BRITISH COUNCIL

QAA

Cultures of Quality: An International Perspective

Profiles of Quality Assurance in Higher Education in Nine Countries

Australia Brazil Chile China
Colombia India Mexico
United Kingdom United States

Contents

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Foreword

This collaborative international research project between QAA and the British Council considers the extent to which quality assurance cultures have evolved in nine countries, in relation to the differing features of their higher education systems. It includes individual case studies for the UK, USA, Australia, India, China, Brazil, Chile, Mexico and Colombia.

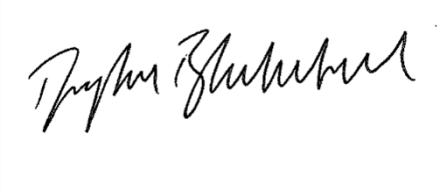
The research finds that generally the demand-led growth of higher education outstrips the ability of the state to provide, resulting in an expanding private sector, so that a mixed economy now exists in all nine countries featured in this research.

The research also raises some questions for future consideration, for example:

- What kinds of risk-based/light-touch structures will work best in rapidly developing, mixed-economy systems?
- What examples of embedded quality assurance cultures exist that might be developed in a new system context that can operate at scale and speed?

We look forward to continuing our collaboration with the British Council to investigate these questions, which are relevant to the role of developed higher education systems in a global market, as well as working on further insight into successful policy development for secure quality cultures in education worldwide.

We hope that you find these first phase findings interesting and informative.



Douglas Blackstock
Chief Executive (Interim)
QAA

Summary

Recent Developments in Higher Education Systems and their Approaches to Quality Assurance

1 Introduction

This collaborative research project, in collaboration with the British Council, considers how the structures and frameworks of quality assurance organisations in nine countries (**Australia, Brazil, Chile, China, Colombia, India, Mexico, the United Kingdom and the United States**) encourage cultures of quality in higher education systems. Specifically:

- the extent to which quality assurance cultures affect quality development cultures
- the opportunities to build international partnerships between the UK and other countries to address collective concerns.

These countries have been selected as the basis for comparative case studies because they represent the three largest TNE higher education systems (Australia, the United Kingdom and the United States); the expanding economies of India and China, with their concomitant expansion of higher education and world class universities; together with the developing economies of four Latin American countries, each with their particular agendas for higher education.

Methodology

The research explores what constitutes higher education in different national contexts, in terms of purpose, level, delivery mode and setting.

It investigates how and why higher education is regulated in the nine different countries and what impact this has on teaching and learning - does it improve the student experience and outcomes?

The research has provided nine comparative case studies, identifying the relative size and nature of the higher education systems in each country. A desk-based analysis of secondary sources was employed to provide a quantitative and qualitative scoping of the higher education systems in Australia, Brazil, Chile, China, Colombia, India, Mexico, the United Kingdom and the United States. In each case, the following aspects are outlined:

- the history and context of the higher education system
- GDP indicators
- the size of the higher education system
- the shape of the higher education system
- definitions of higher education.

2 What the national reports are telling us about higher education and its quality assurance systems

Higher education systems

In all nine of the countries whose higher education systems were profiled for the project, two major trends were observed. The first was a major expansion of higher education systems, whether as measured by the numbers of higher education institutions or by the numbers of students enrolled in them. In China student numbers quadrupled between 2000 and 2011 (from 5 million to 20 million). Over a somewhat longer period in Brazil, 1991 to 2013, numbers rose by 177 per cent; and between 2002 and 2012 in Chile student enrolments doubled. In the UK student enrolments rose from 1 million in 1995 to 2.5 million in 2015. In terms of institutions, there was a growth in China from 1,552 higher education institutions in 2003 to 2,491 in 2013. In the already 'mass' system of higher education in the USA there has also been continuing growth in numbers of higher education institutions - but very much concentrated in the growing number of private providers, with numbers of for-profit institutions increasing from 2,393 in 2000 to 3,194 in 2011 (an increase of 33 per cent), while numbers of public and not-for-profit higher education institutions actually decreased slightly (by 3 per cent and 6 per cent respectively).

The second trend was an increasing differentiation of institutions, as new, and especially private, providers joined established, typically public, providers within the rapidly expanding higher education systems. The increase in private providers in China went from 173 in 2003 to 717 in 2013. In several systems, especially in Latin America, there are far more private providers than public ones. In Brazil 87 per cent of institutions are private; in Chile it is 85 per cent; in Colombia 72 per cent; although in Mexico privates only account for 34 per cent of institutions. However, private providers are in most countries quite small specialised institutions. So, in Brazil, to take one example, public universities represent only 8 per cent of institutional provision but they enrol 53 per cent of the students.

However, the public/private division was only one aspect of higher education differentiation. All of the higher education systems contained institutions of many different types, both universities and others. India possessed 677 universities, 51 'institutions of national importance' and 37,204 colleges. In Mexico the system divided between universities, polytechnics and technical institutes, technical universities, teacher training colleges, and other specialised institutions (plus privates). In China there were 'regular colleges and universities', junior colleges and independent colleges, plus branches and programmes of higher education located outside higher education institutions.

However, in considering questions of diversity and differentiation of higher education systems, it is necessary to be aware of differences in how higher education is defined in different places. In some countries it appeared to consist of most post-school education; 'tertiary' and 'higher' were pretty much interchangeable terms. In Brazil higher education comprised universities and professional post-secondary institutions. In the USA higher education was defined as 'all education beyond secondary, of at least 2 years and consisting of programmes acceptable for full credit to a bachelor's degree'. In Colombia all post-secondary education appeared to be defined as 'higher education'. While different terminologies were employed in different places, there were general distinctions made between the academic and the professional/vocational, although with many institutions, especially the larger state ones, active across both areas. There were also differences in the requirements for university status (and title). In Australia the use of a university title was restricted to institutions that were research active in at least three fields of study. The provision of postgraduate courses was a requirement in a number of places.

In the UK, while the distinction between 'higher' and 'further' education is deeply embedded, it should also be remembered that a significant proportion of 'higher' education is provided in 'further' education colleges. Equally, it would never be claimed that vocational education is the distinctive preserve of further education colleges. With the increasing emphasis upon skills and employability, the vocational claims of higher education courses are frequently made, both within specific professional fields and more broadly. Much of the expansion of higher education, in the UK and elsewhere, has come from the growth in courses and enrolments in vocational fields. Boundaries and linkages between 'vocational higher' and 'higher vocational' courses are becoming increasingly blurred, along with definitions of what constitutes 'higher education'.

As well as differentiation between universities and other types of higher education institution, most of the countries differentiated within their university systems, whether formally or informally. Within India there was a differentiation between central universities, regional universities and 'deemed-to-be universities'. The distinction between 'central/national' and 'regional' universities was found in several places and reflected differences in funding and regulatory arrangements as well as status hierarchies, with older larger 'national' universities receiving more autonomy, better funding and a higher reputation than newer regional-based universities.

It is perhaps helpful to relate these multiple forms of higher education system differentiation to Burton Clark's (1983) distinction between 'vertical' and 'horizontal' forms of differentiation, with the former reflecting hierarchical rankings and status, and the latter reflecting more functional differences between institutions - being 'different' without necessarily being 'better'.[1]

A further aspect of system differentiation relates to where authority and decision-making lies - at national, regional or institutional levels - and how it is exercised - supporting academic, managerial, user or broader societal interests. This concerns the provision and transfer of funding, of power and status, and includes the exercise of quality assurance processes. The nine national profiles reveal some interesting patterns and possible contradictions in the operation of expanded and differentiated higher education systems.

First, in relation to the role of new private providers, it might be assumed that market forces would be replacing the state as a major controlling force. However, in several higher education systems, it was clear that new private providers were granted less autonomy than established state institutions. In some cases the privates were dependent on public universities for the award of degrees and the accreditation formalities that preceded them. This was partly a deliberate exercise of state control - in order to ensure the 'public good', protect the consumer and benefit the broader society - but it was also partly a deliberate attempt by small private universities to enhance reputation and public acceptability. Thus, in a number of places where higher education accreditation arrangements were optional, it was the smaller private universities that applied for accreditation, as it was something that could enhance reputation and acceptability. For well-established state institutions accreditation offered less, and indeed could be regarded as a distraction from the core university activities of research and teaching.

Second, however, the distinction between public and private providers was itself sometimes unclear. In cases where students could receive grants or loans from the state, irrespective of where they studied, public money could flow into private providers via the state-subsidised consumer. Similarly, some state institutions were receiving substantial amounts of funding from non-public sources, via research and consultancy contracts, recruitment of overseas students and numerous other means.

[1] Clark, B R (1983) *The Higher Education System*, Berkeley, University of California Press

Quality assurance systems

Bearing in mind these complexities of differentiated higher education systems, we now turn to examine some of the features of the quality assurance arrangements within the nine national higher education systems. In broad terms, differentiated higher education systems seem to require differentiated quality assurance arrangements. Different kinds of institutions have different needs and require different forms of control and support. In general, the national profiles reveal quite complex and multilevel quality assurance arrangements. In some cases, these allowed institutions some degree of choice on how to proceed, for example in being able to choose from a range of accreditation bodies, but at the same time, they enabled national authorities to exercise differential degrees of control, according to the reputation, experience and track record of the individual institution. For example, within the Australian Higher Education Standards Framework, a risk assessment could be undertaken of a particular institution in terms of its regulatory history and standing, its student profile, its academic staff profile, and its financial viability and sustainability. This would allow, at least in principle, the delivery of quality assurance arrangements appropriate to institutional characteristics and history. In Brazil it was the ENADE, an annual test and questionnaire administered to students at all higher education institutions, which was used to identify institutions or programmes where external evaluations might be required to address problems of low standards or student dissatisfaction.

At the system level, quality assurance is an important part of the process that provides a 'licence to practice' for individual institutions. It thus has a fundamental significance to new providers. In many countries it may provide limitations to the practice of an institution, for example in terms of qualification levels or subjects of study. The 'licence' might be time limited. However, for established providers, quality assurance may become a process of 'routine compliance', a necessary undertaking to avoid potential embarrassment and reputational damage, although it can also be reputation-enhancing and developmental. In Chile, while all higher education providers had to be licensed by the National Educational Council, institutional accreditation was an optional process available from private accreditation bodies and overseen by the National Academic Commission. However, in addition, programme accreditation was a requirement for all in the fields of health and education. In India four regulatory bodies shared oversight and accreditation arrangements. The latter had been voluntary until 2012 when accreditation became a requirement for all institutions. In Mexico, with several national quality assurance bodies, voluntary accreditation was frequently sought be institutions for status reasons.

Quality assurance systems and processes can also provide linkages and networking across institutional boundaries, especially when processes of peer review are involved. At the same time, they can be part of a growing competitiveness in relationships between institutions, especially in systems marked by strong vertical forms of differentiation. More generally, quality assurance processes can play an important role in reinforcing differentiation within higher education systems.

A larger picture: The arrival of 'universal' higher education

The higher education system and quality assurance developments occurring in the nine national case studies represent the arrival of what, in Martin Trow's well-known typology of higher education systems, could be described as 'universal' higher education. The key features of 'universal' higher education, in contrast to earlier 'elite' and 'mass' forms, included the following:

- it was an *obligation* for the middle and upper classes
- it was part of adaptations of 'whole populations' to rapid social and technological change
- higher education boundaries and sequences break down
- distinctions between learning and life break down
- there was great diversity with no common standards
- breakdown of consensus making institutional governance insoluble with decision-making flowing into the hands of political authority.

While these were some of the features of universal higher education identified in his original typology in 1974, when he returned to it in one of his final works in 2006, Trow considered where these trends in the development of higher education systems might be leading. Looking ahead, he forecast the following.

> 'In higher education in 2030, there will be more of everything; more institutions, more kinds of institutions, more students and teachers, and more diversity among both institutions and participants.'
>
> 'The development of the economy in advanced societies will continue to increase the demand for a labour force with more than a secondary school education, and reduce the size and numbers of occupations that do not.'
>
> 'The technical upgrading of jobs, and the link between the success of a business and the training and skill of its labour force will accelerate the interest of industry in supporting and continuing the education of their employees. A good deal of advanced education already takes place in the private sector; this will grow rapidly…'
>
> 'Private business and industry, as well as individuals, will increasingly pay for what they want and need by way of further and adult education. Government at every level will be contributing a smaller proportion of the total costs of higher education.'[2]

Trow's predictions seem to accord well with the developments in higher education systems recorded in the nine national case studies undertaken for the present project.

[2] Trow, M (2010) Reflection on the Transition from Elite to Mass to Universal Higher Education, in Burrage, M (ed) *Martin Trow: Twentieth Century Higher Education, Elite to Mass to Universal,* Baltimore, John Hopkins University Press

3 What the national reports are not telling us about higher education and its quality assurance systems

An important point that is often not recognised about Trow's typology is that the smaller system types are not removed by the arrival of the larger systems but continue alongside them. Thus, the universal systems can exist alongside the elite and the mass. This can be a helpful way of understanding the expanded and differentiated higher education systems that have been reviewed for this project. It links well to Clark's concept of vertical differentiation and it can be a useful way of linking differentiated quality assurance arrangements to their differentiated higher education systems. What is not clear, however, from the national profiles is whether differentiated quality assurance arrangements mainly reflect or can be an important cause of perceived quality differences between institutions. It was noted in several of the profiles that many institutions sought accreditation or other quality assurance processes in order to enhance their reputation.

More generally, in these large differentiated higher education systems, there is very limited evidence available to conclude that differences in factors such as reputation, funding and size are related to differences in educational content and processes, the student experience and learning outcomes, or to the social and economic impact of different types of institution. This is something that quality assurance processes might be examining, but comparable information from them seems to be less readily available than the more formal regulatory arrangements.

This is in part a more general observation that it is not clear how comparable the quality assurance processes are between different systems and agencies. Are accreditation arrangements broadly the same - in terms of the kinds of information collected, the criteria for evaluation, the backgrounds of the accreditors, the kinds of reports published and decisions made - within and across different systems? Are the outcomes of these processes the intended or unintended ones? Do quality assurance arrangements sometimes distort the processes and activities they are attempting to evaluate?

This has implications for the comparability of standards and qualifications gained from different higher education systems. With increasing international mobility of students, many of whom are acquiring a bachelor's degree from one national system then moving to a different system for a master's degree, questions about comparability of qualifications across national system boundaries become increasingly important. In large differentiated systems, there can also be questions of comparability within the system.

In raising questions of comparability, it should not be assumed that the issue is always one of concerns about low academic standards and the acceptability of qualifications from low reputation institutions. Sometimes the differences are in the opposite direction, with assumptions being made about differences in quality and standards between high and low reputation institutions on the basis of little or no evidence. In some places, available evidence suggests greater commonality of standards than is assumed by the policy rhetoric and public discourse.

Two further issues are raised by but not really elaborated in the country reports.

First, the sheer increase in the volume of institutions, students and curricula range pose major resource issues for quality assurance and related agencies. One approach to dealing with the significantly increased requirements to continue to adequately assure taxpayers, students and governments that quality and standards are rigorously scrutinised is to adopt risk-based classifications of institutions. Broadly, those deemed most at risk receive greatest external regulatory attention from agencies, while those regarded as mature and relatively risk-less are the focus of a more light-touch regime.

The reports are not able to reveal the extent to which such approaches are being used informally, irrespective of whether a risk-based regulatory framework has been adopted (as in England and Australia). That is, declared or otherwise, are all quality assurance and similar bodies having to reach views on the relative risks of respective institutions, albeit non-publicly in many cases? Does informality and lack of visibility in declaring risk categories differ substantially in process, effects and outcomes from those countries where risk has become a much more formalised and open methodology? How is risk defined and measured - by track record or more 'objective' determinations based on metrics and similar data?

A second approach is for external quality assurance, accreditation, and professional and statutory bodies to share information, and for quality assurance bodies to utilise data and verdicts found in the reviews by other regulatory bodies. Are such approaches, as a means of easing regulatory load, gaining traction internationally? What are the consequences of using different types of external scrutiny and varying methodologies in providing valid and commensurate judgements?

A second issue raised by, but not explored in, the various case studies is the extent to which the student experience is becoming more of a touchstone for quality judgements (as in England, Australia and the United States) than more straightforward academic or educational achievements? That is, are consumerist notions of quality and standards, in part reinforced by the growth of university rankings, beginning to be found in the approaches of agencies in the different countries? Do variations in national systems and cultures influence the extent to which consumerist approaches to quality are gaining ground? How is the student experience determined or interpreted in the different national systems?

Finally, it is not clear to what extent it is considered valid to externally assure and scrutinise new providers, especially private and for-profit, by using a unitary methodology that has proved resilient in another age and for more conventional institutions. Should all higher education institutions, regardless of the types of ownership and funding, essentially be judged in the same ways to ensure public and student confidence? Or is it appropriate to shape external regulatory and quality assurance approaches into a more pluralistic mould in order to fairly reflect the increased diversity in provision? For example, is there a move away from traditional input criteria (size of libraries, full-time staff) towards student outcomes and capabilities as the determinants of quality and standards? Is this regarded as removing regulatory barriers and in-built protectionism to innovation, new business models and the applications of digital higher education?

Relatedly, there are large questions for all higher education systems regarding how national regulatory policies are implemented at the institutional and basic unit levels of faculties and departments. There has been some limited research into the ways policies are 'recontextualised' (using the terminology of the sociologist, Basil Bernstein) when they reach different levels of decision-making and action. In the case of quality assurance this is a particularly large issue. National agencies set the frameworks for quality assurance processes but, to a greater or lesser extent, the processes are implemented by others. In most cases there will be processes of self-evaluation undertaken within institutions. These will be implemented in various ways and may have strong or weak linkages to the externally set national frameworks for quality assurance. Some national quality agencies, such as the QAA in the UK, carry out evaluations of institutions (or programmes within institutions) as well as setting out the frameworks for these evaluations. There are, however, also examples, as in the accreditation arrangements in India and Brazil, where other agencies carry out the evaluation processes and institutions have some choice about which agency to use. There is a balance to be achieved here between allowing different kinds of institutions to find quality agencies particularly suited to their distinctive features, while ensuring sufficient commonality in the implementation of quality processes to

provide assurance of comparability of quality and standards across increasingly differentiated systems.

There is a further step beyond policy implementation, of course. This is the impact of the implementation on the behaviour and decisions of key stakeholders, who, in the case of higher education, are the students, their teachers, the managers and administrators of institutions, the employers of the graduates, and the funders of higher education. Differences in quality assurance arrangements and processes are likely to impact upon the actions of all these groups.

4 Some unanswered questions about quality assurance arrangements in higher education systems

The nine national profiles of higher education systems revealed much in common: great expansion of student numbers and institutional providers; increasing differentiation of provision and providers; and changing regulatory frameworks, with often quite complex arrangements involving different organisations with responsibilities at different system levels. However, while the profiles were informative about the policy and organisational frameworks for quality assurance in higher education systems, they were much less so concerning the processes involved, and the impacts and outcomes of those processes.

If we consider for a moment some of the extensive literature that exists on higher education systems and their differentiation, we can identify some of the key challenges that are involved in moving from policies to practices and outcomes. Referring first to the seminal study *The Higher Education System* by Burton Clark we can note the different levels at which authority is exercised in higher education systems. Clark refers to:

i **discipline-rooted authority:** which may be 'personal rule' (professorial), 'collegial rule' (professorial), 'guild authority' or 'professional authority'
ii **enterprise-based authority:** which may be 'trustee authority' (institutional) or 'bureaucratic authority' (institutional)
iii **system-based authority:** which may be 'bureaucratic authority' (governmental), 'political authority' or 'system-wide academic oligarchy'.[3]

To those three levels identified by Clark over 30 years ago, we must now add a global level and note an increased role for consumers and markets at all levels. The Clark typology is still useful, however, if we want to try to understand how policies are implemented, and how the changes and re-contextualisation that occur shape the impacts and outcomes that are generated.

In a more recent contribution to debates about higher education systems, Ulrich Teichler has identified five factors that are exerting pressures to restructure institutional patterns and differentiation within higher education:

i growing international cooperation and mobility
ii globalisation
iii new steering and management systems
iv moves towards a knowledge society
v new media.

[3] Clark, B R (1983) *The Higher Education System*, Berkeley, University of California Press

We can find evidence of these pressures within the national profiles undertaken for this project. Looking at the potential of higher education policies to shape both short and long-term developments of higher education systems, Teichler argues that:

> 'most policies were a mixture of, first, "idiosyncratic" approaches, where emphasis is placed on the persistence of characteristics of national systems of higher education; second, the "functional" approaches, according to which the higher education system in all modern societies is seeking the universally optimal response; and third, "political" approaches, according to which actors have ample room to opt for elitist or egalitarian solutions, for extreme or moderate vertical diversity, for a strong role of academic or utilitarian norms etc' (Teichler, 2007, p 266)[4]

In considering current policy developments in higher education systems, and their quality assurance arrangements internationally, we can identify both similarities and differences between countries. However, if we consider the implementation and the effects of these policy developments in different national and institutional contexts we may still find similarities and differences, but they may reveal a different pattern from the policy intentions. What is happening in practice may be different from what was meant to happen - and this brings us to some 'unanswered questions'. In posing some unanswered questions for higher education quality assurance in particular it may be useful to distinguish between aims, processes, audiences and impacts, and how these relate to wider questions concerning the development of higher education systems. Some questions for both policy and future research are listed below for each of these groupings.

a Questions about the 'aims' of quality assurance

Essentially, there is a need for greater clarity in particular systems and contexts about the questions that quality assurance is asking of higher education. These are likely to include some combination of the following.

- Is this higher education good enough?
- How does it differ from some other higher education?
- Is it better than that other higher education? (How and why?)
- How can it be made even better?

These questions are relevant at all levels within quality assurance systems, from the system level itself down to quality processes at programme levels.

b Questions about quality assurance 'processes'

Questions here are particularly important if we want to improve our understanding of different higher education systems and the similarities and differences that exist between them. They include asking the following.

- Who is responsible?
- What is the unit of analysis? (Course? Qualification? Institution?)
- What is the method? (Peer review? Performance indicators? Risk analysis?)
- What is assessed? Input? Process? Output?
- How does it differ according to institutional (or programme) type?

[4] Teichler, U (2007) *Higher Education Systems: Conceptual Frameworks, Comparative Perspectives, Empirical Findings*, Rotterdam, Sense Publishers

c Questions about audiences and impacts

Bearing in mind the different levels of authority and decision making in higher education, and the differences that exist at both system and institutional levels, questions need to be asked in order to identify:

- internal and external audiences
- uses of information obtained through quality assurance processes by these different audiences
- evidence of impacts on practices and priorities within higher education systems and institutions, and on the users of those systems and institutions
- evidence of the development of quality cultures - what and where are they?

d Wider system questions

Finally, there are questions concerning the rapid changes occurring in the size and shape of higher education systems, which provide both changing contexts for quality assurance as well as potentially both changing needs and changing outcomes. Wider system questions concern the following.

- The place of private (for-profit and not-for-profit) providers and their relationship to public providers, the kinds of education they provide and the kinds of students who receive it.
- More generally, the relationship between higher education system differentiation and student diversity.
- Do we have national or regional systems, or is a 'global' system emerging?
- Is there clarity about the differences between 'higher' education and 'tertiary' education more generally, and what are the relationships between the two?

In relation to all the above questions we may find that answers differ between national systems, and between sectors and institutions within national systems. There may also be evidence of both convergence and divergence internationally in how higher education is developing and in how its quality assurance arrangements are adapting to this development.

Case studies

1 Australia

1.1 History and context of the higher education system

Before 1990, Australia had a binary education system, with colleges of advanced education that provided professional programmes, and universities that were responsible for research-oriented programmes. In 1990, the colleges became universities, able to offer both professional and academic programmes (EP-NUFFIC, 2015a). Moreover, the 1990 reforms resulted in mergers involving existing universities with previous colleges, new universities created out of mergers, and new models of network or federated university systems (such as that at the University of New England).

The university title is only available to institutions that undertake comprehensive teaching and research across at least three fields of education and include research training at doctoral and post-doctoral level. Australian universities are generally comprehensive institutions offering a variety of programs. There is provision for specialist universities with research in one field of study, but full universities must have research activities in at least three fields of study.

In addition to the changes in quality assurance (described in more detail in section 1.4), the major contextual changes in Australia's higher education landscape include its funding system and changes in student number controls. Today, the main source of public funding for higher education remains the Commonwealth Grant Scheme (CGS). The CGS finances tuition subsidies that are paid to higher education providers on behalf of students. These are known as Commonwealth Supported Places (CSPs) and are expressed in full-time equivalents (Kemp & Norton, 2014, pp 113 ff.).[5] Using funding agreements, the government can set a maximum total payment for student places by institution, as long as the maximum is not lower than the higher education provider received the previous year. Moreover, about three years ago student number controls were eliminated, which led to increased enrolments. In turn, this development raised questions regarding the levels of entrance qualifications failure rates and drops in quality.

However, the 2014-15 National Budget announced major reforms to the funding of higher education (many of which will require legislative amendments to the 2003 Higher Education Support Act).[6] From 1 January 2016, the Government will change the way it provides funding for CSPs, for example by removing the cap on the maximum student contribution that universities can charge CSP students, and extending the demand-driven system introduced in 2012 for bachelor's degrees to all higher education diplomas, advanced diplomas and associate degree courses.

