty ranged from 60 per cent in Brazil to over 90 per cent in Korea and Japan (Altbach and Lewis, 1996). In the other countries in which the survey was conducted, the average ages of faculty were as follows: Mexico: 39.2 (Gil-Antón, 1996); Netherlands: 42.3 (Geurts et al., 1996); Korea: 44.8 (Lee, 1996); Australia: 45 (Sheehan and Welch, 1996); England: 47 (Fulton, 1996); and United States of America: 48 (Haas, 1996), while in Japan and Russia the average academician was over 50 years of age (Arimoto, 1996). Together with female academicians’ concentration in the lower academic ranks, and their smaller number of years in the academic profession, this points to the effect of vigorous affirmative action policies in recruitments and appointments in recent years.

**Teaching activities:** During the academic year, respondents spend an average of 12.9 hours per week teaching. This is quite low, compared to the international norm. The average in the 14 countries of the Carnegie investigation was 22.2 hours (Altbach and Lewis, 1996, p. 21). On the other hand, the classes with which South African academics have to deal are quite large. Respondents’ average answers to the questions as to the smallest and largest introductory course classes which they teach were 81.1 and 128.0 students. In Korea the corresponding figures (Carnegie Investigation data) were 39.4 and 76.6 (Lee, 1996, p. 121).

The increase in student numbers in recent years (Jansen, 2004; Bundy, 2005), amidst considerations such as admission policies being determined by equalization and democratization rather than merit, is being experienced rather negatively by academics, as illustrated by the following responses to questions pertaining to undergraduate students at the respondents’ institutions (averages are reflected, on the following scale: 1: agree, 3: neutral, 5: disagree):

- current undergraduate students are adequately prepared in written and oral communication skills: 4.46
- current undergraduate students are adequately prepared in mathematics and quantitative reasoning skills: 4.73
- current undergraduate students do just enough to get by academically: 2.49
- current undergraduate students are more studious than the students I had five years ago: 3.97.

**Research:** Universities in South Africa have traditionally been conceptualized as teaching and training institutions, with research occupying a subordinate role (see Sutherland and Wolhuter, 2002, pp. 77, 79). This however was subjected to change by a subsidy formula, introduced in 1984, which links government grants to research output. Since then, academics have been subjected to ever increasing pressure to publish.

The questionnaire asked respondents the following question: “Regarding your own preferences, do your interests lie primarily in teaching or in research?”, and then asked them to choose between the following four answers:
The mean of the responses was 2.46, that is, just on the teaching side of 2.5 mid-point of the teaching-research continuum.

Research output is, however, rather low. The question as to how many articles respondents have published in an academic book or scholarly journal over the past three years drew an average response of 3.65. In the other countries for which data are available the figure ranges from 4.3 in the case of Australia (Sheenan and Welch, 1996) to 7.7 in the case of the Netherlands (Geurts et al., 1996). Respondents indicated that factors influencing their research output included the availability of research funding, facilities and resources for research but, surprisingly, not the number of students enrolled in their classes.

**Service:** Respondents had a positive attitude towards service activities. Respondents were asked to reply yes (=1) or no (=2) to the following statements:

- academics in my discipline have a professional obligation to apply their knowledge to problems in society;
- for me service activity beyond the institution is a distraction and competes with essential academic work.

The mean responses to two statements were 1.27 and 2.00 respectively. Yet respondents were apparently engaged in very few service activities. They had to indicate whether they had performed service (paid or unpaid) in any of the types of organizations below by answering yes (=1) or no (=2). Their average responses were as follows:

- business or industry: 1.71;
- educational institutions: 1.33;
- local government bodies: 1.82;
- national government bodies: 1.66;
- private social service agencies: 1.68;
- international government bodies: 1.86;
- other international associations: 1.77.