1.2 GDP indicators

Figure 1 reports the key socioeconomic and demographic indicators for Australia, for the latest year available, as reported by the World Bank, compared with the UK.

1.3 Size of the higher education system

As of October 2014, there were 175 providers registered by the Australian Tertiary Education Quality Standards Agency (TEQSA) to deliver higher education qualifications.

[5] For example, two part-time CSP students at 50 per cent each occupy one CSP.
[6] The government's current higher education reforms (including to deregulate fee levels) has stalled in the Senate and shows no sign at the moment of having enough support in the upper house to pass.

Forty-three are universities and authorised to accredit their own courses of study.
The remaining 132 providers are privately owned - a mix of profit and not-for-profit entities. Four of these 132 providers are authorised to accredit their own courses of study. There are also a number of overseas universities and colleges of specialisation, registered under the Commonwealth Register of Institutions and Courses for Overseas Students (CRICOS).[7]

Over the past decade, Australia has witnessed a growth of about 41 per cent in enrolments. This number conceals differences among different groups. What is particularly important for Australia is the difference between domestic and foreign students. Between 2003 and 2013 the number of domestic students rose by 37 per cent, while the number of foreign students rose by 56 per cent (although in years 2010 and 2011 there was a slight decline).

Undergraduate students are about 70 per cent and postgraduate about 30 per cent.
Year on year, the relative growth is comparable (about 3-5 per cent for undergraduates and slightly higher for postgraduate).[8]

1.4 Shape of the higher education system

Any institution, public or private, wanting to award higher education qualifications in Australia must be registered by TEQSA. TEQSA is Australia's independent national regulator of the higher education sector.[9] It commenced operations in 2012 and represents a substantial increase in regulation for universities after a period of 'light touch' by state governments. TEQSA superseded the earlier Australian Universities Quality Agency (AUQA), which did not have the legal power to sanction providers (TEQSA, 2012). Moreover, higher education institutions (HEIs) were registered through regulatory authorities in their home states and territories, or had been established through state or territory based legislation.
Non self-accrediting HEIs had their courses accredited through the states and territories.[10]

Universities Australia provided recommendations in the context of the 2013 Review of Higher Education Regulation. Universities Australia considered the introduction of TEQSA as positive (and suggested it should be maintained) but the main concerns related to over-regulation and compliance burden. They recommend, inter alia, removing quality assurance from TEQSA's regulatory role (Universities Australia, 2013; Shaha and Jarzabkowskib, 2013). Indeed, TEQSA is being scaled down because the way it operationalised risk-based regulation imposed heavy information loads on the institutions rather than reducing the regulatory burden as originally claimed.

Vocational education and training (VET) colleges are regulated by the Australian Skills Quality Agency (ASQA)[11] but may also provide higher education and, thus, may fall under both the ASQA and the TEQSA with respect to their delivery.

Universities differ in size, ranging from the largest with around 40,000 students down to the smallest at around 2,000 students (CHEPS, 2011). Most range from 10,000 to 20,000 students. Many universities are located in the major cities but there is a significant number located in smaller regional centres. The larger universities usually have a number of campuses. Most of the universities are organised on the basis of faculties or schools but may also have a number of specialised research centres or institutes.

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[7] See: http://cricos.deewr.gov.au.
[8] See: http://education.gov.au/student-data (Annual Selected Higher Education Statistics).
[9] See: www.teqsa.gov.au.
[10] Legislation passed by the national parliament in June this year gives TEQSA the responsibility to register all higher education providers and accredit all higher education courses. It also gives TEQSA the power to impose a range of conditions or sanctions on a provider for not meeting the higher education standards. The key change is a shift towards a more compliance-driven approach to quality assurance.
[11] See: www.asqa.gov.au.

Among the public universities there exists a clear typology that is well known in the sector (Marginson, 1997). To some extent the types of universities are institutionalised via specific university associations, but it is not a formal categorisation of universities as recognised by Government policies. This typology includes:

- the Group of Eight - a coalition of eight old research intensive universities
- Technical Universities - represented by the Australian Technology Network ATN)
- other pre-1987 universities, most of which are represented by the coalition of Australian Innovative Research Universities
- post-1987 universities - represented, for a while, by the umbrella group 'The New Generation Universities'.

Universities have the power to 'self-accredit' their courses[12] to approve their own courses through academic boards or similar bodies. However, they must do so in accordance with the Higher Education Standards Framework. Among other requirements, they must adhere to the Australian Qualifications Framework. A small number of non-university higher education providers can self-accredit their courses, but most have their courses approved by TEQSA. Standards are set by a Ministerial body and are statutory, rather than being established by the universities.

There is no automatic link between TEQSA's decisions and university funding. This is partly because the regulation and funding of higher education have different histories. Although the Commonwealth has only been the principal regulator since 2012, it has been the dominant funder since 1974. Prior to 1974, both the states and the Commonwealth-funded universities (including indirectly through scholarships), along with universities raising money from student fees and other private sources.

TEQSA is a response to the Bradley review, which recommended setting up an independent national regulatory body for regulating all types of tertiary education. It regulates and assures the quality of Australia's higher education sector, including inter alia Australian branches of overseas universities.

TEQSA retains responsibility for each quality assessment; the methodology for conducting quality assessments is not always the same but takes into account the topic, timeframes, available resources and the specific requirements of each assessment. For example, TEQSA may (TEQSA, 2012, p 4):

- engage one or more external experts/consultants (including from TEQSA's register of experts)
- create a reference group to provide advice where specialised expertise is required
- undertake a joint review with another agency (within Australia or overseas)
- contract an external body to conduct aspects of the assessment
- undertake literature reviews and/or meta-analysis of reviews
- commission quantitative and/or qualitative research (either by an individual, a group of individuals, or an external body).

[12] See: www.teqsa.gov.au/for-providers/self-accrediting-authority.

TEQSA's objectives are to:[13]

- ensure national consistency in the regulation of higher education using a standards-based quality framework and applying three regulatory principles:
  - look at the regulatory history
  - make an assessment of the current regulatory scope (compliance)
  - make a regulatory decision (regulatory outcomes)
- protect and enhance Australia's reputation for quality higher education, and excellence, innovation and diversity
- protect students undertaking higher education
- ensure that students have access to information relating to higher education
- encourage and promote a higher education system that is appropriate to meet Australia's social and economic needs.

TEQSA registers institutions and (re)accredits courses of study. It:

- registers and evaluates the performance of higher education providers against the Higher Education Standards Framework and, specifically, the Threshold Standards, which all providers must meet in order to enter and remain within Australia's higher education system[14]
- accredits courses of study (for up to seven years as decided by TEQSA)[15] for providers without self-accrediting authority.[16]

In meeting its statutory tasks, TEQSA:

- undertakes compliance assessments, involving auditing a particular provider's compliance against the Threshold Standards for registration as a higher education provider
- undertakes quality assessments - either an assessment of the quality of an individual provider or a review of an issue across a number of providers (a thematic review).

Providers with self-accrediting authority are accountable (a) for interpreting the requirements of the Threshold Standards (in particular, the Provider Course Accreditation Standards and the Qualification Standards) and (b) for judging whether these will be appropriately applied and met throughout the development, approval, delivery and discontinuance of a course of study. Providers can apply for self-accrediting authority with TEQSA (who will conduct an assessment and come to a decision).[17]

TEQSA registers and evaluates the performance of higher education providers against the Higher Education Standards Framework, which includes five domains (provider standards, qualification standards, teaching and learning standards, research standards, and information standards).

The so-called Threshold Standards are a subset of Australia's Higher Education Standards Framework, including the Provider Standards and the Qualification Standards. These must be met for an HEI to be registered and maintain operation as a higher education provider

[13] See: www.teqsa.gov.au/sites/default/files/TEQSAsnapshotMay2014.pdf.
[14] See: http://teqsa.gov.au/about.
[15] For initial accreditation TEQSA determines the length, which cannot exceed seven years, but can be less. See: www.teqsa.gov.au/for-providers/accreditation/initial-accreditation.
[16] See: www.teqsa.gov.au/sites/default/files/TEQSAsnapshotMay2014.pdf.
[17] See: www.teqsa.gov.au/for-providers/registration/self-accrediting-authority.

within Australia. The Qualification Standards strongly reflect the Australian Qualifications Framework (AQF). Each Standard has a number of subsumed criteria ('provisions').[18]

Finally, TEQSA takes a risk-based approach to assuring higher education standards. The Risk Assessment Framework outlines the key steps and components of the risk assessments TEQSA undertakes of higher education providers annually. Risk assessments provide a snapshot of providers across the sector to help prioritise TEQSA's focus in undertaking quality assurance activities. The risk assessment component is meant to give effect to the TEQSA Act where it requires following principles of reflecting risk, proportionality and necessity as part of quality assurance. TEQSA's risk assessments do not draw conclusions about compliance with the Threshold Standards but identify potential risks of non-compliance (TEQSA, 2014).

TEQSA focuses on four key areas in risk assessments to support the overall evaluation, comes to a risk evaluation and discusses this with the provider (Ibid). Within the areas there are clear indicators of risk (for example, under students there is 'student load', 'cohorts completed', 'attrition rate' and 'graduate satisfaction').[19] The four areas of risk assessment include (a) regulatory history and standing, (b) students, (c) academic staff profile, and (d) financial viability and sustainability

Finally, other important players that affect TEQSA's responsibilities are as follows.

- The Higher Education Standards Panel (HESP),[20] which reports only to the Commonwealth Tertiary Education Minister. Its work is independent of the regulator (TEQSA). HESP proposed the Higher Education Standards Framework, under which the TESQA must operate. In February 2015 the functions of the HESP were combined with those of the TEQSA Advisory Council, which had been inaugurated only in April 2014 (it was established to advise the Minister and TEQSA on minimising regulatory intervention relating to Australian higher education, consistent with ensuring accountability for quality).[21]
- Authorities monitoring and maintaining the AQF: prior to 2008 the Australian Qualifications Framework Advisory Board was the custodian of the AQF on behalf of ministers responsible for education; between 2008 and 2014, the AQF Council, established by, and reporting to, Commonwealth, state and territory ministers responsible for tertiary education, training and employment as well as Commonwealth, state and territory ministers with responsibility for school education had this role;[22] as of 2015, the management of the AQF is delivered through the Australian Government Department of Education in consultation with the Department of Industry and states and territories.[23]

1.5 Definitions of higher education

Higher education in Australia is very diverse and flexible, enabling mobility between different types of education (for example, between post-secondary education and higher education). Moreover, an increasing number of universities are offering professional, non-degree programmes. Usually, non-university higher professional education institutions are not

[18] Higher Education Standards Framework (Threshold Standards) 2011 as amended made under subsection 58(1) Tertiary Education Quality and Standards Agency Act 2011; and the 'Explanatory Statement'. Available at: www.comlaw.gov.au/Details/F2012L00003/Download.
[19] The full list and description is available in Australian Government - TEQSA 2014, Appendix 1, pp 10-14. Available online at: www.teqsa.gov.au/sites/default/files/publication-documents/TEQSARiskAssessFramework_2.pdf.
[20] See: www.hestandards.gov.au/ and www.hestandards.gov.au/higher-education-standards-framework.
[21] See: www.teqsa.gov.au/news-publications/news/teqsa-advisory-council-announced.
[22] See: www.aqf.edu.au/aqf-governance/prev-arrangements/australian-qualifications-framework-council.
[23] See: www.aqf.edu.au/aqf-governance/current-arrangements.

self-accrediting but fall under the supervision of the competent authorities in the relevant state or territory (EP-NUFFIC, 2015a).

Figure 3 shows Australia's higher education system; figure 4 shows the equivalency between the Australian qualifications and the European Qualifications Framework.

2 Brazil

2.1 History and context of the higher education system

Traditionally, the Brazilian higher education system has been accused of elitism and of perpetuating social exclusion (especially for non-white Brazilians living inland).[24] Hence, the two key policy necessities of Brazilian higher education have been expansion and (its impact on) study success (UNESCO, 2012). Over the past two decades, this need was largely addressed by deregulating the sector (privatisation). In turn, this required strengthening external quality assurance mechanisms, for example through the introduction of the National Examination of Student Performance (Exame Nacional de Desempenho dos Estudantes (ENADE).[25]

Examples of policies that have been initiated are as follows.

- The National Education Plan 2001-10 set increasing access opportunities as a primary objective. The aim was to reach 30 per cent access of 18-24 year olds by 2010[26] by:
  - increasing the number of inland federal providers while maintaining quality control during the first phase (2003-07), called Expansion I (Ministry of Education, 2012)
  - promoting distance learning through the System Open University of Brazil (Ministry of Education, 2006)
  - a number of new initiatives under the Ministry's 2012-15 Multi-Year Plan, Plano Pluriannual (PPA), including inter alia, a national student assistance programme and funds for disadvantaged groups (Ministry of Education, 2012b).
- Law n.12.711/2012 guarantees the reserve of 50 per cent of all places, at bachelor's level, in the 59 federal universities and 38 federal institutes of education, science and technology, to students that come from public high schools. It includes family income and racial groups as criteria.[27]
- The Student Financial Aid Fund - Fundo de Financiamento Estudantil (FIES) - is a loan system provided by the Ministry of Education to support access to the private sector. Loans depend on the family income and the external evaluation of courses. The coverage varies from 50 per cent to 100 per cent, with interest rates of 3.4 per cent per year. Students start repayment 18 months after graduation. Since 2010, when the rules for the programme were reformulated, 1.16 million students have benefitted from the programme.[28]
- The University for All Programme - Programa Universidade para todos (Prouni) - is a grant system provided by the Ministry of Education. Family income is part of the criteria for participation and students should either come from public high schools or

[24] The report deliberately avoids using the term 'minority' because the ethnic makeup of Brazil is extreme varied, with about 48 per cent of the population Caucasian and 50.7 per cent mulatto or black. See: www.cia.gov/library/publications/the-world-factbook/geos/br.html.
[25] The National Examination of Student Performance replaced the National Course Examination (Exame Nacional de Cursos), established in in 1995.
[26] A list of policy initiatives is available on UNESCO, 2012, pp 9 ff.
[27] See: http://portal.mec.gov.br/cotas/perguntas-frequentes.html.
[28] See: http://sisfiesportal.mec.gov.br/faq.html.

have had scholarships at private high schools. Since 2005, the programme has already served 1.4 million students, 70 per cent of them with full scholarships.[29]

External quality assurance in Brazil dates back to 1977 when the first evaluations of postgraduate programmes took place. However, it was the mushrooming of higher education institutions (HEIs), mostly private, after 1991[30] that led to a more structured system of quality control - particularly to tackle low teaching quality caused by teachers with lower academic credentials and poor infrastructure (Iveti Magalia et al, 2011). Moreover, the falling research standards are (partly) blamed on the increase in private institutions, which do not conduct adequate research.[31] The undergraduate process is very structured and the use of the ENADE as part of the evaluations suggests a focus on (a) efficiency, but also (b) teaching quality (as students opinions are also monitored through the ENADE).

All these developments are said to be strongly influenced, in one way or another, by international pressures and globalisation. For example, reviews of postgraduate research programmes explicitly define top research programmes as 'at international level', suggesting that the (postgraduate) quality assurance process might endorse, at least implicitly, (a) isomorphic trends in academic research and (b) an increased focus on publications (which are the key indicator for ranking positions); Dias Sobrinho (2010) contends that the ENADE as part of the external quality assurance process is indicative of a desire to strengthen control, efficiency and effectiveness according to market criteria suggested by the Organisation for Economic Cooperation (OECD) or the World Bank. Iveti Magaglia et al. (2011) argue that policies to broaden access were largely designed under influence of the international organisations (as already stated by World Bank, 1994).

2.2 GDP indicators

Figure 5 reports the key socioeconomic and demographic indicators for Brazil, for the latest year available, as reported by the World Bank, compared with the UK.

2.3 Size of the higher education system

As of 2013 there were 2,391 HEIs in Brazil (see figure 9). Between 1991 and 2013, the number of providers grew by 177 per cent, mostly driven by new private institutions.

The number of students is over 7 million, most attending private institutions, including over a million in distance education (Brazilian Ministry of Education, 2013). Universities (as opposed to other providers such as 'colleges') represent just 8 per cent of the tertiary supply of institutions but cater for over 53 per cent of students.

In 2012, according to National Institute of Educational Studies - Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira (INEP) - over 31,000 programmes were offered, of which 1,148 were by distance education. Figures 6-8 show the increase in Brazilian higher education supply and demand.

[29] See: http://prouniportal.mec.gov.br/o-programa.
[30] There were 864 tertiary providers in Brazil in 1991; there were 2,391 in 2013 - a 177 per cent increase.
[31] According to Rita Barata, consultant for evaluation and coordinator in public health with the Brazilian Ministry of Education, quoted in the Times Higher Education, November 2014. See: www.timeshighereducation.co.uk/news/brazils-main-concern-is-research-quality-at-its-universities-says-adviser/2016854.article.

2.4 Shape of the higher education system

Brazilian higher education is very diverse, with a strong private sector (87 per cent of institutions). Public institutions can be universities, University Centres, Colleges (called 'Faculdades'), Federal Centres of Technological Education (Centros Federais de Educação Tecnológica),[32] and Federal Institutes (Institutos Federais). Providers differ regarding their institutional autonomy and their commitment to research and postgraduate education.[33] Moreover, providers can be 'Federal', 'State', or 'Municipal' depending on their funding sources. Figure 9 summarises the numbers of institutions per category as of 2013.

Over 53 per cent of students are enrolled in universities, which represent just 8 per cent of institutional provision. Thus, Brazilian universities are very large.

Both public and private tertiary providers in Brazil are coordinated and monitored by the Ministry of Education, which authorises institutions and courses to operate. External quality assurance is part of the National System of Higher Education Evaluation - Sistema Nacional de Avaliação da Educação Superior (SINAES) - established in 2004. The SINAES provides criteria for the evaluation of programmes and institutions and consists of three main components, namely the evaluation of institutions, programmes and 'information collection'. Evaluations produce an assessment on a five-point scale (0 = indicator not present; 5 = excellent), and all results are made public by the Ministry.[34]

Moreover, the SINAES proposes an 'integrated evaluation' for internal and external evaluation processes, also making use of the ENADE instrument[35] run annually by INEP. The ENADE assesses student performance (skills and competencies) against curricula's purported learning outcomes. All first and final-year students (such as soon-to-be graduates) must participate in the ENADE, which includes a test, a questionnaire on the students' impressions about the test, and a questionnaire about students' opinions on their programme coordinator.[36]

It also contributes to two quality evaluation indicators, namely the 'preliminary courses concept' - Conceito Preliminar de Cursos (CPC)[37] - and the 'general index of courses' - Índice Geral de Cursos (IGC).[38] The CPC is composed by the ENADE and a few other elements, such as the number of part-time/full-time scholars and infrastructure. Grades range from 1 to 5; programmes/courses graded 1 or 2 are subjected to a stricter evaluation. The IGC integrates the evaluations of undergraduate level, organised by the ENADE, and the evaluations of postgraduate levels, stricto sensu, organised by the Brazilian Ministry of Education. Grades range from 1 to 5 and are used as a criteria for the recognition and re-recognition of programmes/courses (see below).

External quality assurance is implemented by two distinct agencies for undergraduate and postgraduate studies. INEP leads the undergraduate reviews, under the supervision of

[32] Federal Centres of Technological Education (CEFETs) are educational institutions subordinated to the Ministry of Education, with administrative, didactic and financial autonomy. They offer professional education, including further and higher education.
[33] See the Brazilian's ministry of education website at: http://portal.mec.gov.br/index.php?option=com_content&view=article&id=116&Itemid=86.
[34] The list of different areas of institutional and programme evaluation and information collection is available at: http://portal.inep.gov.br/superior-sinaes-componentes. A further description of the regulatory cycles is available at: http://portal.mec.gov.br/index.php?option=com_content&view=article&id=13012:ciclo-de-seminarios-debate-regulacao-e-avaliacao&catid=212&Itemid=86.
[35] See: http://portal.inep.gov.br/superior-sinaes-instrumentos.
[36] See: http://portal.inep.gov.br/web/guest/enade and http://portal.inep.gov.br/enade/perguntas-frequentes.
[37] See: http://portal.inep.gov.br/educacao-superior/indicadores/cpc.
[38] See: http://portal.inep.gov.br/educacao-superior/indicadores/indice-geral-de-cursos-igc.

Brazil's Higher Education Evaluation Commission - Comissão Nacional de Avaliação do Ensino Superior (CONAES).[39] A federal agency under the Brazilian Ministry of Education, the INEP reviews and implements public policy in education.[40] Postgraduate programmes are validated by the Coordination of the Improvement of Personnel of Higher Level - Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES) - also a Brazilian Ministry of Education agency.

At undergraduate level, INEP: leads the entire evaluation process; produces the indicators and an information system that supports both the regulatory process, carried out by the Brazilian Ministry of Education; and ensures transparency of data on quality of higher education to the whole society. INEP uses the ENADE and the outcomes of expert panels for its decisions.

Institutional evaluation includes an internal and external phase and is meant to (a) improve the quality of higher education generally, (b) steer the institution's programmatic offer according to national goals, (c) ensure the permanent increase in institutional, academic and social effectiveness, and (d) deepen institutional social responsibility.[41]

Programme/course evaluations include three stages, namely authorisation (licencing), recognition (first time validation) and re-recognition (validation). A team of experts registered in the national Evaluator Database - Banco Nacional de Avaliadores (BASis)[42] - implements each stage.[43]

At postgraduate level, Coordination for the Improvement of Higher Education Personnel (CAPES), a foundation within the Ministry of Education in Brazil tasked with improving the quality of Brazil's faculty and staff in higher education, is the relevant accrediting agency. This validation also occurs every three years. CAPES focuses particularly on productivity. The evaluation rates institutions on a scale from 1 to 7, with rankings of 6 and 7 considered to be of 'international level'. Most of the programmes with this rating are in the South-East and at public universities (European Commission, 2012 p 15; interview at CAPES, March 2014). So called 'lato sensu' postgraduate programmes must be registered with INEP.[44]

2.5 Definitions of higher education

Higher education includes university education and professional post-secondary education. University education has two levels: graduação (undergraduate, four to six years) and pos-graduação (postgraduate). Graduação programmes warrant a degree of Bacharel (bachelor's). Professional qualifications are also used, such as Médico and Engenheiro. The university teacher-training programme (four years) leads to a Licenciado degree (a Licenciatura). Pos-graduação programmes include especialização, mestrado and doutorado.

There are two types of pos-graduação programmes, namely: latu sensu ('in the broad sense', for example refresher courses or specialisation courses); and stricto sensu

[39] The CONAES is the entity responsible for evaluation within the Ministry. It is formed by representatives of INEP, CAPES, teachers, students, and representatives from civil society (European Commission, 2012, pp 17 ff.)
[40] Therefore, it is not limited to higher education but has a dedicated department for higher education: Diretoria de Avaliação da Educação Superior (DAES).
[41] See: http://portal.inep.gov.br/superior-avaliacao_institucional.
[42] See: http://portal.inep.gov.br/superior-basis.
[43] See: http://portal.inep.gov.br/superior-condicoesdeensino.
[44] See: http://portal.inep.gov.br/c/journal/view_article_content?groupId=10157&articleId=11154&version=1.0.

('in the strict sense').[45] A Mestre degree grants admission to the Doutorado (PhD, which usually takes four years).

Cursos superiores de tecnología are classified as post-secondary professional education. The programme is primarily geared towards the labour market and graduates are awarded a certificate with the professional qualification of Tecnólogo. This certificate also allows progression to a nominal one-year professional postgraduate programme (Mestrado Profissional) or to a related university undergraduate programme, with certain exemptions.

Figure 10 shows Brazil's higher education system; figure 11 shows the equivalency between the Brazilian qualifications and the European Qualifications Framework.[46]

3 Chile

3.1 History and context of the higher education system

Chile's state higher education started with the establishment in 1842 of the University of Chile (Universidad de Chile), which was based on an institution originally founded by the Spanish in colonial times (1738). The first private university, the Pontifical Catholic University of Chile (Pontificia Universidad Católica de Chile), was established in 1888. The system expanded as these two universities established new branch campuses and a further six universities were created. Their administrative autonomy was recognised in 1931.
Until the early 1980s, the Chilean higher education system consisted of eight universities (OECD, 2012).

In 1981 a new piece of legislation enabled the establishment of Professional Institutes - Institutos Profesionales (IPs) - Technical Training Centres - Centros de Formación Técnica (CFTs) - and private universities in the higher education system (DIVESUP/MINEDUC, 2012, cited in OECD, 2012; see also figure 14). The Council of Rectors of Chilean Universities - Consejo de Rectores de las Universidades Chilenas (CRUCH) - represents state universities (and the regional universities, which were created out of branch campuses), which are distinct from the new (private) institutions established after 1981.

Higher education financing reforms also took hold as public grants increasingly were allocated to families rather than paid directly to institutions. A small proportion was retained for grants and scholarships to students (Ibid). CRUCH universities still received direct public grants, however private funding was inter alia diversified among tuition fees and Indirect Public Grant.

Since the 1990s new institutions must undergo a licensing process. This was initially called 'accreditatión' and was run by the Higher Council of Education (Consejo Superior de Educación), which is today's 'National Education Council' - Consejo Nacional de Educación (CNED) (Ibid).