The reasons for the low service profile could not be ascertained. Respondents were asked to indicate on a Likert scale (ranging from 1: strong positive influence to 3: no influence/neutral to 5: strong negative influence) the extent to which their service activities were influenced by each of the following factors: the number of courses which they teach, the number of students enrolled in their classes, the amount of student advising which they do, their research commitments, their administrative work and their non-academic professional activities. All these drew responses of between 2.5 and 3.5.
It seems, therefore, that South African academics appreciate the necessity of changing the “ivory tower” approach towards their profession and that they desire to do so, but that they are prevented from accomplishing this for reasons that have not yet been identified.

**Relations with institutional and national governance:** Respondents were asked to score their influence in shaping key academic policies at each of the three levels of department or similar unit, faculty, school or similar unit and institution level. They had to indicate their response on a four-point Likert scale, with 1 signifying “very influential”, 2 “somewhat influential”, 3 “a little influential” and 4 “not at all influential”.

The mean responses were as follows:
- department level: 2.12;
- faculty level: 2.65;
- institutional level: 3.73.

It seems that while academics felt that they had some influence in shaping key academic policies at department level and a little influence at faculty level, they had no influence in shaping such policies at institutional level.

Academics appear to have neutral (neither exceptionally good nor very bad) relations with institutional governance. Respondents had to indicate the extent to which they agreed or disagreed with the statements below on an Osgood scale (ranging from 1: agree to 3: neutral to 5: disagree). Their average scores were as follows:
- top-level administrators are providing competent leadership: 3.23;
- I am kept informed about what is going on at this institution: 2.86;
- communication between academics and administration is poor: 2.69;
- the administration is often autocratic: 2.43;
- administration supports academic freedom: 2.95.

**International activities:** On average, respondents have published articles or books in another country 3.75 times during the three years prior to the survey, and 3.67 times during the ten year period prior to the survey. In the other 14 countries in which the survey had been conducted the corresponding averages were 1.3 and 4.0 (Altbach and Lewis, 1996, p. 37). These patterns were also evident in the other indicators of international activity measured by the survey, namely that whereas the effect of the international academic boycott was still visible over the ten years prior to the survey being carried out in South Africa (2002), in the period three years before the survey the effect was more than cancelled out.

**Gender and Racial Disparities:** The authors used the data obtained in the survey to investigate the extent of gender inequalities in the academic profession of South Africa (see: Higgs, Higgs and Wolhuter, 2004). No statistically significant gender differences on any of the questions surveyed could be found, except in the case of age, and in the cases of the two questions about the number of years em-
ployed in higher education and academic rank. As reported above, female academics score lower than male academics on these counts, and these could possibly be ascribed to the recent influx of females into the academic profession, due to vigorous affirmative action policies. The absence of gender differences with respect to other questions is in vivid contrast to the pattern in all the other countries surveyed (see: Welch, 1997, p. 329; Bain and Cummings, 2000).

The instruments (the international questionnaire) did not include a question asking respondents about their racial identity. The post-1994 policy principle of equalization has called for the radical transformation of the traditionally White dominated academic profession. This apparently has not been as successful as the demolition of the gender divide. Gibbon and Kalaki (2002, p. 200) draw attention to the fact that White academic staff dropped but slightly from 87 per cent in 1993 to 80 per cent in 1998. Potgieter (2002) investigated reasons for leaving their institutions and for leaving the academic profession. She used interviews and focus group discussions. The study identified the following reasons: institutional racism, poor management or leadership and responding to the new environment. The last mentioned refers to academics leaving universities as they were uncomfortable with the role of academics as fund raisers and entrepreneurs, and because they feel that universities had not risen to the challenge of operating within a changing global economy.

5. Conclusion

While the South African academic profession, in line with the changing idea of a university and the South African university in particular, see research as one of their core tasks, their research output has not yet matched this conceptualization. Similarly, while they accept that the walls around the ivory tower must come down, and that they have an obligation to undertake community service and to contribute towards the preconstruction and development of society, they have not yet gone so far as to step out of the ivory tower and perform community service or become very prolific researchers into the problems experienced by society.