[45] In Brazil postgraduate courses are divided between 'broad' (so-called lato sensu) and 'narrow' (so-called stricto sensu). Postgraduate courses lato sensu include programmes and courses designated as Master in Business Administrations, and others with a minimum duration of 360 hours and leading to a final certificate as opposed to a diploma. In addition, they are open to candidates/graduates in higher education and those that meet the requirements of educational institutions. Postgraduate courses, stricto sensu, include master's and doctoral programmes open to graduates of undergraduate courses that meet the requirements of educational institutions and selection rules. At the end of the course the student will get a diploma.
[46] See: https://ec.europa.eu/ploteus/search/site?f per cent5B0 per cent5D=im_field_entity_type per cent3A97.

3.2 GDP indicators

Figure 12 reports the key socioeconomic and demographic indicators for Chile, for the latest year available, as reported by the World Bank, compared with the UK.

According to the OECD (2014, p 4), Chile has the smallest share of public expenditure in tertiary education of all OECD countries. The proportion of private expenditure is about 76 per cent, against an OECD average of 31 per cent.

3.3 Size of the higher education system

According to the CNED, as of 2015 there were 187 higher education institutions (HEIs) in Chile, including Armed Forces Institutions belonging to the Ministry of Defence (see also figure 14).[47] Data from the Chilean Ministry of Education reported by OECD (2012) indicate that enrolments doubled between 2002 and 2012, from 521,882 to 1,127,200. Moreover, during the same time span, gross coverage also increased steadily from 30 per cent to around 55 per cent, surpassing the expected 50 per cent enrolment of 18-24 year-olds youth in higher education by 2012. Figure 13 shows the enrolment increases in Chile between 2002 and 2012.

The data conceal significant variations amongst different providers. Since 2006, the growth in the gross enrolment has been concentrated in CFTs, IPs and private universities rather than in CRUCH universities. In the period 2006-11 enrolments at CRUCH universities (representing 33 per cent of overall enrolment) increased by 18 per cent, at private universities by 63 per cent, at CFTs by 100 per cent, and at IPs by 137 per cent (OECD, 2012). This rise is partly due to new financial support mechanisms implemented after 2006, including a state guaranteed loan system and the new 'millennium scholarship'. Meanwhile, CRUCH universities enrol now about 29 per cent of total enrolment, down from 33 per cent, although numbers increased in absolute terms (Ibid).

3.4 Shape of the higher education system

Higher education is available at both private and public institutions. Private HEIs are the majority (85 per cent according to the Institute for International Education).[48] Chile also has Military Academies (Instituciones de Educación de las Fuerzas Armadas), which fall under the responsibility of the Ministry of Defence. HEIs may be 'autonomous' or 'non-autonomous'. When an institution is first established it needs to seek permission from the Ministry of Education and CNED, and goes through the licensing process (formerly known as accreditation). This process is compulsory. The CNED will monitor the new institution and take responsibility for its awards for a period of 6-11 years. After that time, the CNED determines whether the institution either becomes autonomous (it has developed according to its stated objectives) or must close down (OECD, 2012). Figure 14 shows the number of institutions of different types in Chilean higher education; figure 15 (reproduced from OECD, 2012, p 19) shows the numbers of enrolments per type of institutions (including the growth between 2002 and 2012).

Countries with relatively high access, such as Chile, often use accreditation to regulate the private sector. Here, accreditation was introduced to control the private sector, whereas in other countries, such as Mexico, it was intended to give more prestige to the public sector (interview data, May 2015). In most Latin American countries institutions are allowed to

[47] According to OECD (2012) the numbers are slightly different: 60 universities, 45 Professional Institutes and 68 Technical Training Centres.
[48] Chilean Private HEIs, all the institutions created after 1981, are not created by law and are not derived from existing institutions before that year, see: www.iie.org/en/Services/Project-Atlas/Chile.

function, with governmental recognition, without being accredited. In Chile, on the contrary, accreditation is mandatory and includes also regional schemes - this is also the case in other Latin American countries, such as Argentina, Uruguay, Bolivia and the Central American countries (interview data, May 2015).

The first steps in quality assurance were taken in the 1990s, when the Higher Education Council - Consejo Superior de Educación (CSE) - started implementing a compulsory licensing ('accreditation') system for new institutions (the CFTs and IPs). Subsequently, bodies were created for voluntary accreditation of undergraduate and graduate programmes.[49] In 2006, the Law 20.129 set up the National Higher Education Quality Assurance System - Sistema Nacional de Aseguramiento de la Calidad de la Educación Superior (SINAC-ES) - including quality assurance institutions and functions.

In Chile, the primary bodies responsible for quality assurance are the CNED and the National Accreditation Commission - Comisión Nacional de Acreditación (CNA) (see also below). Institutions must be accredited by the Chilean Ministry of Education. Without official accreditation (reconocimiento oficial) from the Ministry, institutions may not offer study programmes. Since 2006, autonomous institutions may apply for both institutional and programmatic accreditation (this accreditation procedure is not mandatory, except for new HEIs and programmes in the fields of medicine and teacher-training). CRUCH universities have institutional accreditation. Accreditation can be awarded for a maximum period of seven years and the CNA is the body responsible for the accreditation procedure (EP-NUFFIC, 2015c).

The main actors of the national quality assurance system are as follows.

- The Higher Education Division in the Ministry of Education, División de Educación Superior del Ministerio de Educación (DIVESUP), which is responsible for assuring legal compliance and formally recognises tertiary providers. It also gathers and disseminates information on higher education through a dedicated system.
- The CNED manages the licensing process, the appointment of peer reviewers, the provision of information and the conduct of appeals from accreditation decisions. The CNED is composed of nine well-known scholars and professors and is presided over by a scholar/professor designated directly by the President of the Republic.
- The CNA manages accreditation, establishes accreditation criteria, implements institutional accreditation, authorises Accreditation Agencies and provides public information. It is formed by fifteen members, including experienced academics and professors, the Head of the DIVESUP, student representatives, the Executive Secretary (who has no vote), and a President designated by the President of the Republic. The mandate of most of these members lasts for four years.
- Accreditation Agencies are private and for-profit organisations, which conduct programme accreditation. They have to be authorised by the CAN in order to operate at specific knowledge areas and academic levels.

Four main functions are performed by these bodies (OECD, 2012):

- **information** - mainly performed by DIVESUP (although CNA and CNED deliver information on their specific performance areas)

[49] In 1999 the Commission for the Evaluation of Undergraduate Programmes - Comisión Nacional de Acreditación de Pregrado (CNAP) - was created. It was followed in 2000 by the Commission for the Evaluation of Postgraduate Programmes - Comisión Nacional de Acreditación de Posgrado (CONAP). In 2004 CNAP also started implementing accreditation at the institutional level (see OECD, 2012).

- **licensing** - exclusively performed by CNED - a compulsory process, consisting of approval and monitoring the development of new providers (the process lasts between 6-11 years and leads to institutional autonomy, or closure if unsuccessful)
- **institutional accreditation** - exclusively run by the CNA - a voluntary process of quality assurance of autonomous institutions through a combination of internal and external evaluation of the mechanisms, implementation and results of the institution's goals and mission
- **programme accreditation** (obligatory for health and education programmes) - performed by either the CNA or Accreditation Agencies, this is a process of quality verification of delivered programmes in autonomous institutions, according to the goals and declared mission.

The quality assurance process includes several steps (see figure 16), reproduced from OECD, 2012, p 28). First, new providers must formally register with the IVESUP/MINEDUC. Then, they must go through the compulsory process of licensing - 6-11 years, formerly called 'accreditation' (acreditación). Once an institution is licensed, it becomes 'autonomous'. This means it can develop according to its mission, create new programmes, new branch campuses and enrol more students. Institutional accreditation is voluntary, thus there is no fixed timeframe period between licensing and accreditation. However, the main incentive for accreditation relates to funding as successful institutional accreditation leads to eligibility of students for state funding.

The eight CRUCH HEIs created before 1981 were already considered autonomous and were exempt from the licensing process. All institutions established after 1981 (private universities, IPs and CFTs) had to achieve 'autonomous' status. Initially, to gain institutional autonomy, they had to be under the supervision of a CRUCH institution, but afterwards IPs and new universities fell under the supervision of the newly established CSE (see above), while CFTs fell under the supervision of the Ministry
of Education.

3.5 Definitions of higher education

The General Law on Education (Ley General de Educación) defines three types of HEIs, classified by the kind of qualification they can grant: academic, professional or technical. Admission to higher education requires a secondary school diploma. An entrance examination called University Selection Test (Prueba de Selección Universitaria) is applied by all CRUCH universities.

Institutions considered as higher education are universities, IPs and CFTs that have obtained official recognition by the Government and that currently partake in teaching activities.[50] Universities may offer programmes at every level up to PhD. Moreover, universities have the exclusive right to award qualifications for legally protected professions (which require prior education in the form of an academic degree). IPs offer professional programmes that do not lead to an academic degree. These programmes lead to the so-called Professional Title (Título Professional). CFTs offer exclusively vocational programmes leading to the Superior Technical Level (Técnico de Nivel Superior), which is a post-secondary qualification (sub-higher education).

Hence, although technically part of the higher education system, IPs and CFTs also provide post-secondary education (below level 5 on the European Qualifications Framework).[51] These vocational education programmes require a secondary school diploma for admission.

[50] See: www.unesco.org/new/en/education/resources/unesco-portal-to-recognised-higher-education-institutions/dynamic-single-view/news/chile/ and www.cned.cl/public/Secciones/SeccionEducacionSuperior/instituciones_educacion_superior.aspx.
[51] See: https://ec.europa.eu/ploteus/search/site?f per cent5B0 per cent5D=im_field_entity_type per cent3A97.

Upon completion of the programme, students will receive the Superior Technical Level certificate (Técnico de Nivel Superior). This offers access to the labour market and to advanced higher education programmes. In some cases, students may also qualify for exemptions on the basis of the certificate. The Professional Title (Título Profesional) is a professional qualification.

Figure 17 shows Chile's higher education system; figure 18 shows the equivalency between the Chilean qualifications and the European Qualifications Framework.

4 China

4.1 History and context of the higher education system

In China, the Communist party-state's apparatus still plays a key role in governing the country's universities. During the Mao period, institutions of higher education were typically managed by various central government ministries (for example, the Ministry of Coal operating institutes for mining technology) (Kapur and Perry, 2015).

However, since the educational reforms in the 1980s, many changes have taken place in the higher education system, including:[52]

- devolution from the Ministry of Education to local bureaucracies and individual institutions (leading to more autonomy and freedom)
- mergers
- privatisation (for example private autonomous institutions affiliated with public universities and charging higher fees, which subsequently can become independent)
- introduction of fees for students who scored below the cut-off line on the national college entrance examinations (so-called 'dual track' introduced in the 1990s)
- expansion in enrolments
- focus excellence projects.

4.2 GDP indicators

Figure 19 reports the key socioeconomic and demographic indicators for China, for the latest year available, as reported by the World Bank, compared with the UK.

China's National Plan for Medium and Long-term Education Reform and Development 2010 (National Plan 2020) gives several directions regarding higher education reform, including regulation and finance, as summarised below (Jacob and Hawkins, 2012).

- The government plans to increase the total amount of public funding on education toward the goal of 4 per cent of the total GDP (Jia, 2010; Xiong, 2012). The UNESCO Institute for Statistics (Jacob and Hawkins, 2013 p 4) indicates China allocated 13 per cent of total government spending toward education in 2010.[53]
- Closely related to the multiple financing streams is the increasing cost of tuition. The private sector tuition costs are often significantly higher than those in the public

[52] This information draws on the International Comparative Higher Education Finance and Accessibility Project at State University of New York at Buffalo. The project has been examining the worldwide shift of higher education costs from governments and taxpayers to parents and students. The Project began in 2000 under the leadership of Bruce Johnstone, former Chancellor of the State University of New York System.
See: http://gse.buffalo.edu/org/inthigheredfinance/files/Country_Profiles/Asia/China.pdf (project homepage: http://gse.buffalo.edu/org/inthigheredfinance/index.html).
[53] Not higher education only.

sector (Bollag, 2007; Levy, 2010). Even the public sector now requires students to pay for tuition, where this was traditionally never the case.

4.3 Size of the higher education system

Over the past decade, China has witnessed an impressive growth. Student numbers grew from under 5 million at the turn of the century to over 20 million by 2011 (see figures 20-21).

The number of institutions[54] has also increased significantly over the past decade. In relative terms the increase in the private sector is very notable. In 2003 there were 1,552 higher education institutions (HEIs) (of which 173 were private); by 2013 the number had grown to 2,491 (of which 717 were private). During the same period, institutions providing graduate programmes grew from 720 to 830. However, it should be noted that private growth is limited to regular providers as, during the same period, 'other' non-State/private HEIs dropped from 1,104 to 802 in 2013. HEIs for adults also dropped (Kapur and Perry, 2015 p 34).

For many years, there existed only one channel of higher education financing through the government. Now there is an emerging private sector, though it remains extremely small in comparison to the entire higher education system. However, the private sector is helping to fill the demand for higher education.

4.4 Shape of the higher education system

In China higher education is offered at institutions that call themselves 'university', 'college' or 'school'. These include degree-awarding institutions (including several hundred research institutes), specialised institutions, professional universities, military institutions, medical schools and colleges (both regular and military), and executive training schools, which train staff for state-run companies and ministries (NUFFIC, 2015).

The Chinese Ministry lists the following types of institutions:[55]

- regular colleges and universities
- junior colleges
- independent colleges
- branches and programs.

HEIs can:

- fall under the authority of central ministries and agencies
- fall under the authority of local authorities
- be independent (private).

Figure 22 is a snapshot of the higher education provision in China as of 2013 (data from the Chinese Ministry of Education).[56]

All higher-education institutions must be accredited in order to be allowed to confer diplomas of 'Bachelor', 'Master' and 'Doctor'. Programmes offered by non-accredited institutions are also not accredited, and only diplomas obtained at accredited HEIs are included in the national database of the Chinese government. The Academic Degree Committee of the China State Council (the chief administrative authority in China) accredits all higher education programmes and determines whether they are of sufficient quality to be eligible to award qualifications (bachelor's, master's or doctorate). Exceptions are the Sino-foreign

[54] See section 4.4 for types of institutions as defined by the Ministry.
[55] See: www.moe.edu.cn/publicfiles/business/htmlfiles/moe/moe_2812/200906/48836.html.
[56] See: www.moe.edu.cn. This statistical information is available in Chinese only.

cooperation programmes that have not (yet) been approved and programmes admitting students with low gaokao scores - the so-called jihuawai (out of plan) students (EP-NUFFIC, 2015d).

Until 2004 there were three types of quality assurance in Chinese higher education.

1 Accreditation for newly established HEIs (since 1994).
This applied for HEIs established after 1976. The evaluation of institutions was categorised into excellent, very good, sufficient and insufficient.
2 Periodic assessment of institutional education quality (since 1996). This procedure applied for around 100 older HEIs of a higher level.
3 Assessment on provincial and national level, in which a ranking of the most excellent institutions was made to encourage mutual competition since 1999. This procedure applied for other HEIs that fell in between the above-mentioned categories of institutions.

After 2004 these three categories were merged into one policy plan after the establishment of the Higher Education Evaluation Centre of the Ministry of Education (HEEC). The HEEC's responsibilities include (Li 2010, pp 64-65):

- to organise and implement higher education evaluation
- to conduct research in policies, regulations and theories relating to higher education reform and evaluation
- to develop international cooperation with evaluation agencies in other countries
- to undertake training of evaluators (at the National Education Evaluation Centre), typically, evaluators are senior university managers (university presidents or vice-presidents)
- to provide evaluation-related consultation and information services.

The HEEC is responsible for the evaluation of:

- higher professional education (zhuanke)
- undergraduate programmes (benke)
- education offered by independent colleges.

The Academic Degree Committee of the Ministry of Education is directly responsible for oversight of master's and PhD degree education.

The policy plan includes the following components:

- HEIs are assessed every five years in a standardised and systematic way
- a database is maintained in which the data of the HEIs (concerning, for example, infrastructure or facilities) are publicly accessible
- evaluation on programme level in cooperation with certain professional organisations, in order to set up an evaluation system and by doing so also creating a professional qualification system with recognition by professional bodies after completion of certain professional programmes
- a system with a combination of internal and external evaluation
- creating a pool of experts carrying out the evaluations.

The National Education Examinations Authority (NEEA), including the State Office of the Self-taught Higher Education Examinations and the Office of the Self-taught Higher Education Examinations of the Ministry of Education, is an institution directly under the supervision of the Ministry of Education. It is appointed by the Ministry to exclusively undertake educational examinations and to practice some administrative authority. The State

Office of the Self-taught Higher Education Examinations and the Office of the Self-taught Higher Education Examinations of the Ministry of Education were established in 1983; NEEA was founded in 1987. They merged in 1994.[57]

4.5 Definitions of higher education

Chinese higher education includes both academic education (culminating in an academic title) and professional higher (not culminating in an academic title). These programmes are called zhuanke and take 2-3 years. They are equivalent to a European Qualifications Framework[58] level 5 qualification (typically this is a short cycle higher education) and are offered by universities and other HEIs offer them. It is possible to progress from a zhuanke to bachelor's degree (EP-NUFFIC, 2015d).

Figure 23 shows China's higher education system; figure 24 shows the equivalency between the Chinese qualifications and the European Qualifications Framework.

[57] An Introduction to the National Education Examinations Authority, available at: www.neea.edu.cn/buttom/english.htm.
[58] See: https://ec.europa.eu/ploteus/search/site?f%5B0 per cent5D=im_field_entity_type per cent3A97.

5 Colombia

5.1 History and context of the higher education system

Law 30 of 1992 (Law of Higher Education, resulting from the 1991 Constitution) established the constituent elements and organisms of the Colombian higher education system. The Law of Higher Education contains the fundamental regulations with which the Colombian State organises higher education supply, including university autonomy and democratic participation of the educational community in the government bodies and institutional managements (see figure 25).[59]

Institutions of Higher Education wishing to offer and develop academic programmes must undergo an evaluation process framed in the Quality Assurance System and divided into two stages (see also below). The first (qualified registry) is mandatory and establishes that the minimum conditions have been met, and authorises that the programmes begin operating. The second stage is accreditation, which is voluntary (see also below).[60]

In 2002, the government launched an education improvement programme called Education Revolution (Revolución Educativa). Tertiary enrolments have increased since then, although Colombia is still below the OECD average. Recently, the government has established a National Programme for Advising Higher Education Institutions on Internationalisation, led by the Ministry of National Education in collaboration with a group of 23 universities.

5.2 GDP indicators

Figure 26 reports the key socioeconomic and demographic indicators for Colombia, for the latest year available, as reported by the World Bank, compared with the UK.

Between 2007 and 2011, Colombia's total education spending increased by 43 per cent. The percentage of GDP spent on higher education rose from 1.84 per cent to 1.96 per cent (from 7.19 per cent to 7.65 per cent on education at all levels overall). Within these spending totals, public spending has risen significantly (from 0.86 per cent to 0.98 per cent of GDP on tertiary education and from 4.28 per cent to 4.75 per cent of GDP on education at all levels) (OECD et al, 2012, pp 43-44).

5.3 Size of the higher education system

During the period 2002-10, Colombia's tertiary enrolments grew by over 67 per cent (OECD et al, 2012). By 2011, the gross enrolment rate, as a percentage of the population aged 17 to 21, had also grown, from 24.4 per cent to 37.1 per cent (Ibid). Figure 27 (reproduced from OECD et al, 2012, table 1.4 p 35) shows the enrolment trends between 2002 and 2010 by type of institution, at aggregate level.

Institutional expansion in Colombia has not been as strong as elsewhere. By 2010, Colombia had 79 universities (32 state-run), 107 university institutes, 51 technological institutes and 43 technical training institutes. Between 2007 and 2011 there has been an increase of 3 per cent in higher education institutions but there have been differences in the trends among different sorts of providers. In both the public and private sectors the numbers of higher-level tertiary institutions have risen, while the numbers of technological and technical institutions focusing on preparation for the labour market have fallen (OECD et al,

[59] See: www.ond.vlaanderen.be/hogeronderwijs/bologna/forum2010/documents/COLOMBIA_Higher_Education_System.pdf.
[60] See: www.cna.gov.co/1741/article-195811.html.

2012, p 32). This might indicate that such institutions have been absorbed into larger institutions or have become higher-level institutions (Ibid).

With 72 per cent private provision as of 2011, Colombia was the first Iberophone Latin American country with majority private higher education provision (Levy, 2013). However, interestingly (and contrary to other Latin American systems) enrolments have grown primarily in the public sector (see also section 5.4). The reasons are said to lie in deliberate polices to expand the public sector by incorporating low-cost non-university education and upgrading part of the National Training Service - Servicio Nacional de Aprendizaje (SENA) (Uribe, 2010). As of 2011, of the 288 institutions of higher learning (including universities, university institutions, technological institutions and professional technical institutions), 208 were private (see figure 28), reproduced from OECD et al, 2012, table 1.2, p 33).

The OECD et al (2012) reports that between 2002 and 2010 the growth in total enrolment was 75.7 per cent in public institutions but 24.3 per cent in private institutions. Moreover, whereas 41.7 per cent of students were enrolled in public institutions in 2002, by 2010 the figure was 55.4 per cent. Levy (2013, p 35) indicates that between 1997 and 2007 private higher education enrolment expanded 18 per cent while public higher education expanded 196 per cent. The private-sector decline in Colombia is particular since (a) it is in contrast to Latin America's overall expansion of private enrolment and (b) it began in the 1990s when other Latin American countries were seeing increasing (Chile, Costa Rica, Guatemala, Mexico, Peru and Nicaragua) or stable (Argentina, Bolivia and Paraguay) private enrolments (Ibid).

Colombia's expansion is also characterised by a proliferation of programmes resulting from regulatory provisions that allow institutions to open programmes without limits across several campuses in the country, provided they are listed in the Register of Qualified Programmes (see below).

5.4 Shape of the higher education system

In Colombia, higher education is available from both private and public institutions, within a unitary system. There are four different types of institutions (see also OECD et al, 2012; EP-NUFFIC, 2015e):

- universities (universidades)
- university institutes or technological institutes (instituciones universitarias or escuelas tecnológicas)
- technological institutions (instituciones tecnológicas)
- technical training institutes (instituciones técnicas profesionales).

Universities can offer programmes at any level, up to and including PhDs. University institutes or technological institutes offer mainly undergraduate programmes (pregrado), although under certain conditions they can offer postgraduate programmes (posgrado). Technological institutions offer both upper secondary vocational education and higher professional education programmes. Technical training institutes primarily offer upper secondary vocational education.

Higher professional education is offered by both technological institutions and universities, has a nominal duration of two to three years and consists of both theoretical and practical subjects. Upon completion, graduates are awarded a Tecnólogo (technologist) degree, which provides direct access to the labour market. After this programme, a two-year advanced programme leading to the degree of Tecnólogo Especializado (specialised technologist) may be taken. Under certain conditions (at least one year's work experience)

the Técnologo certificate also grants access to undergraduate university programmes in a similar specialisation, which lead to the degree of Licenciado (bachelor's).

The process of quality assurance, and institutional and programme accreditation, in Colombia is structured around two institutions (see also figure 25), namely the National Intersectorial Commission for Higher Education Quality Assurance - Comisión Nacional Intersectorial de Aseguramiento de la Calidad de la Educación Superior (CONACES) - and the National Accreditation Council - Consejo Nacional de Acreditación (CNA). 'High quality' accreditation is voluntary and applies to programmes as well as institutions (see OECD et al, 2012, pp 183 ff.).

The CONACES is a consultative organisation whose main task is to advise the Ministry of National Education - Ministerio de Educación Nacional (MEN) - on whether programmes may be listed in the Register of Qualified Programmes, which is a prerequisite to gain MEN authorisation to operate. The CONACES also advises on the establishment of new programmes (both undergraduate and graduate). Hence, one of its fundamental roles is to ensure that both programmes (technical, professional, technological, university, specialisations, master's and doctorates) and institutions meet minimum standards to be listed in the Register. CONACES consists of 33 academic members, selected by the National Council of Higher Education - Consejo Nacional de Educación Superior (CESU) - to represent a variety of areas of study and geographic regions. To be admitted to the Register of Qualified Programmes, programmes must meet 15 minimum quality-related conditions in a number of areas including: inter alia, curriculum, academic personnel, infrastructure and finances (Ibid).

Once authorised, tertiary providers can offer academic programmes anywhere in the country (there is no limit on the number of programmes an institution can offer on different sites). The process for registration through CONACES follows a number of steps from the formal application up to the granting (or not) of the certification of compliance issued by the Ministry of National Education (throughout this process, documents are reviewed and there is an external audit by academic peers) (Ibid). Figure 29 (reproduced from table 5.4 in OECD et al, 2012) shows the total number and percentage of programmes by level, the percentages of each offered by public and private institutions, and the percentages on the Register of Qualified Programmes.

The CNA is a consultative body that advises the MEN on whether tertiary institutions and programmes that have applied for high quality accreditation should be awarded this status. The CNA's main functions include:

- to guide the institutions in the self-evaluation process
- to set the quality criteria, instruments and technical indicators for the external evaluators to use
- to carry out the final evaluation and to make recommendations to the MEN.

The CNA is composed of seven members. These are nominated by CESU to serve for a period of five years, after which they cannot be reappointed (OECD et al, 2012).

5.5 Definitions of higher education

In Colombia, any study following the completion of upper secondary schooling is called 'higher education' (educación superior). There is no strong distinction between 'post-secondary' and 'higher' education. According to the CAN:[61]

[61] See: www.cna.gov.co/1741/article-197026.html.

> Institutions of higher education grant degrees to students once they finish the academic program they have pursued and in which they have acquired a determined body of knowledge. These degrees can only be conferred by institutions recognised by the Ministry of National Education. Degrees are conferred by means of a diploma. (Art. 24, Act 30 of 1992).

Figure 30 shows Colombia's higher education system; figure 31 shows the equivalency between the Colombian qualifications and the European Qualifications Framework.

6 India

6.1 History and context of the higher education system

The Indian higher education sector includes universities/university level institutions, colleges and diploma-awarding institutions. Higher education is the shared responsibility of both the Central Government and the States. The coordination and determination of standards in Universities and Colleges is entrusted to the University Grants Commission (UGC) and other statutory regulatory bodies.[62] At present, the main categories of university/university-level institutions include Central Universities, State Universities, Deemed-to-be Universities and University-level institutions (Institutions of National Importance and Institution under State Legislature Act).[63]

A 'Deemed-to-be University' is an institutional type specific to India, and refers to 'a high-performing institution, which has been so declared by Central Government under Section 3 of the University Grants Commission (UGC) Act, 1956'. Institutions of National Importance are established by an Act of Parliament and declared as Institution of National Importance.

Universities/university level institutions are the only institutions allowed to grant degrees (Dhanuraj and Kumar, 2015). Students attending one of the over 30,000 colleges may also earn a degree, but colleges (both private and public) must have an official relationship with a State university. The degree awarded is conferred on the student by that university (Ibid, p 2; Stolarick, 2014).[64] Colleges enjoy limited autonomy over issues, including curriculum, staffing and programmes offered (Agarwal, 2009). Figure 32, taken from Dhanuraj and Kumar (2015, p 2) shows the spectrum of higher educational institutions in India.

6.2 GDP indicators

Figure 33 reports the key socioeconomic and demographic indicators for India, for the latest year available, as reported by the World Bank, compared with the UK.

Government expenditure on higher education increased annually in real terms by 7.5 per cent in the 1950s, 11 per cent in the 1960s, 3.4 per cent in the 1970s, and 7.3 per cent in the 1980s (World Bank, 2010). Yet, at just over 1 per cent of GDP, public funding has not been sufficient to keep up with growing enrolment numbers (Daugherty et al, 2013). The National Education Policy 1968 and 1986 (revised in 1992) recommended government expenditure on education (overall) at 6 per cent of GDP. As of 2010-11 it was at 3.8 per cent (see figure 37). The 12th Five-Year Plan envisages a continued increase in public investment on higher education.

[62] See: http://mhrd.gov.in/university-and-higher-education.
[63] See: http://mhrd.gov.in/university-and-higher-education.
[64] Some colleges can be given autonomous status, which allows them to confer degrees under their own name but still over the seal of an affiliated university (Stolarick, 2014).

6.3 Size of the higher education system

India's higher education has grown exponentially over the decades. At independence, there were 20 universities and 500 colleges, mostly of British creation. According to the Department of Education, by 2014 there were:[65]

- 677 universities (45 Central Universities - of which 40 are under the purview of Ministry of Human Resource Development - 318 State Universities, 185 State Private universities and 129 Deemed-to-be-Universities)
- 51 Institutions of National Importance established under Acts of Parliament under MHRD (16 IITs, 30 NITs and 5 IISERs) plus four institutions established under various State legislations
- 37,204 Colleges (31 March 2013).

The number of institutions grew particularly strongly after 2005. The number of students also mushroomed, especially after the 1990s, reaching almost 24 million (figures 34-35) reproduced from Stolarick, 2014, p 4-32).

6.4 Shape of the higher education system

In India higher education institutions can be public (central or state) or private (Kaul, 2006; Singh, 1993; Singh and Sharma, 1988; Haggerty, 1969). About 66 per cent of all institutions are private but all educational institutions must be not-for-profit, including private providers. While many private colleges have relationships with for-profit corporations (Gupta, 2004; Gupta, 2008), they must have a separate charter and not-for-profit mission (Kingdon, 2007).[66] Private universities are relatively new. The first private university (Sikkim Manipal University of Health, Medical and Technological Sciences) was set up in 1995 and began operations in 1997 (before 1997, all private universities were of the 'deemed' type) (Centre for Civil Society, 2014).

In general, India's model for higher education governance is one of the world's most top-down, and most authority is exercised by the state (Daugherty et al, 2013). At the top is the Ministry of Human Resource Development (MHRD), which is the primary national governing body overseeing the central universities and setting policies on quality for all institutions. The State Ministries of Human Resources Departments (SMHRDs) are state-level governing bodies that directly oversee the State universities (Ibid). Moreover, the system is fragmented and is regulated by multiple agencies set up from time to time, such as (inter alia) the UGC, the All India Council for Technical Education (AICTE), the National Council for Teacher Education (NCTE), the Medical Council of India (MCI), the Pharmacy Council of India (PCI), the Council of Architecture (COA), the Dental Council of India (DCI), and the National Assessment and Accreditation Council (NAAC) (Shanbhag and Kondapalli, 2013). Figure 36 is a simplified snapshot of the Indian Higher Education System's governance structure reproduced from Daugherty et al, 2013 (p 4). Most, but not all, state governments have legislation in place to grant university status to private colleges, providing them with their own degree awarding powers and much more autonomy.

At the national level, while the UMHRD is responsible for setting and monitoring quality, its regulatory arms, such as the UGC and the AICTE set and implement the quality standards that all institutions are expected to follow (Ibid). The UGC is the only grant-giving agency in the country, in which has been vested two responsibilities. It is a funding body and it is

[65] Numbers may differ slightly in different sources since growth is continuous. For example, Dhanuraj and Kumar (2015) report over 700 universities. The source of the numbers presented here is the official Department's website: http://mhrd.gov.in/university-and-higher-education (accessed in August 2015).
[66] All references in this paragraph are referred to in Stolarick (2014).

responsible for the coordination, determination and maintenance of standards in institutions of higher education.

The higher education sector ensures quality of the educational process through accreditation agencies established for the purpose (World Bank, 2010; UGC, 2014). Traditionally, accreditation in higher education in India was a voluntary exercise, resulting in only a small percentage of HEIs opting for accreditation (CII and Deloitte, 2013). Being 'recognised' was the only mode of validating postsecondary institutions. The recognising agency evaluated the institution one time only to establish whether it met the agency's standards and norms.[67] Before starting a new course, universities needed (and still need) to apply for authorisation.[68] In 2012 accreditation of higher educational institutions was made mandatory under UGC (UGC, 2014).

Four regulatory bodies exist within the Department of Higher Education, in the MHRD in the Central Government, that oversee higher education and are generally responsible for accreditation (Stolarick, 2014), as follows.

- The National Assessment and Accreditation Council (NAAC), established by the UGC in 1994, accredits about 80 per cent of universities and colleges. It covers seven criteria for accreditation, specified in several 'key aspects'.[69]
- The All India Council for Technical Education (AICTE) is responsible for oversight and accreditation of over 8,500 technical institutes, most of which are diploma-granting. The AICTE established the National Board of Accreditation (NBA) as an autonomous body in 1987 to conduct periodic evaluations. It covers nine criteria for accreditation and several 'parameters'.[70]
- The Distance Education Council (DEC) oversees thirteen State open universities and approximately 200 programs at other universities.
- The Council of Architecture (CoA) sets qualifying examinations and registers architects as well as helps to set education standards for education in architecture.

A similar function is performed for agricultural education by the Accreditation Board, set up in 1996 by the Indian Council of Agricultural Research (ICAR), which is an autonomous organisation under the Ministry of Agriculture.[71] Finally, five research councils exist within the Department of Higher Education, which focus on research in History, Social Science, Philosophy, Civilizations and Rural Issues.

Under the UGC/NAAC, institutions are graded for each Key Aspect under four categories: A, B, C and D, denoting Very Good, Good, Satisfactory and Unsatisfactory levels respectively. The summated score for all the Key Aspects under a Criterion is then calculated with the appropriate weightage applied to it, and the GPA is worked out for the Criterion. The Cumulative GPA (CGPA), which gives the final Assessment Outcome, is then calculated from the seven GPAs pertaining to the seven criteria, after applying the prescribed weightage to each Criterion.[72]

Over two-thirds of universities are not accredited, while just about 15 per cent of Colleges are. This may relate to the voluntary nature of accreditation up until 2012. Moreover, the low number of accredited colleges may relate to the fact that the universities are really meant to

[67] See: http://ierf.org/pdf/Nafsa09_handout.pdf.
[68] See: https://mygov.in/sites/default/files/user_comments/research-regulatory-structure-of-higher-education-in-india.pdf.
[69] See: www.naac.gov.in/criteria_assessment.asp.
[70] For NBA criteria see: www.nbaind.org/En/1051-nbas-accreditation-parameters-criteria-and-processes.aspx.
[71] See: www.icar.org.in/.
[72] See: www.naac.gov.in/grading.asp.

be the monitors and arbitrators for the colleges who are educating people that are receiving a degree with the university's name and seal on it (Stolarick, 2014, p 25).

6.5 Definitions of higher education

Higher education mainly consists of university education, leading to the award of a bachelor's, master's or doctor's degree (PhD). Polytechnics provide higher professional education, leading to the award of certificates and diplomas, although this represents a relatively small group. Bachelor's degrees can be 'General', 'Professional', 'Honours', and 'Postgraduate Bachelors' (for which a bachelor's degree is an admission requirement, for example the two-year Bachelor of Education or the three-year Bachelor of Law). Postgraduate studies include Postgraduate Diplomas (usually one year), Master's (usually two years) and PhD. Polytechnics offer higher level diplomas including Post-Diplomas and Advance Diplomas, which last between two and three years (NUFFIC, 2015f).

Figure 37 shows India's higher education system; figure 38 shows the equivalency between the Indian qualifications and the European Qualifications Framework.

7 Mexico

7.1 History and context of the higher education system

Mexico is the oldest higher education system in Latin America, dating back to the establishment in 1551 of the Royal Episcopal University of Mexico. Qualifications include higher technical and associate professional degrees, licenciatura (bachelor's) degrees, and graduate degrees (master's and doctorates) (de Wit et al, pp 239 ff.).

At present, the main categories of higher education institutions (HEIs) include:

- universities
- polytechnics and technological institutes offering university degrees in engineering and applied sciences
- Technological Universities offering two-year degree programs with a strong practical component
- Teacher Training Institutions
- 'other' (specialised) institutions
- a wealth of private HEIs that offer all types of degrees in all disciplines.

Some public universities (with the word Autónoma in their name) enjoy significant autonomy over management, budgeting and curricular content, and may incorporate private institutions (thus bestowing official validity to their programmes).

As in most of Latin America, in Mexico the national government has traditionally played the key role in higher education policy and quality control (accrediting bodies were set up by the government). Today, a crucial point remains the relationship between accreditation (quality) and regulation, as institutions are allowed to function with governmental recognition even if not accredited. The relationship between the State and higher education has been shaped by two dynamic forces, namely university autonomy and the State's active pressure. Autonomy is enshrined in the constitution and is reflected in the statutes of the National Autonomous University of Mexico - Universidad Nacional Autónoma de Mexico (UNAM); the incorporation of higher education by the state can be illustrated by the reopening of the University of Guadalajara as a state university in 1925 (see also OECD, 2008).

In the 1990s, under government impulse, the National Association of Universities and Institutions of Higher Education - Asociación Nacional de Universidades e Instituciones de

Educación Superior (ANUIES) - approved general guidelines for the evaluation of higher education. At the same time, the Mexican Federation of Private Institutions of Higher Education - Federación de Instituciones Mexicanas Particulares de Educación Superior (FIMPES) - created its own institutional evaluation system. However, it was only in 2000 that the national government created the Council for the Accreditation of Higher Education - Consejo Para la Acreditación de la Educación Superior (COPAES)[73] - to oversee and authorise private agencies to accredit undergraduate programmes at both public and private providers. Accrediting bodies are organised by fields of knowledge (for example Humanities and Medicine).

Foreign accrediting agencies (mostly US-based) are a relatively new phenomenon. By the end of the 1990s an increasing number of public and private universities sought accreditation (both institutional and programmatic) by US agencies. Concomitantly, the number of foreign branch campuses has also risen, as have acquisitions of existing private institutions. For example, Laureate has bought up about 30 institutions in Mexico, organised in the University del Valle de Mexico, which is now the biggest private university in Mexico.

7.2 GDP indicators

Figure 39 reports the key socioeconomic and demographic indicators for Mexico, for the latest year available, as reported by the World Bank, compared with the UK.

7.3 Size of the higher education system

Mexico has increased its enrolment in HEIs from 10,000 students in 1930 to over 3.7 million students in 2014 (N. Dominguez-Vergara, M. Monroy-Anieva, A. Dominguez-Perez, 2014). In the last three decades of the 20th century enrolments grew six-fold from 290,000 to over 1.9 million (the number of students doubled between 2000 and 2014). In Mexico, the private sector enrols over 1 million students (up from 400,000 in 2006). Demand for private university places is particularly strong among students from poorer backgrounds, as fees tend to be quite low. However, quality is a concern, as many private institutions in Mexico do not have recognised accreditation (Dyson, 2012). Moreover, they tend to focus on a limited number of disciplines (such as accounting and business), which has resulted in an over-supply of graduates in certain fields leading to graduate unemployment. Public institutions are the largest provider, enrolling about 66 per cent of tertiary students.

In 1999 Mexico's higher education system comprised 1,250 institutions (counting only main institutions, not branches), 515 of which were state run and 735 private (ANUIES, 2000 ch 2.3.1; Gacel-Ávila, 2005). By 2012 higher education was offered at over 2,500 public and private HEIs, including (government data):[74]

- 61 federal and state universities under the Public University Subsystem - several of these universities have been awarded the status of 'autonomous' (with over 200,000 learners, UNAM is the largest Autonomous University in the country)
- 39 polytechnics and 218 technological institutes under the Technological Education Subsystem - these institutions offer programmes a limited fields of study and are thus very specialised
- 61 institutions under the Technological University Subsystem, administered by state authorities but authorised by guidelines established by the Secretary of Education - Secretaría de Educación Pública (SEP) - located within the ministry

[73] See: www.copaes.org.
[74] See: www.ciees.edu.mx/index.php/ingles/whats.

- Teacher Training institutions - part of the Teacher Training Subsystem (Subsistema de Educación Normal) - offering licenciado degree programs for all types and levels of teacher training
- 116 'other' specialised (public) institutions of higher education, including Institutes of Education in Arts, Military and Health, and Intercultural Universities
- nearly 2,000 private HEIs, part of the 'Private Institution Subsystem' - programmes are supervised by either State or Federal ministries
  (or the SEP), or by public Autonomous Universities; private institutions of higher education offer all types of degrees in all disciplines; degrees from incorporated programmes are issued by the incorporating autonomous university, even though transcripts may be issued by the private institution.

7.4 Shape of the higher education system

In Mexico, HEIs can be public (Federal or State) or private. Most HEIs are private but fall under the supervision of Federal or State ministries, or of Autonomous Universities). Moreover, institutions of higher education may also be categorised according to their official institutional and programme recognition. According to this schema, there are six types of institutions: public autonomous universities, public state institutions, institutions dependent on the federal government, private independent (libre) institutions, private institutions with official validity, and institutions without official validity.

There are different approaches in the Mexican quality assurance system, including different accreditation and assessment procedures, quality improvement programmes, standardised examinations and registers of high quality institutions, study programmes and researchers. Overall, the quality assurance system is characterised by its many actors, limited direct intervention by the Ministry, its voluntary nature, and its narrow link to institutional accountability (OECD, 2008).

There is no single national quality assurance agency. Responsibilities for quality assurance activities are shared between several agencies, including (Ibid):

- the SEP
- the Inter-institutional Committees for Higher Education Assessment (CIEES)
- the COPAES and its 28 authorised accrediting bodies
- the National Council for Science and Technology - Consejo Nacional de Ciencia y Tecnología (CONACyT) - mostly through the National Registry of Graduate Programmes (PNPC), in conjunction with the SEP and the National System of Researchers - Sistema Nacional de Investigadores (SNI)
- the FIMPES, through its system of institutional accreditation
- the National Centre for Higher Education Assessment (CENEVAL) through its standardised student tests, the supervisory entities of the states, and the institutions of tertiary education.

COPAES recognises 28 agencies covering a wide variety of fields.[75] Accrediting agencies accredit undergraduate degree programmes (licenciado, técnico superior and profesional asociado), designating them of 'good quality' (buena calidad), if successful.
The accreditation process is voluntary and follows five steps as presented in figure 40.
Agencies must follow a general framework for accreditation of academic programmes set out

[75] The list of agencies authorised to accredit higher education educational programmes can be found at www.copaes.org (under FAQ: '¿Cuáles son las organizaciones acreditadoras facultadas para acreditar programas educativos del tipo superior?').

by COPAES.[76] The framework consists of 10 categories, which must be assessed during the validation process (COPAES, 2012).[77]

The CONACYT evaluates graduate programmes at public and private HEIs for designation as 'graduate programmes of excellence' (programas de posgrado de excelencia). Programmes meeting the minimum standard are listed on the PNPC.[78] Programmes are classified as either High Level (Alto Nivel) or Competent on an International Level (Competencia Internacional).

7.5 Definitions of higher education

Higher education mainly consists of the different forms of provision mentioned heretofore. First level higher education qualifications can be professional or university education. Universities also provide short professional programmes that lead to the degree of Técnico Superior Universitario (also called Profesional Asociado). Some universities regard this title as an intermediate degree. Institutos Tecnológicos provide higher professional education programmes with a nominal duration of two to three years, culminating in the degree of Técnico Superior (EP-NUFFIC, 2015). Access is subject to passing an entrance examination, which follows successful completion of secondary schooling. Figure 41 shows Mexico's higher education system; figure 42 shows the equivalency between the Mexican qualifications and the European Qualifications Framework.

8 United Kingdom[79]

8.1 History and context of the higher education system

The United Kingdom includes Great Britain (England, Scotland and Wales), Northern Ireland and the smaller British Isles. Responsibility for education in England lies with the central government, with executive operations conducted by two departments since 2007: the Department for Education and the Department for Business, Innovation and Skills. Responsibility for education in Scotland, Wales and Northern Ireland is a devolved responsibility and has been delegated to the local ministries of education. Legislation for education is contained in various Education Acts. Universities obtain their authority from either a Royal Charter or, since 1992, an Act of Parliament.

The university sector in the UK has a long history, originating in the medieval period, when the ancient universities provided a training for the Church; in England, Oxford and Cambridge remained the only universities until the 1830s, when London and Durham were established. These were followed in the late 19th century by significant expansion in the form of the new civic universities in the large industrial towns, such as Manchester, Birmingham, Bristol, Leeds, Sheffield, Nottingham and Newcastle, reflecting the industrialisation of the UK economy and the concomitant need for skills and knowledge in scientific and technological areas. These universities attracted government funding and private endowments. In 1922 the creation of the University Grants Committee placed state

[76] In addition to demonstrating capacity to conduct fulfil their tasks.
[77] The categories include academic staff, students, curriculum, assessment of learning, comprehensive training, support services for learning, bonding/extension (relating to the programme's relationships with society, see section 7 pp 17 ff.), research, infrastructure and equipment, administrative, and management and financing.
[78] See: www.conacyt.gob.mx/index.php/becas-y-posgrados/programa-nacional-de-posgrados-de-calidad.
[79] This report draws from the following key source: the CHEPS International Higher Education Monitor (www.ihem.nl) and EP-NUFFIC. The reports deals primarily with England. The other three nations (Scotland, Wales and Northern Ireland) each have devolved responsibility for higher education policy (although not for science funding). For the sake of policy clarity, rather than present three or four largely similar policy analyses, the situation in England is described where possible. Where either statistics are only freely available for the UK as a whole, or where the policy area is reserved to the UK government, then this report talks of UK policy as it applies to England.

funding for universities on a recurrent footing; however, the number of universities did not expand during the interwar years, with only one university (Reading) being created by Royal Charter during this period.

After the Second World War, the 1950s saw the emergence of vocational and professional higher education in response to the need for highly skilled technicians and professionals. This need was met by the upgrading of existing institutions and the creation of new ones, especially the polytechnics, which frequently reflected the local industrial base. The expansion of higher skills training by the polytechnics and colleges of advanced technology was accompanied by the growth of technical colleges to provide intermediate skills training, usually by day release and evening classes, in conjunction with employers. This dual system led to the 'binary divide', where university education was funded by central government and perceived as more prestigious than the technically focused curriculum of the polytechnics and colleges, which were funded by the local education authorities (LEAs), who also funded schools. This divide was emphasised by universities' possession of degree awarding powers and the autonomy of a Charter, whereas polytechnics and colleges offering higher qualifications did so through validation by the external examination system of universities (usually London) or (from the 1960s) by the Council for National Academic Awards (CNAA). The 1960s also saw an expansion in the number of universities following the Robbins Report of 1963, accompanied by financial support for all prescribed higher education students in the form of grants. The polytechnics (funded by LEAs) remained a distinct component of UK higher education until 1988, when the Education Reform Act transferred funding to a new national agency (the Polytechnics and Colleges Funding Council). This was followed in 1992 by the Further and Higher Education Act, which abandoned the binary divide by re-designating the polytechnics as universities with degree awarding powers and created a unified funding agency, the Higher Education Funding Council (HEFCE). The 1992 Act remains the primary legislation governing UK higher education, despite the increased size and diversity of the sector today.

Tuition fees for undergraduate study were introduced in 1998 at the level of £1,000 per annum, and raised to £3,000 in 2006. The introduction of fees was accompanied by various changes to the financial system of student support and the allocation of block teaching grants to institutions. From 2012 undergraduate tuition fees in England were increased to a maximum of £9,000 per annum, accompanied by the establishment of the Student Loans Company (SLC), which channels financial support for teaching via student payment of tuition fees, rather than grants to institutions.

8.2 GDP indicators

Figure 43 reports the key socioeconomic and demographic indicators for the UK, for the latest year available, as reported by the World Bank.

8.3 Size of the higher education system

There are currently over 350 institutions in the UK that are in receipt of public funding for higher education. The sector includes a range of different types of institution. In England there are 133 bodies with degree awarding powers, including 105 universities, referred to by the Department for Business, Innovation and Skills as 'recognised bodies'. In addition, there are several hundred colleges and other institutions that do not have degree awarding powers but who provide complete courses leading to recognised UK degrees through validation arrangements with recognised bodies. These are referred to as 'listed bodies'. Organisations that only offer part of a degree course do not have listed body status.

There is now a large and diverse provision of higher education in the UK, particularly in England, with a mix of public and private provision, including five private universities and

three private degree-awarding bodies without university title. The recent growth in private providers is a result of government policy aspirations to meet the increased and differentiated demand for higher education, expressed in *Students at the Heart of the System* (BIS, 2011). There are now 2.3 million students in UK higher education, with over 500,000 entering via UCAS in 2014. This shift from an elite to a mass system has been demand-led, placing a strain on the ability of governments to support continuing growth through public funding.

8.4 Shape of the higher education system

The increasing expansion and differentiation of institution types within a unitary higher education sector, has led to both 'vertical' and 'horizontal' differentiation. It is also the case that a significant proportion of higher education at the sub-degree and bachelor's levels is to be found in a 'further education' sector of institutions, whose main focus is on post-school education at levels below those of higher education, which is defined as level 4 and above. While a key distinction between universities has been between pre-1992 and post-1992, this distinction is becoming somewhat misleading with the 21st century arrival of substantial numbers of new universities, following the award of university titles to some existing colleges and institutes.

As mentioned in section 8.3, there is a small number of private institutions (eight) that have the power to award degrees, and there are a number of private providers offering qualifications accredited by other UK institutions. Provision in the private sector is very diverse, making further generalisation hard. These providers are typically rather focused colleges offering a narrow range of professional courses in management, business studies, accountancy and law. From 2012 reforms to higher education will make it possible for private providers to access student fee funding through the public loan system, although capped at £6,000 (€7,500) rather than £9,000 for public universities. Access for the first time to public financing through the system of designated course support is expected to lead to an expansion in private provision, and private higher education is therefore likely to develop very quickly in the coming years.[80]

Scotland has higher education institutions (HEIs) comparable to those in other parts of the UK, though with some significant differences. Higher education is also divided into degree programmes and non-degree programmes, as well as undergraduate and postgraduate phases. There are two main differences. First, undergraduate honours programmes take one year longer to complete than ordinary degrees (in most cases, four years instead of three); second, the undergraduate degree programmes at the four old universities (Aberdeen, St Andrews, Edinburgh and Glasgow) do not award a bachelor's degree, but instead a Master of Arts (Honours) degree (MA (Hons)). This only applies to arts programmes. In England, Wales and Northern Ireland, this type of master's degree is regarded as being equal to a bachelor's degree (EP-NUFFIC, 2015g).