Concerning moving away from elitist to mass education, at least as far as student intake is concerned, they seem to not have embraced equity principles yet. On the other hand, the South African academic profession seems to have progressed far down the road of gender equity. Other research suggests that this is not the case with racial equity though, and that racial inequalities persist.

In times of globalization, the profession seems to have internationalized rapidly, to the point of more than having wiped out the effect of the international academic boycott.

From the reported study, the two weak points of the South African academic profession seem to be low productivity and the persistence of racial disparities. In terms of all three fields of academic activity - teaching, research and community
service, the output of academicians in South Africa is, compared to their peers abroad, low. The questions included in the questionnaire failed to detect the causes for that. Follow-up research, similar to Potgieter's (2002) study on the racial divide, getting to the roots of the causes of the low productivity and suggesting solutions, would be valuable.

The two strongest points of the South African academic profession, on the other hand, appear to be the rapid and vigorous achievement of internationalization and of gender equity. On the evidence of the survey, the South African academic profession has attained a degree of gender equity exemplary even for egalitarian societies and higher education systems, such as Germany and Sweden. Further research, aimed at identifying societal and institutional contextual factors that facilitated attainment of this equality would therefore be valuable for the international higher education community.

At a time when concerns are raised that the present international trend of globalization will bypass Africa, and thus aggravate the continent's marginalization, the internationalization of the universities of Africa should become the focus of research, and the resulting findings employed in comparative educational research studies of the internationalization of universities worldwide. In such studies, successful strategies facilitating the internationalization of universities could be identified. As indicated by the research findings included in this chapter, faculty of South African universities apparently internationalized within one decade, to the point of being a model even for first class universities and higher education systems worldwide. Subjecting this process to thorough research, and juxtaposing and integrating the results with knowledge such as De Wit's (1995) study on strategies for internationalizing universities in Australia, Canada, Europe and the USA, can put the South African experience of the internationalization of universities to the benefit of the whole world.

Against the backdrop of this conclusion the imminent international (including South Africa) study of the changing academic profession is timely. The first international investigation (the Carnegie study) was colour and culture blind. With questions on respondents’ home language, the new investigation will allow studies of how academicians of (at least different linguistic) communities experience the academic profession in their countries. The new study will also allow a more thorough investigation of topics such as the internationalization of the South African academic profession, their teaching and research activities and their morale. Moreover, it will enable comparisons with some 20 other countries worldwide (which are also participating in the investigation), with the potential benefits to be reaped from comparative studies.
References


Brazil: A Typology of the Academic Profession and the Impact of Recent Government and Institutional Policies

Elizabeth Balbachevsky and Simon Schwartzman

1. Introduction

Brazil, like many other countries in Latin America, was taken by surprise by the new demands and challenges posed by globalization. The successful experience of industrialization based on import-substitution had produced a strong inwardly-oriented culture among the Brazilian elite and society. The prevailing notion was one that linked development to the government’s success in protecting Brazilian enterprises. Thus, autarchic, hierarchical, and centralized perspectives were predominant.

But the last decade of the 20th century brought impressive changes in this framework. The opening up of the economy, even though moderate, exposed Brazilian enterprises to an unusually high level of competition. Monetary stabilization, a successful privatization program and a new regulatory framework, enacted by the Constitutional amendments of the 1990s, created a new macroeconomic environment. The impact of these changes in education and the labor market was contradictory. The need for highly qualified manpower increased; however, industrial employment did not grow, while technology-intensive agriculture replaced the more traditional, labor-intensive rural economy. At the same time, with the expansion of secondary education in the 1990s, the demand for mass higher education increased, particularly in sectors requiring fewer entry qualifications from students, and low investment from the teaching institutions. So, the tensions between the higher-end, selective and highly productive higher education and the demand for lower-end, accessible and less demanding education became stronger than ever.

This chapter outlines the evolution of Brazilian higher education under these circumstances. It begins with a brief history of higher education in Brazil, de-
scribes its most relevant features today, and ends with a picture of the most recent trends, highlighting some of the challenges facing the Brazilian academic profession.2

2. Background

Higher education is a recent experience in Brazilian society. The first higher education institutions were created only in early nineteenth century. Then, the chosen institutional framework was the isolated professional school. These schools were public, with free tuition and supported by the federal government. Only in the early 1920s was the aim of creating a university seriously considered by the Brazilian elite. The first university, the Universidade do Brasil, was nominally established in 1920, but remained a loose connection of autonomous professional schools. In 1931 the first university law was enacted. This law was based on the Napoleonic notion that higher education institutions were licensed by the state to teach and certify for the established professions. Since all institutions had to provide the same core curriculum for each profession, the 1931 Law reserved little room for academic autonomy. In the long run, this starting point generated a large federal bureaucracy and an intricate web of rules and regulations regarding all dimensions of higher education. Until today, the Ministry of Education is in charge of supervision, inspection and enforcement of all these regulations. Such a complex system is also controlled by a National Council of Education and its state level counterparts.

The years between 1930 and 1950 consisted of growth and diversification. In 1934, the State of São Paulo, the richest region in the country, created its own university, the Universidade de São Paulo, by merging several existing professional schools (in engineering, law, medicine, agriculture) with a newly founded Faculty of Science, Philosophy and Humanities. This was followed in 1940 by the reorganization of the Universidade do Brasil with its own Faculty of Philosophy. After 1945, the University of Brazil became the federal university of Rio de Janeiro, and a nation-wide network of federal universities began to grow. The first Catholic university, the Pontifícia Universidade Católica do Rio de Janeiro, was launched in 1940. In the following years, new federal and Catholic universities were created in the most important state capitals throughout the country, and several states started to organize their own regional higher education systems. Isolated non-university institutions continued to be created by state governments and the private sector.

In 1968, the federal government, then under military rule, enacted a bill seeking to reorganize the entire Brazilian higher education sector. The reform replaced the old chair system with the departmental model, proposed the adoption of full-time contracts for faculty, regulated graduate studies and shifted the undergraduate level from the conventional sequential courses to a credit system, similar to the
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U.S. model (for an overview of the 1968 Reform, see Klein, 1992, and Durhan, 1998). Due to its authoritarian origins, the reform faced mistrust among faculty and students and resistance from the powerful faculty of the most traditional professional schools. Nevertheless, in the long run, it was successfully implemented in the public sector. Estimates show that the federal universities budget grew 5.4 fold in real terms between 1972 and 1986. Most of these resources were used to pay for full-time contracts for faculty (Schwartzman, J., 1993, and Velloso, 1987).

The 1968 Reform was implemented amid an explosive increase in the demand for higher education. In 1960, total enrolment in Brazilian higher education amounted to 93,000 students (Schwartzman, 1992). By 1970, enrolment had already jumped to 425,478. Five years later, in 1975, students at the undergraduate level had reached 1.1 million. This sharply enlarged student population was not envisaged by the 1968 Reform. To meet this demand, the Government relaxed the constraints over the creation of private, non-university institutions. The new colleges and professional schools absorbed the bulk of the expansion, protecting the public sector from the most deleterious effects of mass higher education. The growth of the private sector was achieved mostly by an increase in the number of for-profit, teaching-oriented, non-university schools and colleges. In the public sector, entrance examinations and numerus clausus are still used to limit the growth of enrolment and the pressures on teaching.

As depicted in more detail by one of the authors in another paper (Balbachevsky, 2004), graduate education in Brazil was first regulated in 1968. In the 1970s, a period of rapid economic expansion, it experienced explosive growth, when the major public science and technology agencies identified graduate programs as a priority for investment. In the 1980s, the economy ceased to grow, resources for research and new investment in higher education dwindled, but support for graduate education was maintained, and the number of scholarships increased dramatically. The explanation for such a paradox can be found in the Brazilian federal budgetary process. While funding for research is conceived as “expenses” and can be subject to major cuts from one year to the next, funding for scholarships is conceived as “salary” and the law forbids major cuts. When economic stagnation beset the Brazilian economy in the 1980s, the managers in the major science and technology agencies converted their funds from “soft” research expenses to “hard” scholarships and bench funds for graduate studies.