British higher education has no government-run system of accreditation. There are accreditation bodies that do not act on behalf of the government and therefore focus more on private institutions or certain types of education, such as education by correspondence or professional examination programmes. The British government may recognise HEIs through legislation, such as a Royal Charter. These institutions constitute the group called 'recognised bodies'. There is also a group of listed bodies: institutions that are not recognised through legislation but are authorised to provide recognised programmes through cooperation with a recognised institution. If the quality of the programmes is unsatisfactory, the government can suspend funding (EP-NUFFIC, 2015g).

[80] See: www.ihem.nl.

To date, quality assurance in teaching in the UK is the responsibility of national funding bodies, although up to now these have delegated that task to the Quality Assurance Agency for Higher Education (QAA). QAA produces reports for the funding councils at the level of institutions, together with thematic analyses. Institutions are subject to peer review (Higher Education Review), judged against four criteria and awarded four scores (commended, meets UK expectations, requires improvement to meet UK expectations, and does not meet UK expectations). Those institutions receiving the lower two scores are considered unsatisfactory, and must develop and implement action plans to meet expectations, and in most circumstances undergo a follow-up review.

In England, there is now a common review method for all higher education providers, both public and private. The review team makes judgements on how the institution:

- sets and maintains threshold academic standards
- manages the quality of students' learning opportunities
- enhances its educational provision
- manages the quality of its public information.

Its additional aims are to highlight good practice, to affirm progress made in areas previously cited for development, and to encourage future improvements. Each HEI is currently subject to review on six-year cycle, but a Review of Quality Assessment is being conducted by HEFCE, with a view to introducing a more proportionate and risk-based system, appropriate to a diverse sector.

The HEFCE annually reviews whether QAA's performance is sufficiently rigorous to allow HEFCE to be sure that it is discharging its statutory duty to monitor and assess standards in teaching and learning.[81]

8.5 Definitions of higher education

The main formal distinction in English higher education is between higher education providers with full research and teaching degree awarding powers, and those providers who award teaching and sometimes research degrees accredited by degree awarding bodies. The Department for Business, Innovation and Skills defines higher education as level 4 and above, which incorporates bachelor's degrees (levels 4-6), foundation degrees (levels 4-5), Higher National Diplomas/Certificates awarded by Pearson (levels 4-5) and other diplomas and certificates. Programmes certificated at levels 4-5 are referred to as sub-degree programmes and are frequently a feature of technical and vocational education, delivered outside the universities.[82]

Graduates of degree programmes are awarded a bachelor's, master's or doctoral degree; whereas graduates of non-degree programmes receive a different type of qualification, usually a certificate or diploma. Both programme types can be either academic or professional in nature. The two most prevalent sub-degree qualifications in higher education are the Higher National Diploma and Higher National Certificate.

Figure 46 shows the UK's higher education system; figure 47 shows the equivalency between the UK qualifications and the European Qualifications Framework.

[81] See: www.ihem.nl.
[82] See: www.ihem.nl.

9 United States

9.1 History and context of the higher education system

In the United States the supply of higher education is very diverse. Types of providers in the US are as follows.

- Community and Junior Colleges providing two-year courses beyond secondary school. Graduates of junior colleges are awarded an Associate in Arts (AA) or Associate in Sciences (AS) degree and may subsequently transfer to a four-year college or university.
- Technical Institutes offer two or three-year courses of training for a semi-professional occupation (for example, dental, engineering or medical technicians).
- Terminal Occupational Education offers one to three years of study beyond secondary level intended to prepare the student for immediate employment (students cannot transfer to a four-year college or university).[83]
- Liberal Arts Colleges and Universities offer a university education combining natural and social sciences as well as humanistic studies. The term 'college' is often used where undergraduate study is concerned. The college may be part of a university that also has graduate and professional schools, or it may be an independent institution offering bachelor's degree programmes with little if any instruction at the graduate level.[84] Fine Arts and Music may be taught in these colleges and universities but may also be available in specialised academies.

The Carnegie Foundation created a more richly differentiated system of classifying colleges and universities, including in its 2010 edition (Johnson, 2014):

- Associate Colleges (community colleges): granting two-year associate's degrees
- Doctorate-Granting Institutions, granting at least 20 research doctorates (mainly the PhD and not counting professional doctorates) - these can be divided into 'very high research activity', 'research activity' and 'research institutions'
- Master's Institutions, all of which also award bachelor's degrees, but also includes institutions awarding fewer than 20 research doctorates
- Baccalaureate Colleges, granting mainly bachelor's degrees, although some also grant a small number of associate and/or master's degrees
- Special Focus Institutions
- Tribal Colleges (members of the American Indian Higher Education Consortium)
- Faith Institutions, with explicit religious orientations.

Traditionally, the US invests significantly in higher education (see also section 9.2). However, the 2008 financial crisis led to significant institutional budget cuts. As a response, the American Recovery and Reinvestment Act (ARRA) was enacted. The ARRA provided funding to stabilise state support for education (among other interventions). With the approval of the Secretary of Education, funds allocated to the states by Congress could be used to supplement state and local funding for education in 2009, 2010, and 2011. In 2011, 31 states provided ARRA funding to their higher education systems totalling $2.8 billion, helping to offset reductions in state and local support since 2008 (SHEEO, 2013).

[83] This means that they do not provide higher education, as per the letter of the 1965 Higher Education Act.
[84] For example, Harvard College is the undergraduate division of Harvard University; Vassar College, Amherst College and Sarah Lawrence College are independent colleges.

9.2 GDP indicators

Figure 48 reports the key socioeconomic and demographic indicators for the US, for the latest year available, as reported by the World Bank, compared with the UK.

The aggregate expenditure of all US colleges and universities, public and private, was more than $448.5 billion in 2011-12. This aggregate includes expenditures on instruction, sponsored research, operations and maintenance of the physical plant, auxiliary enterprises (institutionally-provided food and lodging), university hospitals and clinics, and public service. The per-student expenditure on instruction alone, controlled for differences in size, reported by the Center for Education Statistics for 2011-12, is:

- **public four-year colleges and universities**: spending $9,133 (down from a high of $9,888 in 2008-09)
- **public two-year community colleges**: spending an average of $4,405 on per-student instruction (down from a high of $5,004 in 2007-08)
- **private non-profit bachelor's degree colleges**: spending an average of $10,174 on per-student instruction
- **private elite research universities** (Carnegie classification 'very high' research universities such as Stanford, Harvard, Chicago, Yale, MIT and Vanderbilt): spending an average of $43,678 per-student on instruction.

9.3 Size of the higher education system

The US system has grown significantly in the last decade. Between 2001 and 2012, enrolments increased by 32 per cent, from 15.9 million to 21.0 million (figure 49). However, in 2012 enrolment was about 2 per cent percent lower than the record enrolment in 2010.[85] The growth in higher education provision has been driven almost exclusively by for-profit private higher education institutions (HEIs). Between 1999-2000 and 2010-11 (see figure 50):

- the number of public tertiary providers dropped from 2,078 to 2015 (3 per cent)
- the number of for-profit private tertiary providers grew from 2,393 to 3,194 (plus 33 per cent)
- the number of non-profit private tertiary providers dropped slightly from 1,936 to 1,812 (minus 6 per cent).

However, in terms of student numbers, high proportions are to be found in the generally larger public institutions (see figure 49). Many of the private providers are quite small.

9.4 Shape of the higher education system

Higher education in the US is the responsibility of the states, rather than of the federal government. Thus, with some exceptions (such as the military service academies), public higher education is owned and controlled by the federate states. The private higher education sector too is under the legal jurisdiction of the states. The federal Department of Education has the following critical functions that apply equally to public and private institutions:

- provision of student financial assistance
- oversight over the accreditation of colleges and universities
- maintenance of a database on higher education information

[85] See: http://nces.ed.gov/fastfacts/display.asp?id=98 and http://nces.ed.gov/programs/digest/d13.

- financial responsibility for the funding of most basic research.

The US has the longest history of formal external quality assurance, in the form of accreditation (Cremonini et al, 2012; OECD, 2010). The character and functions of accreditation have changed in recent decades, mainly under the influence of federal legislation requiring more evidence of student learning in reaction to political attention to an increasing rate of loan defaults after graduates failed to obtain the type of jobs (and associated salaries) expected of them (Cremonini et al, 2012). Today, all institutional accrediting organisations require providers to gather evidence of the extent to which groups of students (for example, those sharing a similar characteristic such as gender, age or socioeconomic status) achieve learning outcomes on the aggregate (OECD, 2010).

Accreditation can be at institutional and programme level. The former is necessary for providers and students to obtain federal funding; the latter only applies to fields where professions organise themselves for this purpose. An institution is accredited (every 3-10 years) provided that its programme of study, professors and academic facilities meet the minimum standards established by an agency recognised by the Council for Higher Education (CHEA)[86] or by the US Department of Education. The CHEA is a private sector organisation whose members are approximately 3,000 degree-granting colleges and universities.[87] Hence, accreditation is carried out by private, non-profit organisations that derive their legitimacy from the colleges, universities and programmes that created accreditation rather than from the government.

There are four types of accrediting organisations, as follows.

- **Regional accreditors**: accredit public and private, mainly non-profit and degree-granting, two and four-year institutions.
- **National faith-related accreditors**: accredit religiously affiliated and doctrinally based institutions, mainly non-profit and degree-granting.
- **National career-related accreditors**: accredit mainly for-profit, career-based, single-purpose institutions, both degree and non-degree.
- **Programmatic accreditors**: accredit specific programmes, professions and freestanding schools, for example law, medicine, engineering and health professions.

Throughout the US there are over 80 recognised accrediting organisations,[88] about 7,700 accredited colleges, universities or vocational schools, and 19,000 accredited programmes.[89] Accreditors undergo a periodic 'recognition', such as an external review of their organisations. Recognition can be carried out by another private organisation and/or CHEA and/or the United States Department of Education.[90] It happens every 10 years (plus an interim report) for CHEA and every five years for the US Department of Education.

9.5 Definitions of higher education

The US Higher Education Act of 1965 defines 'higher education institutions' and thus, implicitly, 'higher education'. According to this piece of legislation, higher education is all education beyond secondary schooling, of at least two years, consisting of programmes that

[86] See: www.chea.org.
[87] See: www.chea.org/pdf/chea-at-a-glance_2015.pdf.
[88] The full list of 93 accreditors recognised by either CHEA or the US department of education is available at www.chea.org/pdf/CHEA_USDE_AllAccred.pdf.
[89] See: www.chea.org/public_info/video_About_CHEA.asp.
[90] Although accreditation is strictly a nongovernmental activity, recognition is not.

are acceptable for full credit toward a bachelor's degree.[91] HEIs mainly consist of two-year Junior Colleges, Colleges and Universities, and Technical schools (leading to Associate Degrees and Technical Certificates). Qualifications granted include the bachelor's degree (four years of between 120 and180 of credits);[92] the master's degree (one to two years, between 30 and 60 course credits, and an average grade of 'B'); and the PhD. There are also professional postgraduate trainings (for example, to become a practicing lawyer or a medical doctor), and possibilities for so-called non-degree students who wish to take courses without enrolling for a degree (they are registered as 'special students').

Figure 51 shows the US higher education system; figure 52 shows the equivalency between the US qualifications and the European Qualifications Framework.

[91] See Public Law 89-329, 8 November 1965m part C (Higher Education Act) at www.gpo.gov/fdsys/pkg/STATUTE-79/pdf/STATUTE-79-Pg1219.pdf, p 1249.
[92] The US credit system differs from the European Credit Transfer and Accumulation System (ECTS) because it is based on contact hours rather than study load. See, for example: www.eunc.edu/academics/ects-us-college-credits. It also differs from the UK credit system.

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Annex: Supporting information

Australia

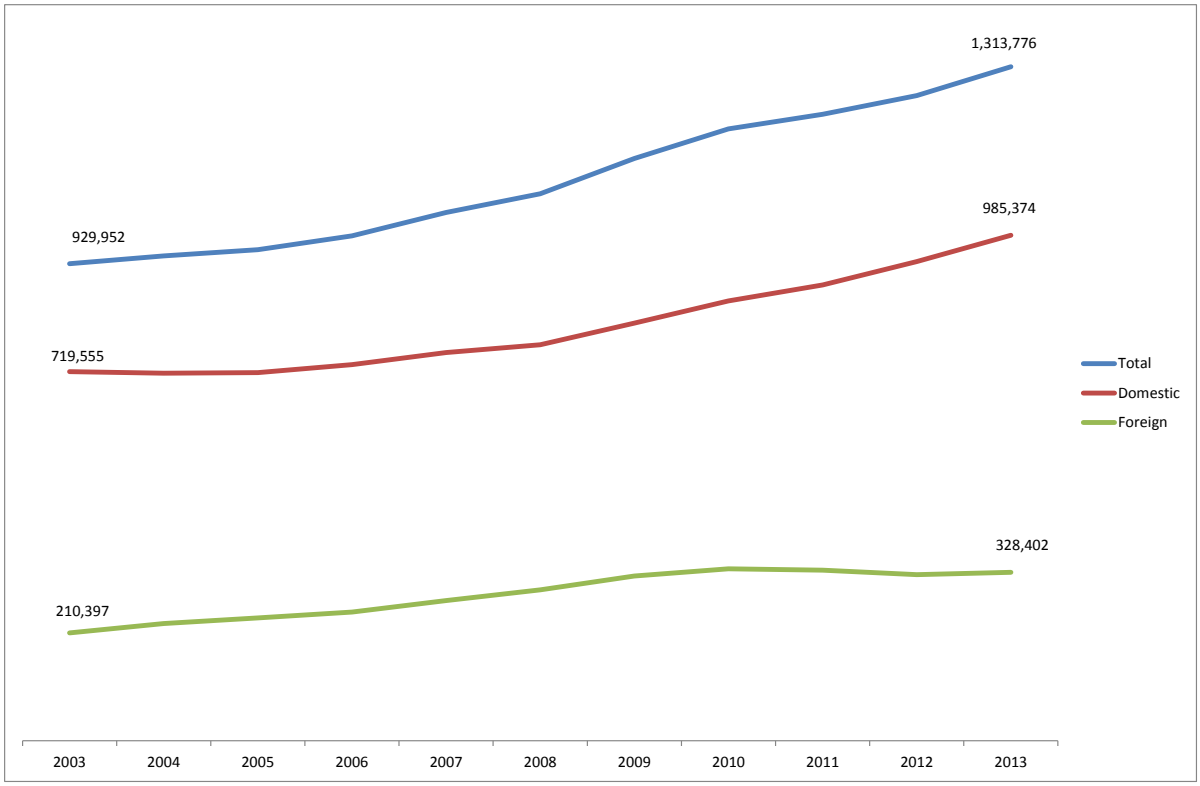
Figure 1. Australia: Select socioeconomic and demographic indicators

Indicators	Australia	UK	Year
Population	23.49 million	64.51 million	2014
GDP	US$1.454 trillion	US$2.942 trillion	2014
GNI per capita (Atlas method)*	US$ 64,680	US$42,690	2014
Population below poverty level	--	--	--

Source: World Bank, 2015: http://data.worldbank.org/country/australia

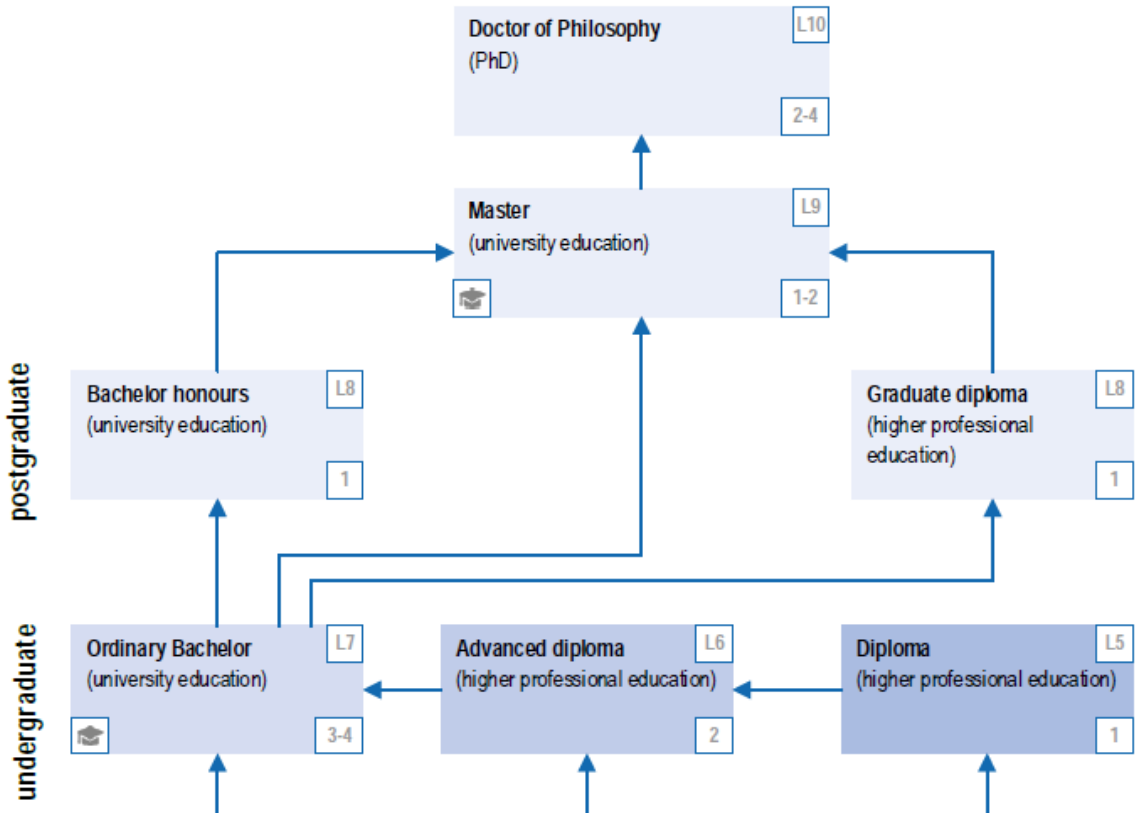
* A special Atlas method of conversion is used by the World Bank. This applies a conversion factor that averages the exchange rate for a given year and the two preceding years, adjusted for differences in rates of inflation between the country, and through 2000, the G-5 countries (France, Germany, Japan, the United Kingdom and the United States). From 2001, these countries include the Euro area, Japan, the United Kingdom and the United States.

Figure 2. Enrolments in Australian higher education (2003-13)



Source: http://education.gov.au/student-data - selected higher education statistics, 2003-13 (chart by authors)

Figure 3. Higher education system in Australia



Source: EP-NUFFIC, 2015A, p 3 (adapted by authors)

Figure 4. Australian qualifications: equivalency with the European Qualifications Framework

Degree or qualification	EQF level	Higher Education
Diplomas/advanced diplomas (at higher education level)	5	√
Graduate diplomas (1 to 2 years)	>6/<7	√
Bachelor's degree	6	√
Honours Bachelor's degree	6	√
Master's degree	7	√

Source: EP-NUFFIC, 2015a, p 5 (adapted by authors)

Brazil

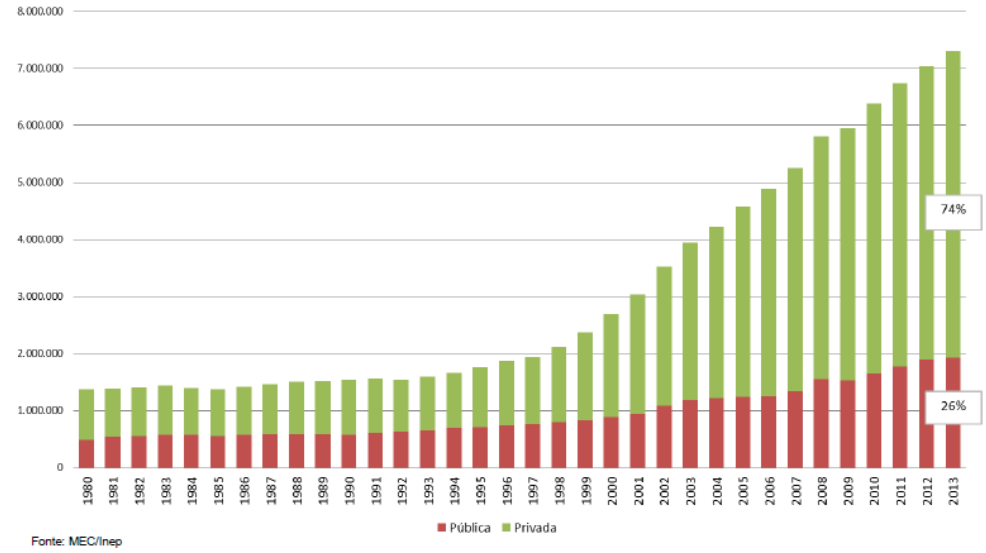
Figure 5. Brazil: Select socioeconomic and demographic indicators

Indicators	Brazil	UK	Year
Population	202.0 million	64.51 million	2014
GDP	US$2.346 trillion	US$2.942 trillion	2014
GNI per capita (Atlas method)*	US$11,750	US$42,690	2014
Population below poverty level	8.9%	--	2013

Source: World Bank, 2015: http://data.worldbank.org/country/brazil

* A special Atlas method of conversion is used by the World Bank. This applies a conversion factor that averages the exchange rate for a given year and the two preceding years, adjusted for differences in rates of inflation between the country, and through 2000, the G-5 countries (France, Germany, Japan, the United Kingdom and the United States). From 2001, these countries include the Euro area, Japan, the United Kingdom and the United States.

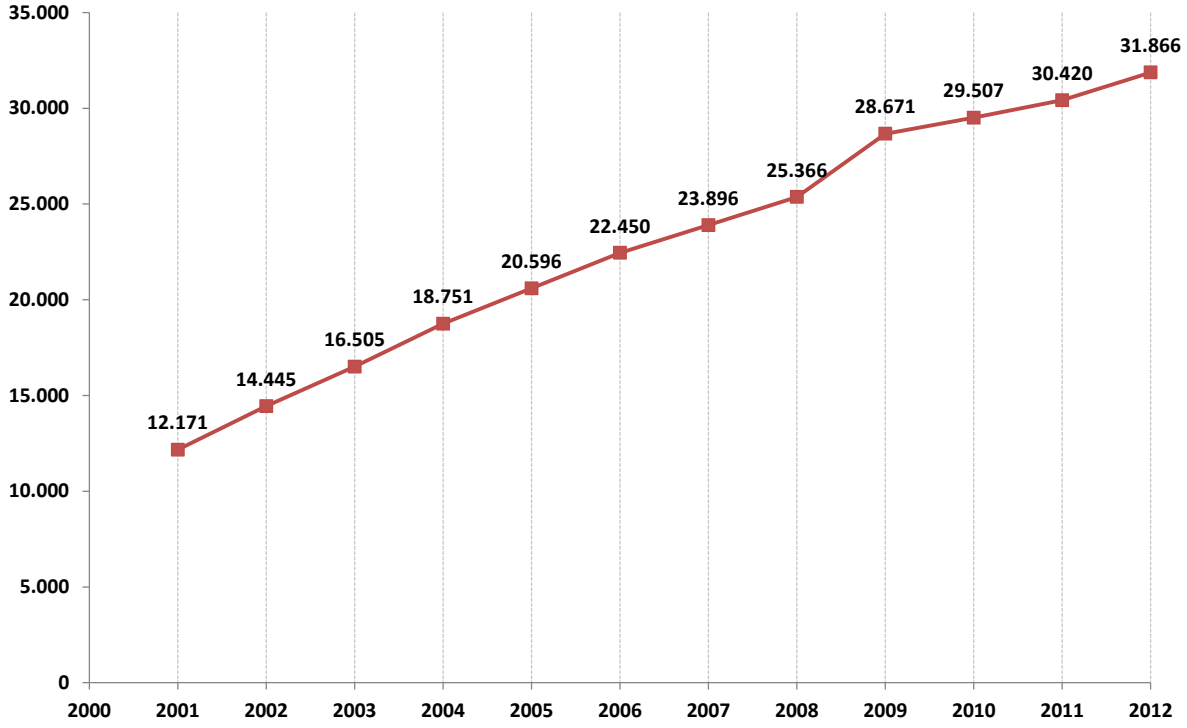
Figure 6. Enrolment trends in Brazilian higher education institutions (1980-2013)[93]



Source: Ministry of Education, Brazil

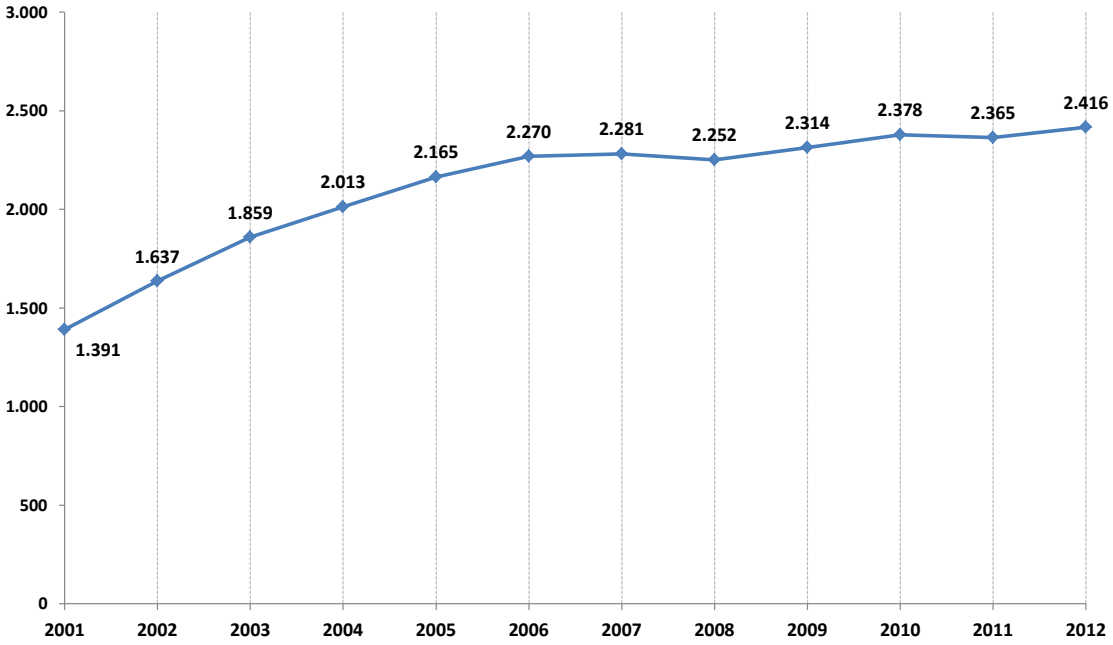
[93] The numbers shown in figures 6-8 differs slightly from those shown in figure 5 because the charts are taken from a presentation provided by INEP, which has data of the prior year. There is more recent data, but a log-in is needed to access the Census 2015 data.

Figure 7. Changes in programme offerings in Brazilian higher education (2000-13)



Source: INEP 2013

Figure 8. Changes in number of Brazilian higher education institutions (2001-12)



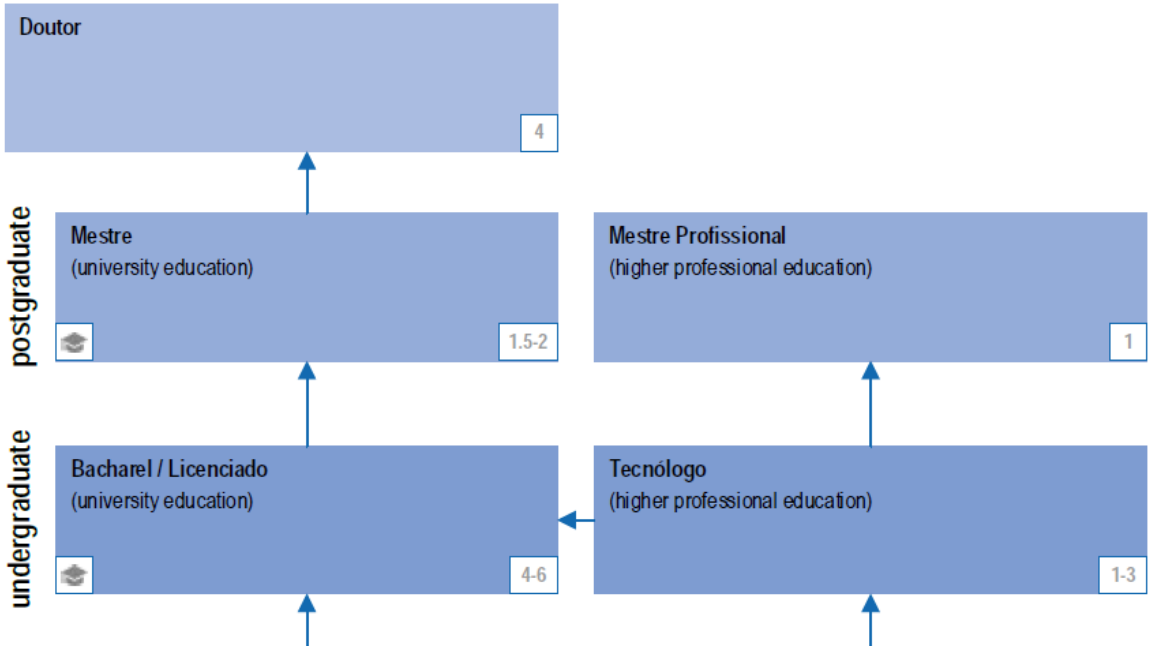
Source: INEP 2013

Figure 9. Higher education provision in Brazil

	Higher education Institutions	Public			Private
		Federal	State	Municipal	
Total	2391	106	119	76	2090
Universities	195				
University Centres	140				
Colleges ('Faculdades')	2016				
IFs and CEFETs	40				

Source: Ministry of Education 2014

Figure 10. Higher education system in Brazil



Source: EP-NUFFIC, 2015b, p 3 (adapted by authors)

Figure 11. Brazilian qualifications: equivalency with the European Qualifications Framework

Degree or qualification	EQF level	Higher Education
Técnico de Nivel Médio/Diploma de Ensino Médio com Habilitação (Medium Level Technician / High School Diploma with specialisation)	1-4	--
Certificado de Conclusão de 2° Grau/Certificado de Conclusão de Ensino Médio (Certificate of Completion of 2nd Degree / High School Completion Certificate)	4	--
Tecnólogo ('technologist')	5	√
Bacharel (Bachelor)	6	√
Licenciado (Bachelor in Teaching education)	6	√
Mestre (profissional) (Master's/Professional Master's)	7	√

Source: EP-NUFFIC, 2015b, p 4 (adapted by authors)

Chile

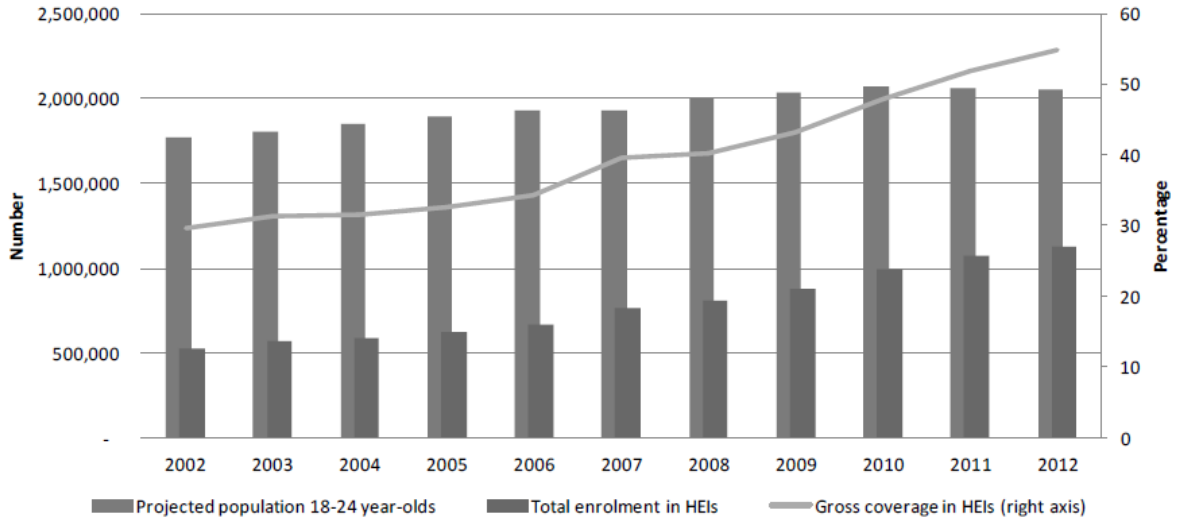
Figure 12. Chile: Select socioeconomic and demographic indicators

Indicators	Chile	UK	Year
Population	17.77 million	64.51 million	2014
GDP	US$258.1 billion	US$2.942 trillion	2014
GNI per capita (Atlas method)*	US$ 14,900	US$42,690	2014
Population below poverty level	14.4%	--	2013

Source: World Bank, 2015: http://data.worldbank.org/country/chile

* A special Atlas method of conversion is used by the World Bank. This applies a conversion factor that averages the exchange rate for a given year and the two preceding years, adjusted for differences in rates of inflation between the country, and through 2000, the G-5 countries (France, Germany, Japan, the United Kingdom and the United States). From 2001, these countries include the Euro area, Japan, the United Kingdom and the United States.

Figure 13. Evolution of enrolment and coverage in HEIs in Chile for projected 18-24 year-olds (2002-12)[94]



Source: OECD, 2012, p 18 (original source as cited: SIES, in DIVESUP/MINEDUC (2012), Informe Nacional de Antecedentes. 'El Aseguramiento de la Calidad de la Educación Superior en Chile', Comité de Coordinación. Sistema Nacional de Aseguramiento de la Calidad de la Educación Superior en Chile (SINAC-ES), August 2012, Santiago de Chile)

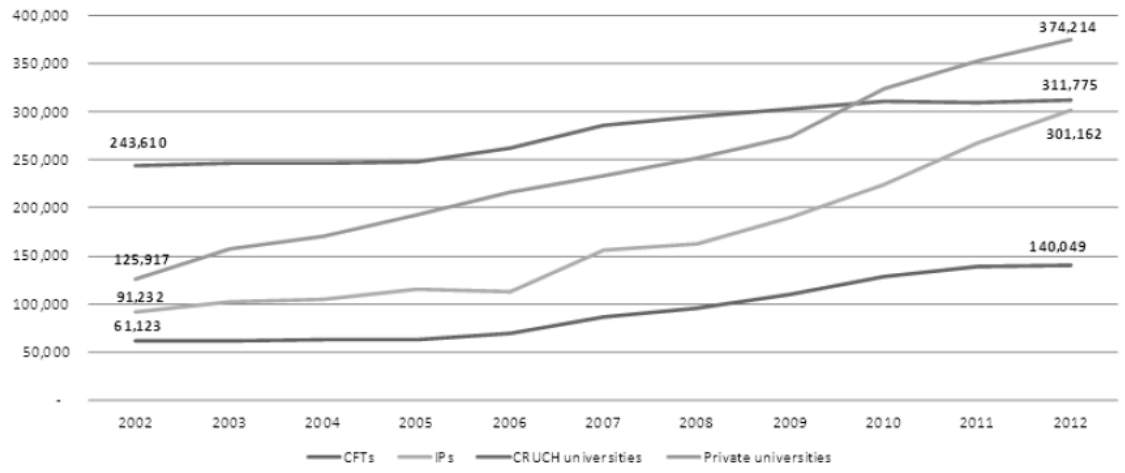
[94] Reproduced from chart 2.1 in OECD 2012

Figure 14. Higher Education Provision in Chile[95]

Universities	59
Professional Institutes ('Institutos Profesionales')	47
Technical Training Centres (Centros de Formación Técnica)	61
Armed forced institutions (belonging to the Ministry of Defence)	20*

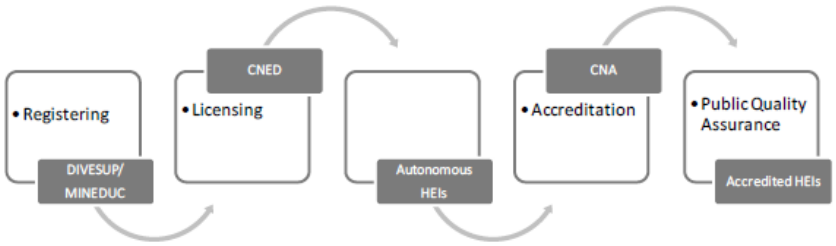
Source: CNED, 2015. * OECD, 2012, p 18

Figure 15. Enrolments in higher education in Chile, by type of institution (2002-12)



Source: OECD 2012, p 19 (source as cited: SIES, in DIVESUP/MINEDUC, 2012)

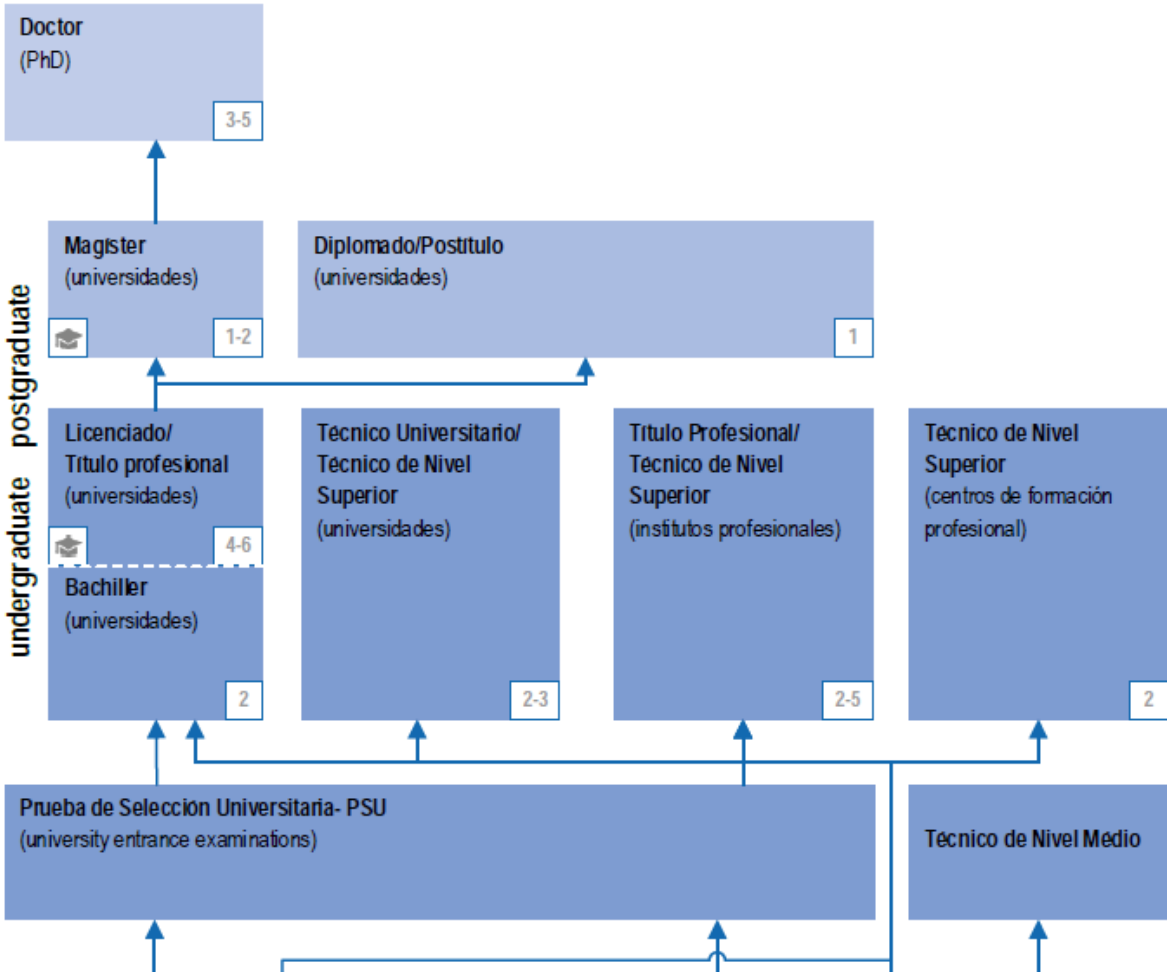
Figure 16. The quality assurance process in Chile



Source: OECD, 2012, p 28 (original source as cited: self-elaboration, CNA, (Comisión Nacional de Acreditación) (2012), Aseguramiento de la Calidad de la Educación Superior, Presentation, 17th July 2012, Santiago de Chile, 2012)

[95] These data are taken from the Ministry's website (see: www.cned.cl/public/Secciones/SeccionEducacionSuperior/listadoinstitucionesautonomasfuncionan.aspx#Uni, accessed August 2015). According to OECD (2012) the numbers are slightly different: 60 universities, 45 Professional Institutes and 68 Technical Training Centres.

Figure 17. Higher education system in Chile



Source: EP-NUFFIC, 2015c, p 3 (adapted by authors)

Figure 18. Chilean qualifications: equivalency with the European Qualifications Framework[96]

Degree or qualification	EQF level	Higher Education
Técnico de Nivel Superior	4	--
Titulo Profesional (Instituto Profesional)	6	√
Licenciado/Título Profesional (Universidad)	6	√
Diplomado/Postítulo	6	√
Magister	7	√

Source: EP-NUFFIC, 2015c, p 4 (adapted by authors)

[96] This table adopts EP-NUFFIC's equivalency assessment. It is not prescriptive and one may well argue that studies requiring a secondary diploma (which is EQF level 4) as a prerequisite for access, even if not 'officially' higher education, could be placed on EQF level 5 (short cycle higher education). For the other countries in this report the same equivalency was used, but the EQF level 5 was present in such cases. EP-NUFFIC bases the equivalency on the Dutch qualification descriptors.

China

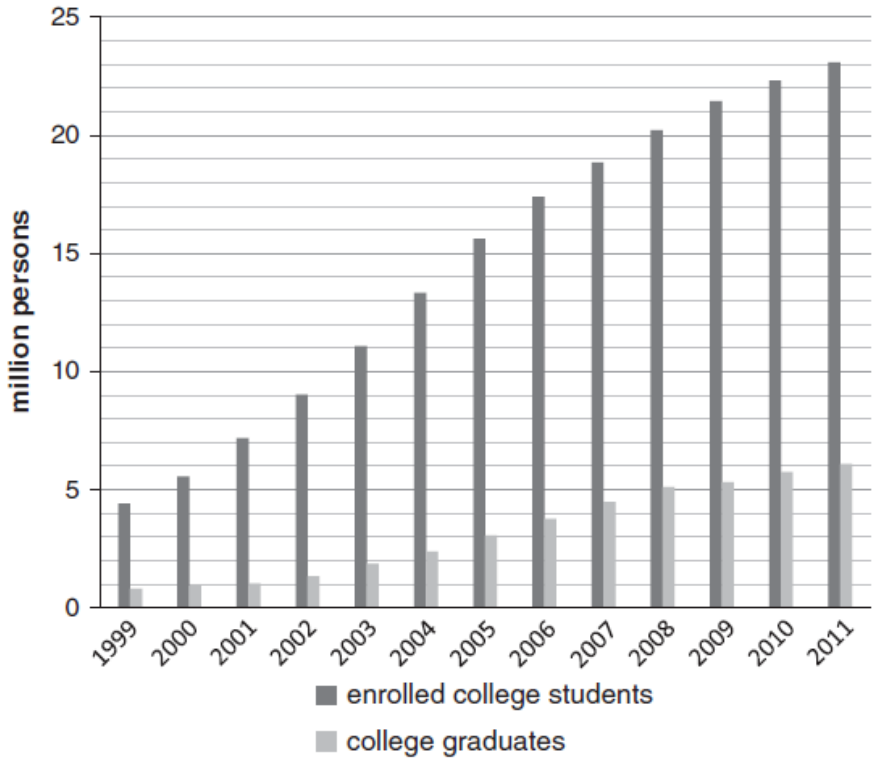
Figure 19. China: Select socioeconomic and demographic indicators

Indicators	China	UK	Year
Population	1.364 billion	64.51 million	2014
GDP	US$10.36 trillion	US$2.942 trillion	2014
GNI per capita (Atlas method)*	US$7,380	US$42,690	2014
Population below poverty level	4.6%	--	1998

Source: World Bank, 2015: http://data.worldbank.org/country/china

* A special Atlas method of conversion is used by the World Bank. This applies a conversion factor that averages the exchange rate for a given year and the two preceding years, adjusted for differences in rates of inflation between the country, and through 2000, the G-5 countries (France, Germany, Japan, the United Kingdom and the United States). From 2001, these countries include the Euro area, Japan, the United Kingdom and the United States.

Figure 20. Numbers of enrolled students and graduates in regular colleges in China (1999-2011)



Source: National Bureau of Statistics of China (1999-2013)

Figure 21. Growth in higher education institutions in China (2003-13)

	2003	2013	per cent change
Institutions providing graduate programs	720	830	+15%
Regular HEIs	1552	2491	+61%
Number of regular HEIs that are private	173	717	+314%
HEIs for Adults	558	297	-47%
Other Non-state/private HEIs	1104	802	-27%

Source: Kapur and Perry, 2015 p 34 of 41[97]

Figure 22. Higher education provision in China (2013)

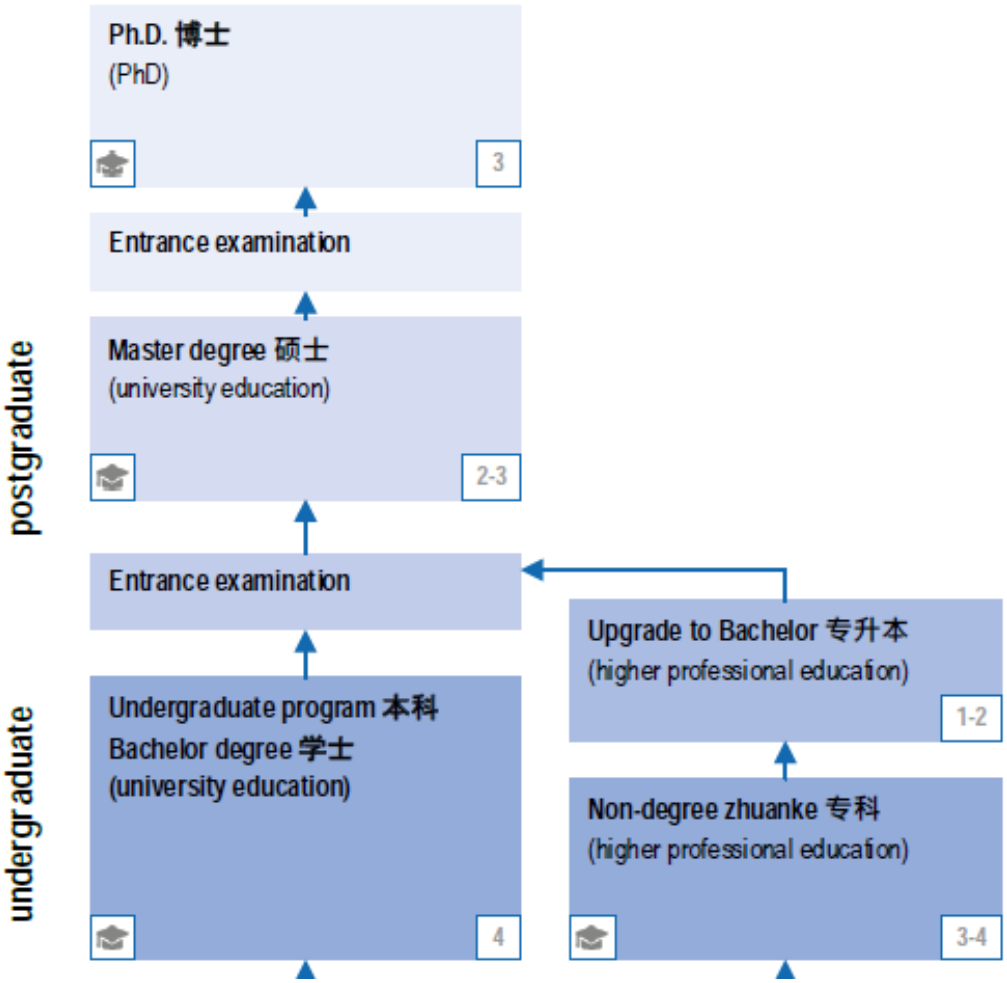
		HEIs under Central Ministries & Agencies		HEIs under Local Auth.			Independent
	Total	HEIs under MOE	HEIs under Other Central Agencies	HEIs under MOE	Run by Non-ed. Dept.	Local Enterprises	
Institutions Providing Postgraduate Programs **of which…**	830	73	275	412	64	1	5
Regular HEIs	548	73	34	411	25		5
Research institutes	282		241	1	39	1	
Regular HEIs **of which…**	2,491	73	40	1,015	598	48	717
Higher vocational colleges	1,321		3	414	531	48	325
HEIs offering Degree Programs **of which…**	1,170	73	37	601	67		392

[97] Original source as cited: For 2003-10: '高等教育学校 (机构) 数 ('Number of Higher Education Institutions'),' in 中国教育统计年鉴2003-10; for 2011: Ministry of Education, '高等教育学校（机构）数,' www.moe.gov.cn/publicfiles/business/htmlfiles/moe/s7382/201305/152554.html. Accessed April 3, 2014; for 2012: Ministry of Education, '高等教育学校（机构）数,' www.moe.gov.cn/publicfiles/business/htmlfiles/moe/s7567/201309/156873.html. Accessed April 3, 2014. For 2013: Ministry of Education, '高等教育学校（机构）数,' www.moe.gov.cn/publicfiles/business/htmlfiles/moe/s8493/201412/182068.html. Accessed April 17, 2015)

		HEIs under Central Ministries & Agencies		HEIs under Local Auth.			Independent
	Total	HEIs under MOE	HEIs under Other Central Agencies	HEIs under MOE	Run by Non-ed. Dept.	Local Enterprises	
Independent Institutions	292						292
Adult HEIs	297	1	12	96	146	41	1
Other Non-government HEIs	802						802

Source: Ministry of Education of the People Republic of China: Educational Statistics (www.moe.edu.cn)

Figure 23. Higher education system in China



Source: EP-NUFFIC, 2015d, p 3 (adapted by authors)

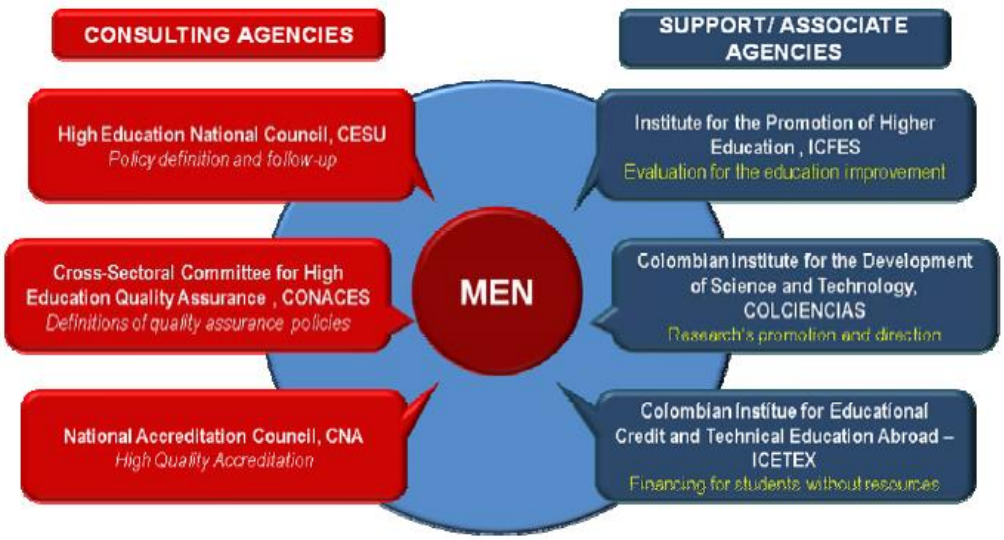
Figure 24. Chinese qualifications: equivalency with the European Qualifications Framework

Degree or qualification	EQF level	Higher Education
Graduation certificate from a zhuanke programme (2 years)	5	√
Graduation certificate from a zhuanke programme (3 years)	5	√
Graduation certificate from a bachelor's programme (4 years)	6	√
Graduation certificate from a bachelor's programme at a Project 211 institution (4 years)	6	√
Graduation certificate from a master's programme (2 years)	7	√

Source: EP-NUFFIC, 2015d, p 4 (adapted by authors)

Colombia

Figure 25. Key actors in Colombian higher education



Source: Ministry of National Education (Ministerio de Educación Nacional - reproduced in www.ond.vlaanderen.be/hogeronderwijs/bologna/forum2010/documents/COLOMBIA_Higher_Education_System.pdf)

Figure 26. Colombia: Select socioeconomic and demographic indicators

Indicators	Colombia	UK	Year
Population	48.93 million	64.51 million	2014
GDP	US$377.7 billion	US$2.942 trillion	2014
GNI per capita (Atlas method)*	US$$7,780	US$42,690	2014
Population below poverty level	30.6%	--	2013

Source: World Bank, 2015: http://data.worldbank.org/country/colombia

* A special Atlas method of conversion is used by the World Bank. This applies a conversion factor that averages the exchange rate for a given year and the two preceding years, adjusted for differences in rates of inflation between the country, and through 2000, the G-5 countries (France, Germany, Japan, the United Kingdom and the United States). From 2001, these countries include the Euro area, Japan, the United Kingdom and the United States.