Thus, the federal government has been investing huge resources in the graduate level since the early 1970s. Money is provided to support programs and fellowships are generously offered to attract students. Unlike at the undergraduate level, the Government and the academic community has made a decisive effort to assure quality at this level since the early 1970s. At that time, the Fundação Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES), the Ministry of Education agency in charge of graduate education, created a sophisticated peer review
system that, to this day, successfully connects performance with support at the
graduate level.

3. Some Key Data

The 2004 census of the Brazilian higher education system shows that it comprises
2,013 institutions, of which 169 are universities. Only 11 per cent of the institu-
tions are public. Public institutions are owned by the federal government (4 %), or
by state (provincial) governments (4 %) and also by municipalities (local govern-
ment) (3 %). On average, public institutions are bigger and more established than
the private ones: they represent 49 per cent of all Brazilian universities and are
responsible for most of the country’s graduate education (82 % of the enrolments
at this level). The exceptions are the municipal-owned institutions, which are
usually small and less well-established colleges.

The private sector is huge: it includes 1,789 institutions and 72 per cent of all
undergraduate enrolment. Most of these institutions are small, family owned col-
eges, and 78 per cent are formally classified as for-profit institutions. As such,
they pay taxes and are not required to provide scholarships or philanthropic ser-
vice. Others, formally classified as philanthropic, are mostly confessional or
community-owned institutions. Most of the catholic universities belong to this
group. However, there are also large for-profit universities, and small phi-
anthropic institutions.

In the private sector, full time contracts are mostly found in philanthropic uni-
versities (75 %), and particularly in catholic universities. These universities are
usually very prestigious and tend to favor graduate academics with full-time con-
tracts. Among non-university, for-profit institutions, only 10 per cent of the aca-
demic posts are full-time. In for-profit universities, this figure rises but remains
low at 22 per cent.

Table 1 also shows that 21 per cent of all academic positions in Brazilian
higher education are filled by professionals holding a doctorate. Academics with
such a profile are to be found more usually in federal and state owned universities.
In fact, while the public sector offers only 34 per cent of all academic positions,
63 per cent of all Brazilian academics holding a doctorate find employment in the
public sector. This pattern is opposed to the one found in the private sector, which
offers 66 per cent of all academic positions, but secures only 37 per cent of the
academics holding a Ph.D.
Table 1: Brazilian Higher Education System: Key Data, 2004