Figure 27. Tertiary students enrolled in Colombia (2002-10)

	2002	2003	2004	2005	2006
Technical and technological	183 319	215 285	263 375	295 290	347 052
(percentage of undergraduate total)	(19.55)	(21.60)	(24.77)	(25.95)	(28.45)
Bachelor's	745 570	781 403	799 808	842 482	872 902
Total undergraduate (coverage as	937 889	996 688	1 063 183	1 137 772	1 219 954
percentage of population 17- 21)	(24.43)	(25.65)	(26.96)	(28.44)	(30.01)
Specialisation	55 133	43 783	39 893	45 970	47 506
Master's	6 776	8 978	9 975	11 980	13 099
Doctoral	350	583	675	968	1 122
Grand total	1 000 148	1 050 032	1 113 726	1 196 690	1 281 681

	2007	2008	2009	2010
Technical and technological	394 819	462 646	482 505	**542 358**
(percentage of undergraduate total)	(30.22)	(32.47)	(32.31)	**(34.16)**
Bachelor's	911 701	961 985	1 011 021	**1 045 570**
Total undergraduate (coverage as	1 306 520	1 424 631	1 493 525	**1 587 928**
percentage of population 17- 21)	(31.68)	(34.07)	(35.26)	**(37.05)**
Specialisation	40 866	44 706	54 904	**60 358**
Master's	14 369	16 317	20 386	**23 808**
Doctoral	1 430	1 532	1 631	**2 326**
Grand total	1 363 185	1 487 186	1 570 447	**1 674 420**

Source: OECD *et al*, 2012, p 35 - original source as cited: Background Report (MEN, 2011a)

Figure 28. Tertiary institutions in 2011 in Colombia, by public/private denomination, and change between 2007-11

	Public 2011 (change from 2007)	Private 2011 (change from 2007)	Total 2011 (change from 2007)
Universities	32 (no change)	48 (+ 4)	80 (+ 4)
University institutions	27 (+ 4)	88 (+ 16)	115 (+ 20)
Technological institutions	12 (- 4)	42 (- 1)	54 (- 5)
Professional technical institutions	9 (-2)	30 (- 8)	39 (- 10)
Total	80 (-2)	208 (+ 11)	288 (+ 9)

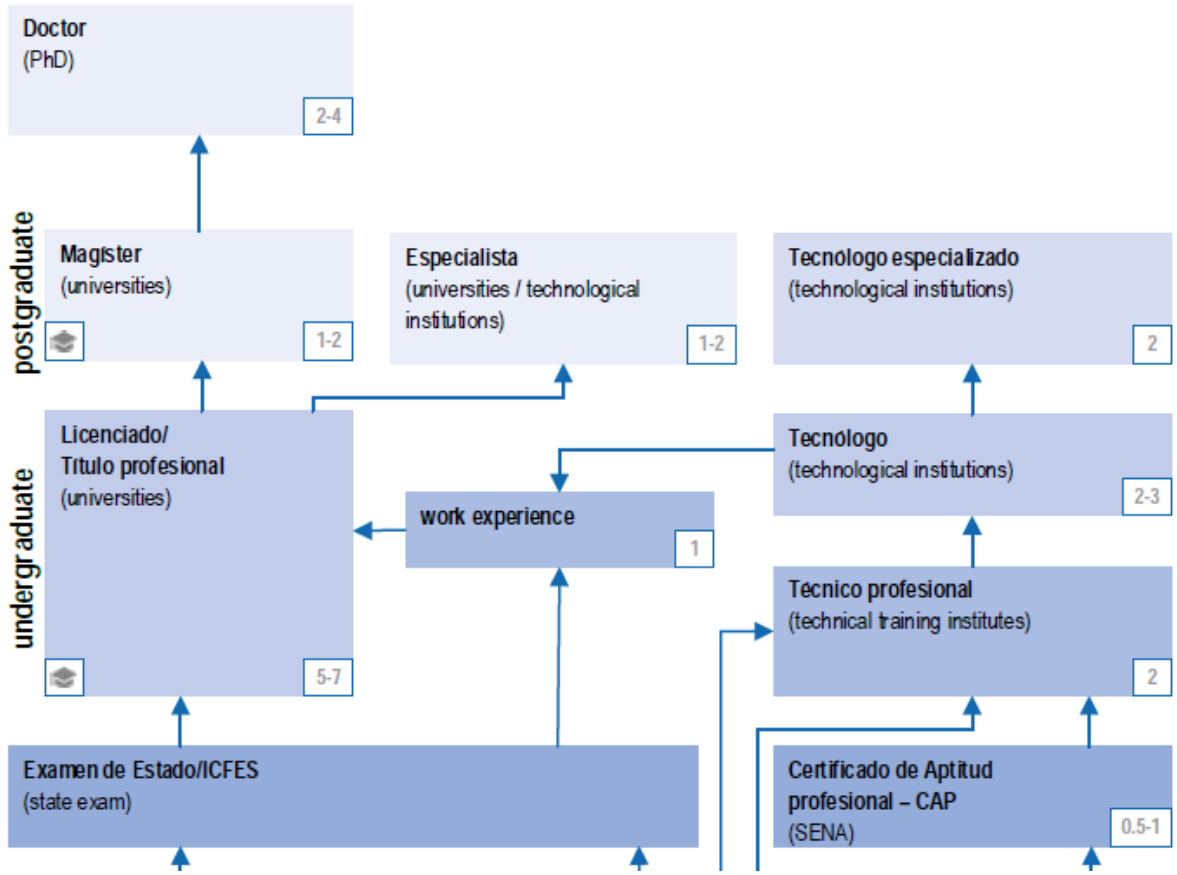
Source: OECD et al, 2012, p 33 - original source as cited: Background Report (MEN, 2011a)

Figure 29. Programmes offered nationally and percentages on the Register of Qualified Programmes in Colombia

Level	Number of programmes offered[1]	% of all programmes offered	% in public TEIs	% in private TEIs	% on Register
Technical	906	8%	41%	59%	83.88
Technological	1 727	15%	49%	51%	90.68
University	4 317	37%	39%	61%	97.66
Specialisation	3 538	31%	31%	69%	95.65
Master's	931	8%	52%	48%	84.96
Doctorate	174	2%	68%	32%	70.69
Total	**11 593**	**100%**	**40%**	**60%**	-------

Note. Includes SENA and National University of Colombia (Universidad Nacional de Colombia [UNAL]) programmes. Source: OECD *et al*, 2012, p 183 (original source as cited: MEN, SACES. Data as at 2 October 2011)

Figure 30. Higher education system in Colombia



Source: EP-NUFFIC, 2015e, p 3 (adapted by authors)

Figure 31. Colombian qualifications: equivalency with the European Qualifications Framework[98]

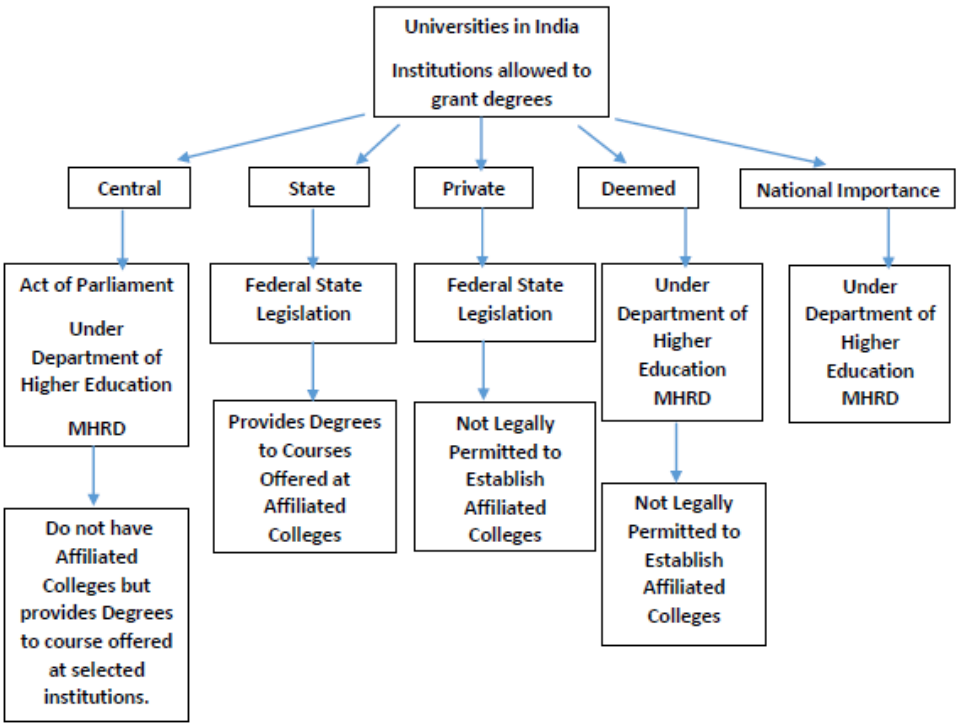
Degree or qualification	EQF level	Higher Education
Tecnólogo	4	--
Tecnólogo Especializado	5	√
Licenciado/Título professional	6	√
Especialista	6	√
Magister	7	√

Source: EP-NUFFIC, 2015e, p 4 (adapted by authors)

[98] This table adopts EP-NUFFIC's equivalency assessment. It is not prescriptive and one may well argue that studies requiring a secondary diploma (which is EQF level 4) as a prerequisite for access, even if not 'officially' higher education, could be placed on EQF level 5 (short cycle higher education). For the other countries in this report the same equivalency was used, but the EQF level 5 was present in such cases. EP-NUFFIC bases the equivalency on the Dutch qualification descriptors.

India

Figure 32. Universe of higher education institutions in India



Source: Dhanuraj and Kumar, 2015, p 2 (MHRD: Ministry of Human Resources Development)

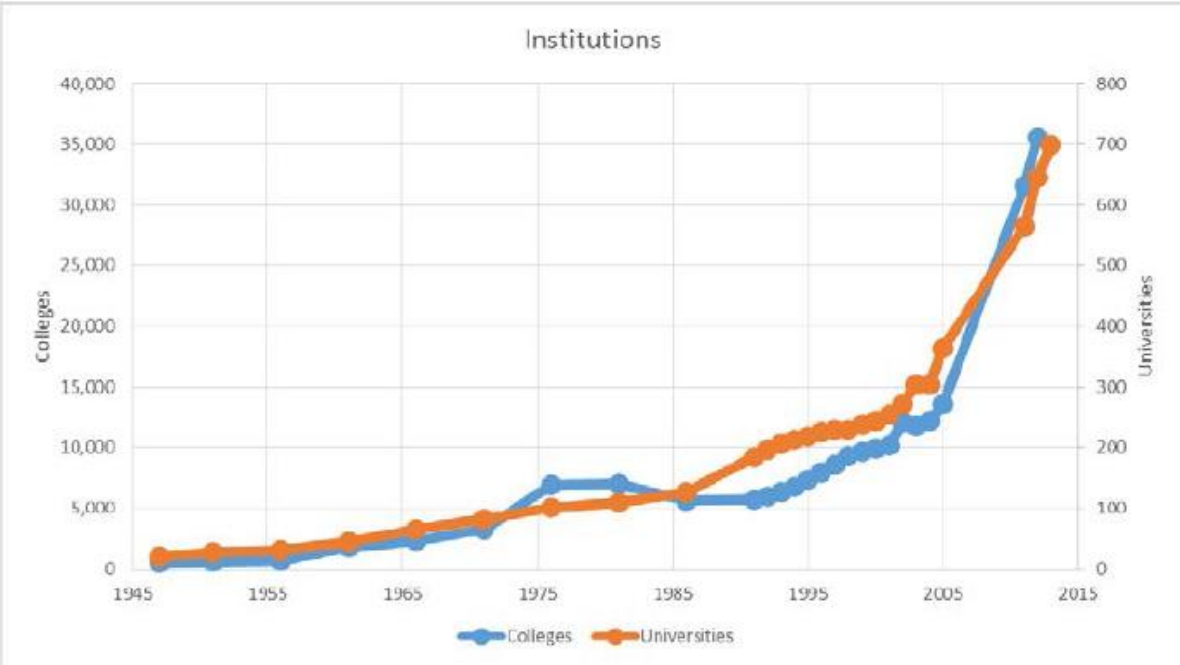
Figure 33. India: Select socioeconomic and demographic indicators

Indicators	India	UK	Year
Population	1.267 billion	64.51 million	2014
GDP	US$2.067 trillion	US$2.942 trillion	2014
GNI per capita (Atlas method)*	US$1,610	US$42,690	2014
Poverty headcount ratio at national poverty lines**	21.9% of population	--	2011

Source: World Bank, 2015: http://data.worldbank.org/country/india

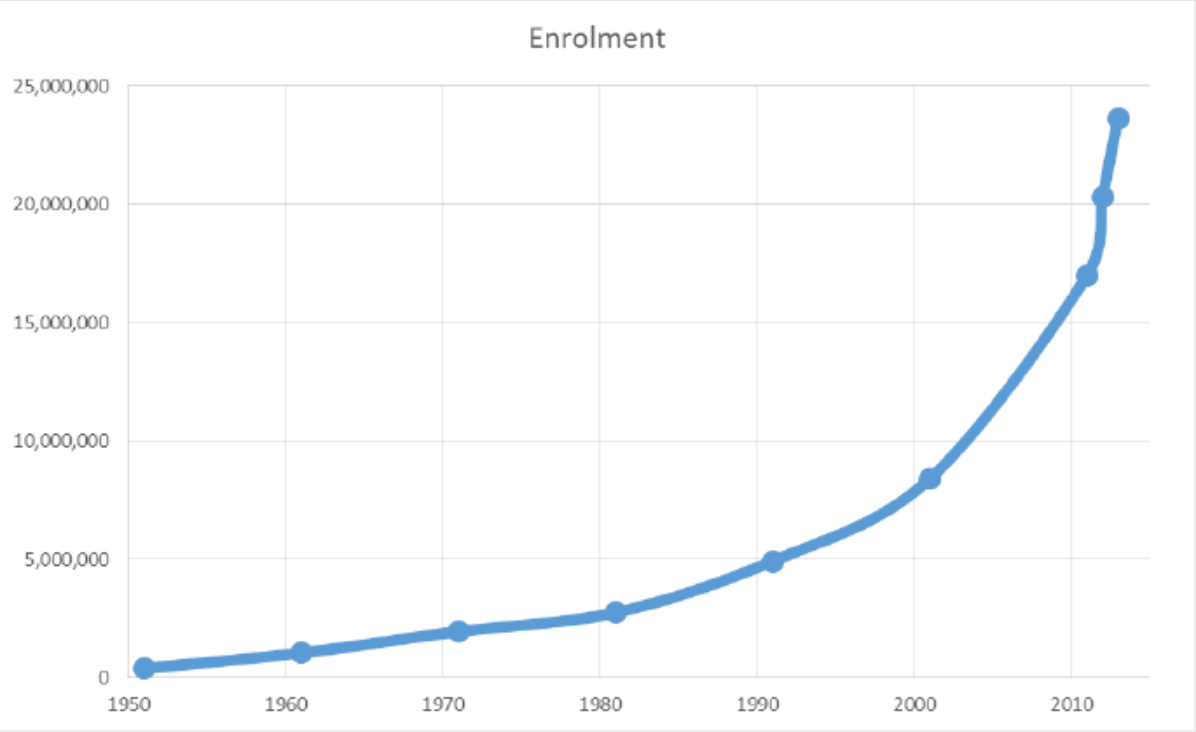
* A special Atlas method of conversion is used by the World Bank. This applies a conversion factor that averages the exchange rate for a given year and the two preceding years, adjusted for differences in rates of inflation between the country, and through 2000, the G-5 countries (France, Germany, Japan, the United Kingdom and the United States). From 2001, these countries include the Euro area, Japan, the United Kingdom and the United States.

Figure 34. Institution growth in India (1947-2013)



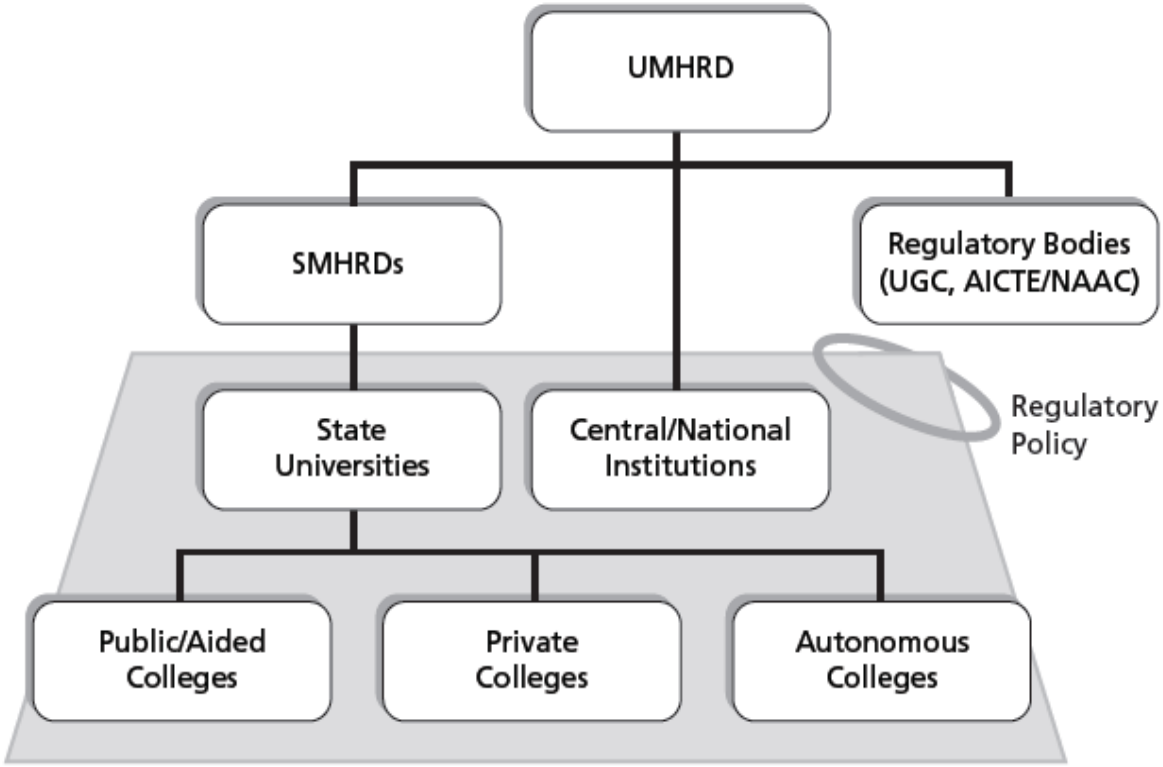
Source: Stolarick, 2014, p 4 of 32 (sources used: World Bank, 2010; University Grants Commission, 2013; Choudaha, 2013)

Figure 35. Enrolment growth in India (1947-2013)



Source: Stolarick, 2014 p 4 of 32 (sources used: University Grants Commission, 2012; University Grants Commission, 2013b; Agarwal, 2007)

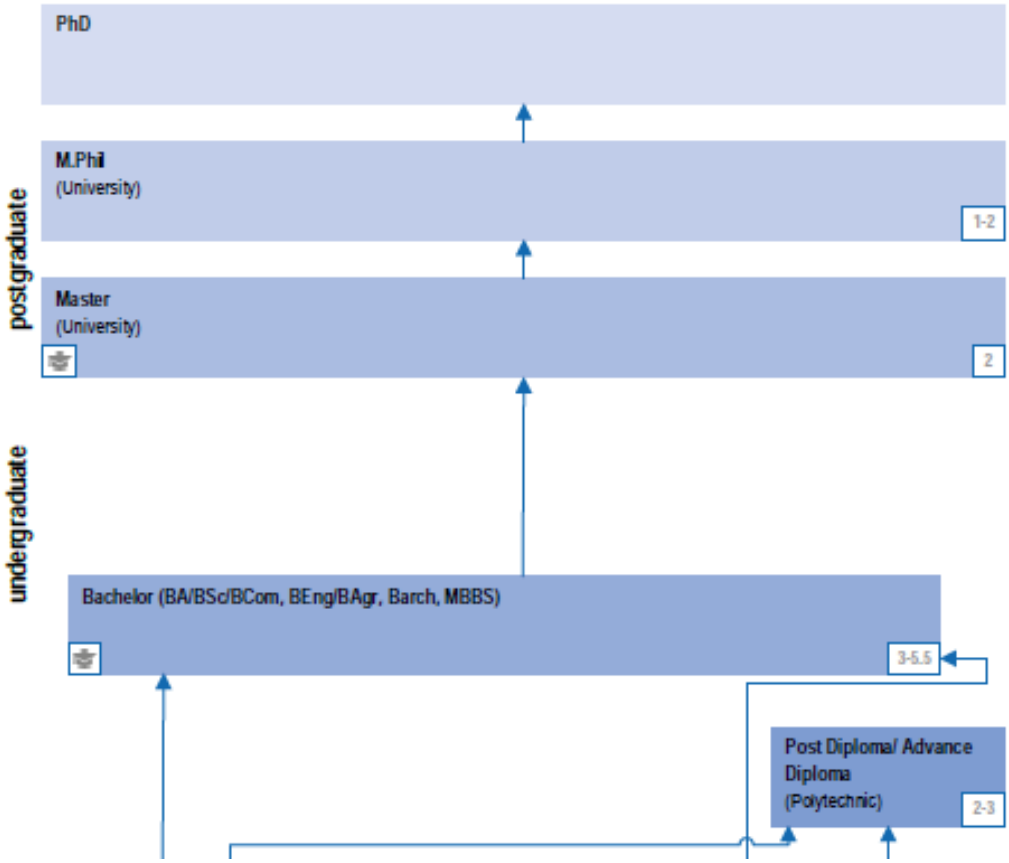
Figure 36. The structure of the Indian higher education system



Source: Daugherty et al., 2013, p 4 (UMHRD: Union Ministry of Human Resources Development; SMHRD: State Ministry of Human Resources Development)[99]

[99] Because charts derive from difference sources there might be differences in the labelling of different actors. In figure 32 UMHRD is referred to as MHRD and SMHRD is falls under federal state legislation.

Figure 37. Higher education system in India



Source: EP-NUFFIC, 2015f, p 3 (adapted by authors)

Figure 38. Indian qualifications: equivalency with the European Qualifications Framework

Degree or qualification	EQF level	Higher Education
Polytechnic Diploma following Standard XII (Post Diploma, Advance Diploma)	5	√
General Bachelor of Arts/Bachelor of Science/ General Bachelor of Commerce	5	√
Honours Bachelor of Arts/Bachelor of Science (other institution)	5	√
Honours Bachelor of Arts/Bachelor of Science (with first class distinction from a leading institution)	6	√
Honours Bachelor of Commerce	6	√
Bachelor of Engineering	6	√
Bachelor of Agriculture	6	√
Bachelor of Dentistry	6	√
Bachelor of Medicine	6	√
Bachelor of Laws	6	√
Master degree	6-7	√
Master of Philosophy	7	√

Source: EP-NUFFIC, 2015f, pp 4-5 (adapted by authors)

Mexico

Figure 39. Mexico: Select socioeconomic and demographic indicators

Indicators	Mexico	UK	Year
Population	123.8 million	64.51 million	2014
GDP	US$1.283 trillion	US$2.942 trillion	2014
GNI per capita (Atlas method)*	US$9,980	US$42,690	2014
Poverty headcount ratio at national poverty lines	52.3%	--	2012

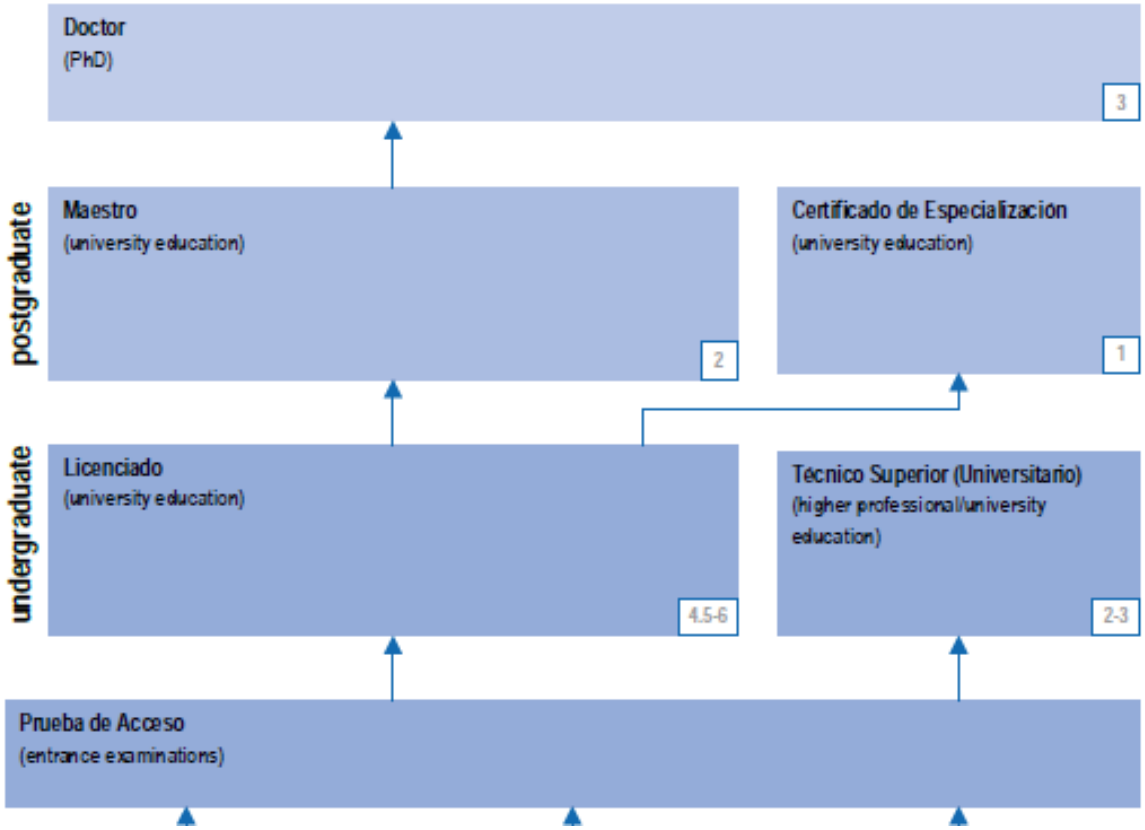
Source: World Bank, 2015: http://data.worldbank.org/country/mexico

* A special Atlas method of conversion is used by the World Bank. This applies a conversion factor that averages the exchange rate for a given year and the two preceding years, adjusted for differences in rates of inflation between the country, and through 2000, the G-5 countries (France, Germany, Japan, the United Kingdom and the United States). From 2001, these countries include the Euro area, Japan, the United Kingdom and the United States.

Figure 40. Accreditation process in Mexico (undergraduate programmes)

Source: COPAES www.copaes.org (translations added by authors)

Figure 41. Higher education system in Mexico



Source: EP-NUFFIC, 2015g, p 3 (adapted by authors)

Figure 42. Mexican qualifications: equivalency with the European Qualifications Framework

Degree or qualification	EQF level	Higher Education
Técnico Superior (Universitario)/Profesional Asociado	5	√
Licenciado (Bachelor; at least 4½ years)	6	√
Certificado de Especialización	6-7*	√
Maestro(a)	7	√

Source: EP-NUFFIC, 2015g, p 4 (adapted by authors)

* Roughly equivalent to a scientific bachelor's or a professional master's (when compared to the Dutch binary system)

United Kingdom

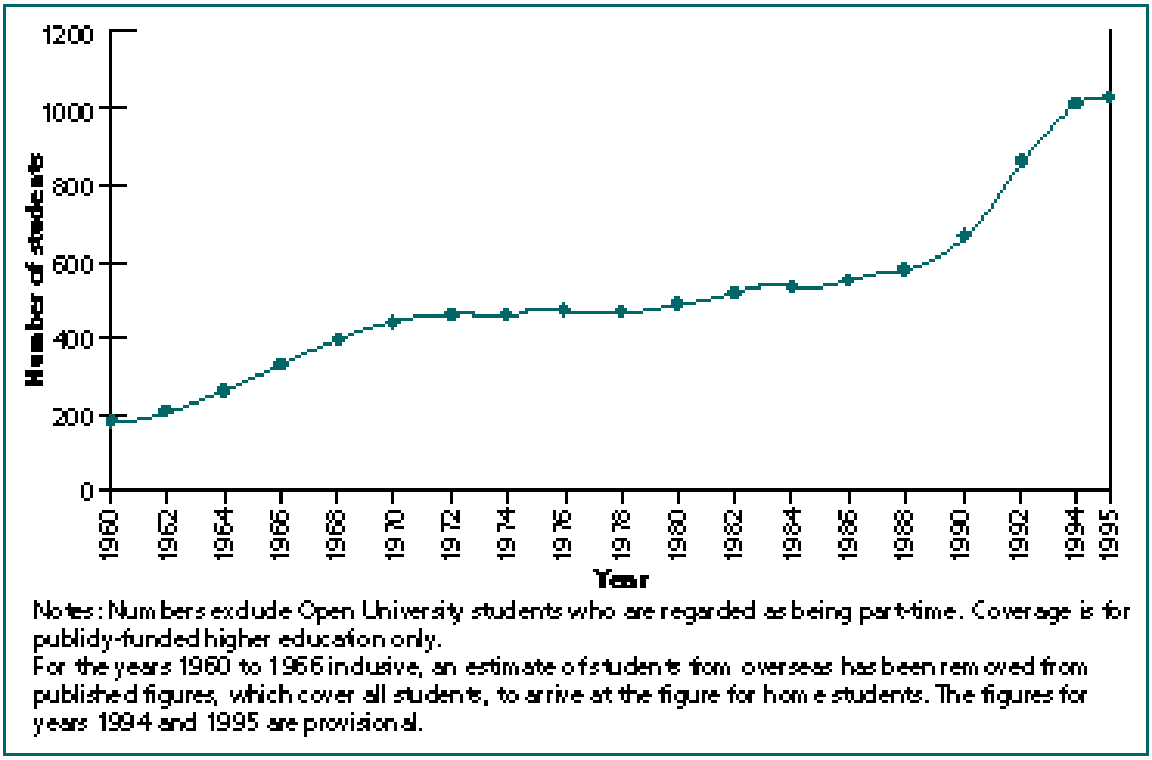
Figure 43. United Kingdom: Select socioeconomic and demographic indicators

Indicators	UK	Year
Population	64.51 million	2014
GDP	US$2.942 trillion	2014
GNI per capita (Atlas method)*	US$42,690	2014
Poverty headcount ratio at national poverty lines**	--	

Source: World Bank, 2015: http://data.worldbank.org/country/united-kingdom

* A special Atlas method of conversion is used by the World Bank. This applies a conversion factor that averages the exchange rate for a given year and the two preceding years, adjusted for differences in rates of inflation between the country, and through 2000, the G-5 countries (France, Germany, Japan, the United Kingdom and the United States). From 2001, these countries include the Euro area, Japan, the United Kingdom and the United States.
** Data are compiled from official government sources or are computed by World Bank staff using national (i.e. country-specific) poverty lines.

Figure 44. Full-time UK students in higher education in the UK (1960-95)



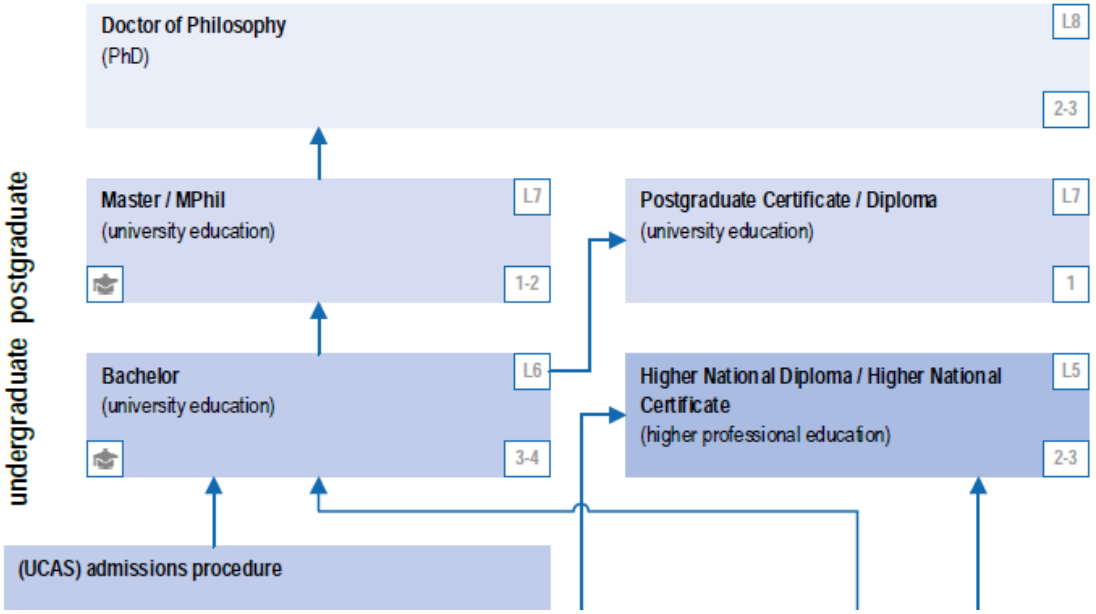
Source: www.leeds.ac.uk/educol/ncihe

Figure 45. Enrolments in UK higher education (2007-11)

	Undergraduate Enrolments Only					Total Enrolments				
	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
FT	437,545	459,395	493,005	516,480	509,020	600,060	620,555	670,600	717,395	716,555
PT	341,030	331,950	344,475	335,050	301,490	457,245	448,275	473,420	467,795	429,415
Total	778,580	791,350	837,480	851,530	810,510	105,7310	1,068,830	1,144,020	1,185,190	1,145,970
FT as %	56.2 %	58.0 %	58.9 %	60.6 %	62.8 %	56,7%	58,1%	58,6%	60,5%	62,5%

Source: www.hesa.ac.uk/dox/pressOffice/sfr169/1569_SFR169_Table_2.xls

Figure 46. Higher education system in the UK



Source: EP-NUFFIC, 2015g, p 3 (adapted by authors)

Figure 47. UK qualifications: equivalency with the European Qualifications Framework

Country	Degree or qualification	EQF level	Higher Education
England, Wales, Northern Ireland	Higher National Certificate	5	√-
	Higher National Diploma	5	√
	(Honours Bachelor degree (3 or 4 years)	6	√
	Master of Science / Master of Arts (1 or 2 years)	7	√
	Master of Philosophy (2 years)	7	√
Scotland	Honours Bachelor degree	6	√
	Master of Arts (Honours) degree (4 old universities)	6	√
	Master of Science / Master of Arts degree (other universities)	7	√

Source: EP-NUFFIC, 2015g, p 4 (adapted by authors)

United States

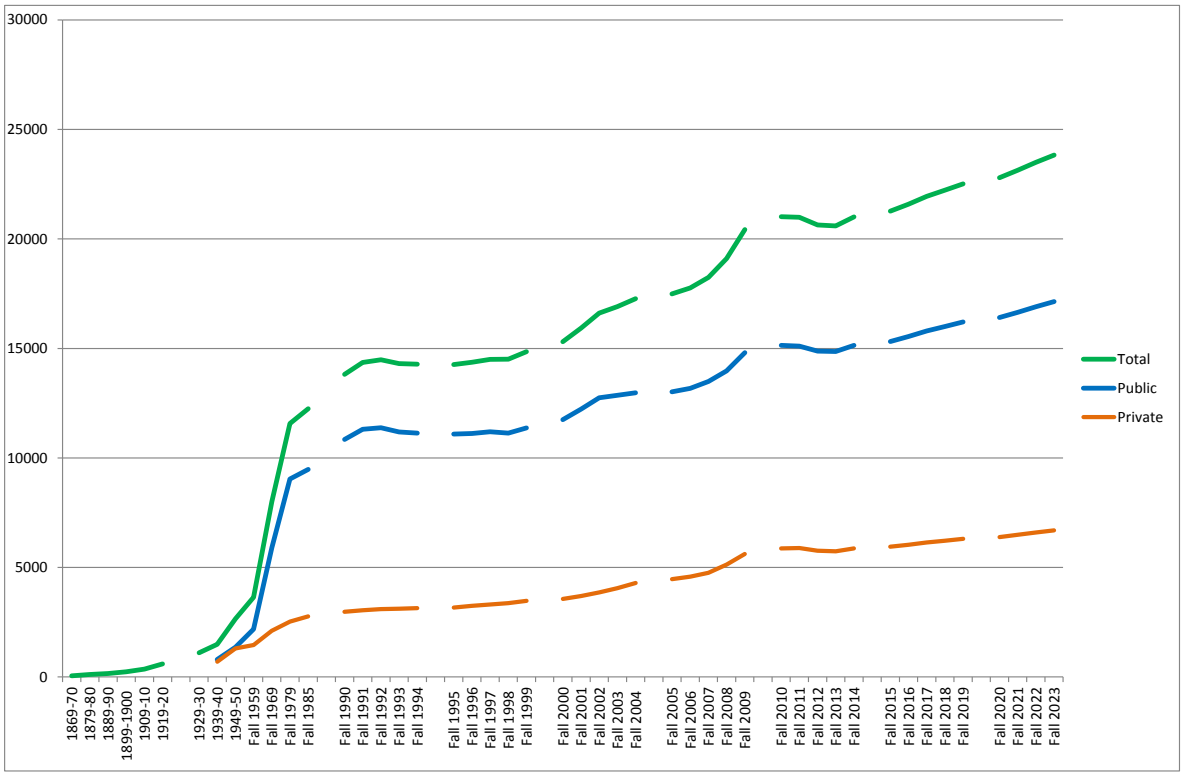
Figure 48. United States: Select socioeconomic and demographic indicators

Indicators	USA	UK	Year
Population	318.9 million	64.51 million	2014
GDP	US$17.42 trillion	US$2.942 trillion	2014
GNI per capita (Atlas method)*	US$55,200	US$42,690	2014
Poverty headcount ratio at national poverty lines**	--	--	

Source: World Bank, 2015: http://data.worldbank.org/country/united-states

* A special Atlas method of conversion is used by the World Bank. This applies a conversion factor that averages the exchange rate for a given year and the two preceding years, adjusted for differences in rates of inflation between the country, and through 2000, the G-5 countries (France, Germany, Japan, the United Kingdom and the United States). From 2001, these countries include the Euro area, Japan, the United Kingdom and the United States.
** Data are compiled from official government sources or are computed by World Bank staff using national (i.e. country-specific) poverty lines.

Figure 49. Enrolment in educational institutions, by level and control of institution, in the United States (1869-2023 projection)*



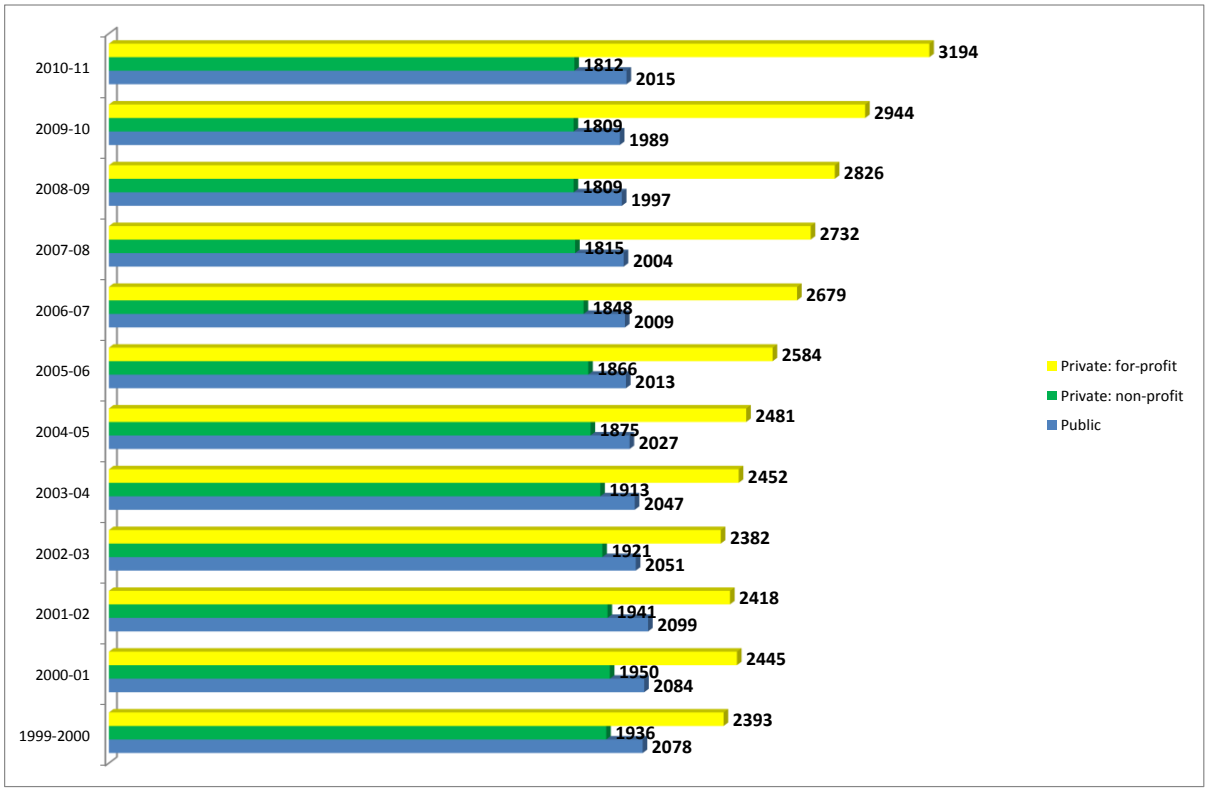
Source: National Center for Educational Statistics (2015). See: http://nces.ed.gov

Original Sources as reported: US Department of Education, National Center for Education Statistics, Annual Report of the Commissioner of Education, 1870 to 1910; Biennial Survey of Education in the United States, 1919- through 1949-50; Statistics of Public Elementary and Secondary School Systems, 1959 through 1979; Common Core of Data (CCD), 'State

Nonfiscal Survey of Public Elementary and Secondary Education,' 1985-86 through 2011-12; Parent and Family Involvement in Education Survey of the National Household Education Surveys Program (NHES), 2012; Private School Universe Survey (PSS), 1991-92 through 2009-10; National Elementary and Secondary Enrollment Projection Model, 1972 through 2023; Opening (Fall) Enrollment in Higher Education, 1959; Higher Education General Information Survey (HEGIS), 'Fall Enrollment in Institutions of Higher Education' surveys, 1969, 1979, and 1985; Integrated Postsecondary Education Data System (IPEDS), 'Fall Enrollment Survey' (IPEDS-EF:90-99); IPEDS Spring 2001 through Spring 2013, Enrollment component; and Enrollment in Degree-Granting Institutions Projection Model, 1980 through 2023. (This table was prepared January 2014).

* Table amended by authors to account for tertiary education only

Figure 50. Number of Title IV educational institutions, by level and control of institution, in the United States (1999-2000 to 2010-11)*

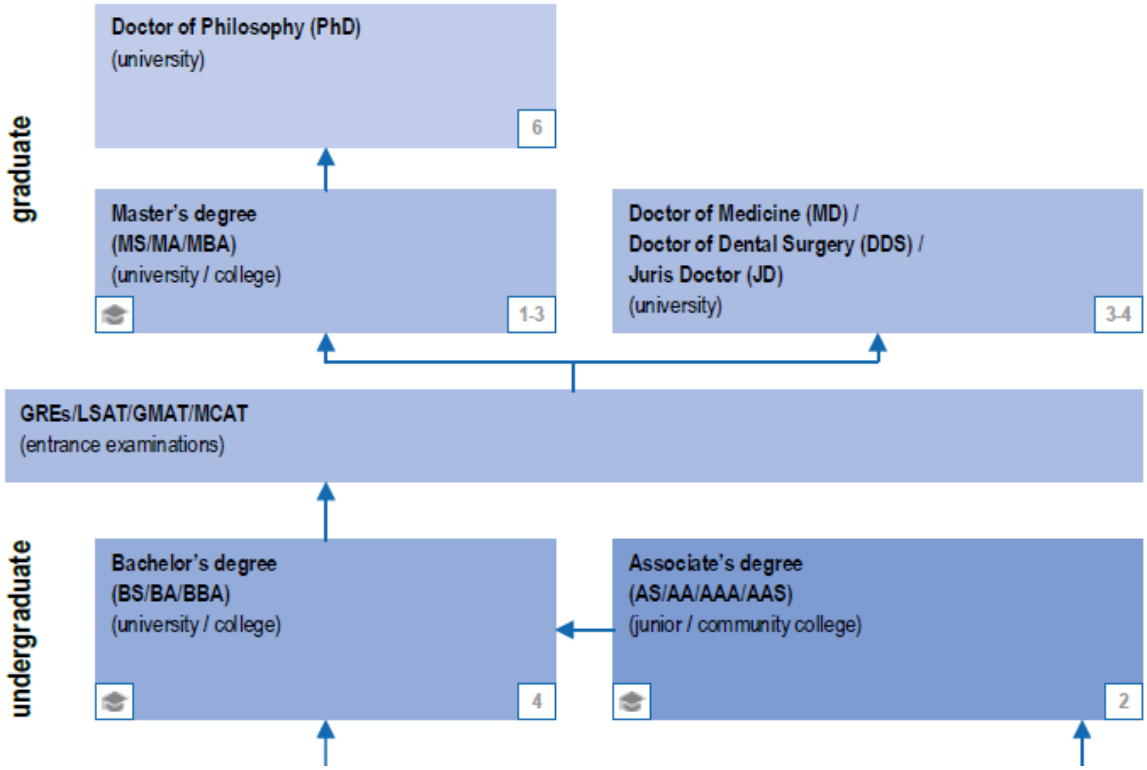


Source: National Center for Educational Statistics (2015). See: http://nces.ed.gov

Original Sources as reported: US Department of Education, National Center for Education Statistics, Common Core of Data (CCD), 'Public Elementary/Secondary School Universe Survey,' 1989-90 through 2010-11; Private Schools in American Education; Statistics of Public Elementary and Secondary Day Schools, 1980-81; Schools and Staffing Survey (SASS), 'Private School Data File,' 1990-91; Private School Universe Survey (PSS), 1995-96 through 2009-10; Higher Education General Information Survey (HEGIS), 'Institutional Characteristics of Colleges and Universities' survey, 1980-81; Integrated Postsecondary Education Data System (IPEDS), 'Institutional Characteristics Survey' (IPEDS-IC:90-99); and IPEDS Fall 2001 through Fall 2010, Institutional Characteristics component.
(This table was prepared December 2012)

* Table amended by authors to account for tertiary education Title IV institutions only. 'Title IV' institutions are those eligible to receive financial aid according to Title IV of the 1965 US Higher Education Act. Title IV institutions include also non-degree-granting institutions

Figure 51. Higher education system in the US



Source: EP-NUFFIC, 2015i, p 3 (adapted by authors)

Figure 52. US qualifications: equivalency with the European Qualifications Framework

Degree or qualification	EQF level	Higher Education
Associate's degree (terminal/vocational program)	4	--
Associate's degree (transfer program)	5	√
Bachelor's degree	6	√
Master's degree	7	√

Source: EP-NUFFIC, 2015i, p 4 (adapted by authors)

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