<table>
<thead>
<tr>
<th>Ownership Type</th>
<th>Number of Institutions</th>
<th>Undergraduate Enrolments</th>
<th>Graduate Enrolments*</th>
<th>Faculty employed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td>46</td>
<td>533,892</td>
<td>N/A</td>
<td>49,104</td>
</tr>
<tr>
<td>Universities</td>
<td>41</td>
<td>40,692</td>
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<td>5,335</td>
</tr>
<tr>
<td>Non Univ.</td>
<td>87</td>
<td>574,584</td>
<td>53,776</td>
<td>21,941</td>
</tr>
<tr>
<td>Total</td>
<td>87</td>
<td>574,584</td>
<td>53,776</td>
<td>21,941</td>
</tr>
<tr>
<td>State</td>
<td>32</td>
<td>429,823</td>
<td>N/A</td>
<td>34,804</td>
</tr>
<tr>
<td>Universities</td>
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<td>41,838</td>
<td>N/A</td>
<td>3,378</td>
</tr>
<tr>
<td>Non Univ.</td>
<td>75</td>
<td>471,661</td>
<td>35,002</td>
<td>14,741</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>471,661</td>
<td>35,002</td>
<td>14,741</td>
</tr>
<tr>
<td>Local</td>
<td>5</td>
<td>59,208</td>
<td>N/A</td>
<td>4,007</td>
</tr>
<tr>
<td>Universities</td>
<td>57</td>
<td>72,875</td>
<td>N/A</td>
<td>3,796</td>
</tr>
<tr>
<td>Non Univ.</td>
<td>62</td>
<td>132,083</td>
<td>414</td>
<td>7,803</td>
</tr>
<tr>
<td>Total</td>
<td>62</td>
<td>132,083</td>
<td>414</td>
<td>7,803</td>
</tr>
<tr>
<td>All</td>
<td>83</td>
<td>1,022,923</td>
<td>N/A</td>
<td>87,915</td>
</tr>
<tr>
<td>Universities</td>
<td>141</td>
<td>1,178,328</td>
<td>89,192</td>
<td>100,424</td>
</tr>
<tr>
<td>Non Univ.</td>
<td>224</td>
<td>1,178,328</td>
<td>89,192</td>
<td>100,424</td>
</tr>
<tr>
<td>Total</td>
<td>224</td>
<td>1,178,328</td>
<td>89,192</td>
<td>100,424</td>
</tr>
<tr>
<td>For</td>
<td>26</td>
<td>407,303</td>
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<td>86,149</td>
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<tr>
<td>Non Univ.</td>
<td>1,401</td>
<td>1,596,894</td>
<td>N/A</td>
<td>107,971</td>
</tr>
<tr>
<td>Total</td>
<td>1,401</td>
<td>1,596,894</td>
<td>N/A</td>
<td>107,971</td>
</tr>
<tr>
<td>Philanthropic</td>
<td>60</td>
<td>939,491</td>
<td>N/A</td>
<td>55,434</td>
</tr>
<tr>
<td>Universities</td>
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<td>449,020</td>
<td>N/A</td>
<td>29,413</td>
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<tr>
<td>Non Univ.</td>
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<td>1,388,511</td>
<td>N/A</td>
<td>84,847</td>
</tr>
<tr>
<td>Total</td>
<td>388</td>
<td>1,388,511</td>
<td>N/A</td>
<td>84,847</td>
</tr>
<tr>
<td>All</td>
<td>86</td>
<td>1,346,794</td>
<td>N/A</td>
<td>77,256</td>
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<tr>
<td>Universities</td>
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<td>1,683,611</td>
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<td>115,562</td>
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<tr>
<td>Non Univ.</td>
<td>1,789</td>
<td>2,985,405</td>
<td>19,380</td>
<td>192,818</td>
</tr>
<tr>
<td>Total</td>
<td>1,789</td>
<td>2,985,405</td>
<td>19,380</td>
<td>192,818</td>
</tr>
<tr>
<td>Total</td>
<td>169</td>
<td>2,369,717</td>
<td>N/A</td>
<td>165,171</td>
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<tr>
<td>Universities</td>
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<tr>
<td>Non Univ.</td>
<td>2,013</td>
<td>4,163,733</td>
<td>108,572</td>
<td>293,242</td>
</tr>
<tr>
<td>Total</td>
<td>2,013</td>
<td>4,163,733</td>
<td>108,572</td>
<td>293,242</td>
</tr>
</tbody>
</table>

Source: Brazilian Ministry of Education, Higher Education Census of 2004, for institutions, undergraduate enrolments and faculty information.

*These figures include students enrolled in master’s of science programs, professional master’s programs, and doctorate programs. Source: CAPES Foundation, 2004

URL: http://www.capes.gov.br/sobre/estatisticas/

N/A: not available.

Table 2 shows how these figures have changed since the early 1990s. This table highlights two different tendencies in the Brazilian academic market: first, as it has expanded in the last years, it has also became more selective regarding academic credentials: in 1994, 63 per cent of the academics holding only a master’s degree found employment in the public sector. Ten years later, this figure dropped to 28 per cent. At the same time, a growing number of graduate professionals has been absorbed by private institutions: in 1994, 37 per cent of professionals with a master’s degree were employed by the private sector. In 1996, this figure increased to 45 per cent, and in 2002 it was 71 per cent. In the last census, 74 per cent of the Brazilian academics with master’s degrees had jobs in private institu-