CHAPTER 6

Inverted U-shape of Estonian Higher Education: Post-Socialist Liberalism and Postpostsocialist Consolidation

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Introduction

The Estonian Republic considers itself the continuation of the first Republic of Estonia, which was in place between 1918 and 1940. In the 50 years between 1940 and 1991, Estonia was part of the Soviet Union. Through the so-called 'Singing Revolution', independence was regained in August 1991. In 2004, Estonia became a NATO member state and a member of the European Union.

In almost 50 years of Soviet occupation, Estonia was subjected to the full force of Soviet ideological, political and economic policies as were other republics within the Soviet Union. While Estonia was afforded limited flexibility to adopt unique education policies reflecting language and culture, in all other respects it was fully integrated into the Soviet Union. The inevitable need to accommodate the heritage of the socialist regime when developing new institutions characterises all postsocialist countries in

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Europe (Bunce 1999). In addition to this, the previous Soviet republics also have to reconcile the experience of belonging to the Soviet Union, which in most cases, and especially in the Baltic republics, was not fully legitimised in society. For countries such as Estonia, this meant that not only was there a need for new ways to continue as a society and construct institutions fit for the new regime, but also that any traces of the old system were likely to be denied and destroyed as part of the colonial Soviet state and the previous regime itself. The major difference stemming from this in relation to the development of the education system lies in the fact that in Estonia, the previously well-established institutionalised systems were discontinued (see Saar et al. 2013a). The Estonian case is special in terms of the radical character of market reform, which has been deep, profound and swift in nature. However, given the fact that institutional solutions have often been 'imported', it would be very important to study what impact these have had on the higher education system. It is clear that the demand-led marketisation of higher education was taken up very quickly, illustrated by the fact that in 2002 there were 49 higher education establishments in Estonia, the majority of which later merged or closed down, but inevitably brought about system diversification on a different scale.

Therefore, not only what happened during the Soviet period but also what happened immediately after societal restructuring has had an impact on how higher education functions. The question remaining is if and when the latter period of 25 years has already become more important in understanding the current higher education era than the socialist period of 50 years; if so, it would become reasonable to replace the term 'postsocialism' with that of 'post-postsocialism' (see Ost 2009). Clearly, the roots of Estonian higher education existed long before the Soviet legacy.

Estonian Higher Education Before the Soviet Period

The development of education in Estonia has been influenced by many different countries which have ruled over its territory (Vaht et al. 2010). The conquest of Estonian territory by German, Swedish and Danish feudal lords in the thirteenth century may be regarded as the starting point of school education in Estonia. The first schools were then established in larger towns, so the development of the Estonian national school was due to the decline of feudalism.

In 1617 during the Swedish-Polish war, the territory of Estonia was incorporated into Sweden and Estonia remained under the rule of Swedish King Gustav Adolf II. This era was favourable for the development of education. In 1632, the Tartu Grammar School was reorganised and given the name Academia Gustaviana, which is now regarded as the establishment of the first university in Estonia: the University of Tartu. In the seventeenth century there were only students of Swedish and Finnish origin at this institution, and no Estonians. Academia Gustaviana operated until 1656 when the area was occupied by Russian troops.

An important event for the development of education in Estonia was the re-opening of the University of Tartu in 1802. Many outstanding scholars received their education there, among them the first native Estonians. Under the independent Estonian republic in 1919, instruction in the Estonian language was introduced and has remained the language of instruction since then. Between 1919 and 1939, 5,751 students graduated from the University of Tartu, a quarter of whom were women. In addition to providing Estonia with lawyers, doctors, clergymen and agronomists, the university also developed its own staff of lecturers and scientists. There were also a number of other higher education institutions (HEIs) that taught specialists. In the course of the brief existence of the independent republic, Estonia was thus able to produce a Western-style though nationally minded Estonian-language high intelligentsia that met the needs of the country at the time.

Using the classifications created by Dobbins (2011) it can be suggested that Estonian HEIs during the pre-Soviet period were between the Humboldtian and Statist tradition: there was freedom of study and teaching, because universities were governed by academic bodies, but also according to state budget decisions. Especially in the 1930s, state control seems to have intensified, with the Ministry of Education dictating student places, study fees, wages and salaries in the universities.

Soviet Period

After the occupation of Estonia by the Soviet Union in 1940, the introduction of the Soviet education system began and possibilities for developing independent education policy were very limited. Education in Estonia was part of the Soviet educational system, which was constructed as an integral part of the party-state institutional structure and organised on the basis of three main principles (see also Titma and Saar 1995; Saar 1997): centralisation, standardisation, utilitarian and egalitarian goals. A strong

functional approach prevailed in education. However, the officially declared goal of education reforms provided more opportunities for previously disadvantaged groups.

The higher education system in Estonia was significantly redesigned in the Soviet period. Courses in dialectical and historical materialism and the history of the Communist Party were incorporated into study programmes, as was the Russian language. Military training also occupied a large share of higher education curricula (Tomusk and Tomusk 1993). Central authorities allocated disproportionally large quotas to engineering and science specialities (Terama et al. 2014). For example from 1975 to 1978, about 70 per cent of all higher education graduates in Estonia were educated in these specialisations (Titma et al. 1982, 45). This proportion stemmed not from the actual labour market dynamics but rather from the idea of industrialisation primarily for military purposes (Gerber and Schaefer 2004). Despite pressure to adopt the Soviet educational structure and curricula, the Estonian educational system nevertheless maintained Estonian as the language of instruction. While functioning within the ideology and constraints of the Soviet education system, Estonia was permitted to gradually develop more independent education policies, especially in the 1970s and 1980s.

By 1988, the higher education system in Estonia included six HEIs: one university, four special institutes (pedagogical, technical, agricultural institutes, institute for art) and one conservatory (see Table 6.1). While only one institution was officially called a university, their legal status was equal.

Reforms and Changes from the End of the 1980s

Upward Curve: Chaotic Liberalisation

Following independence from the Soviet Union, Estonian higher education underwent rapid changes from the late 1980s. These changes, which took place against the background of a general shift from a socialist planned economy to a market-based economy, were characterised by an increasing number of HEIs and developments in areas including funding, quality assurance, equity and links to the job market. The changes continued into the following decade, but by then many aspects of the changes were different. The neoliberal doctrine, which stressed the need to diminish the role of the state in public life, had a great impact by stimulating an explosion of private educational institutions and the development of insti-

Table 6.1 Main types of HEIs in Estonia in 1990/1991 and 1993/1994 academic year

Type of HEI	*1990/ 1991*	*1993/ 1994*	*Students 1993/1994*	*Location*	*Affiliation*	*Main training function*	*Research activities*
Public universities	1 state university[a]	6	7,624	Tartu	Ministry of education	Staff for other HEI and research, top management positions for administration	Research institutes and centres
	5 specialised institutes[b]		13,764	4 in Tallinn, 1 in Tartu		Staff in particular focus areas as well as teachers and management for administration	Fewer research centres
State professional HEIs	–	7[c]	1,824	3 in Tallinn, others regional: Tartu, Viljandi, Narva, Rakvere	Different ministries	Specialists for particular sector of national economy or society (e.g., teachers, engineers)	No significant academic research activity
Private professional HEIs	2[d]	7[e]	1,852	All in Tallinn	Privately owned	Specialists for businesses and managers; fields previously underdeveloped (theology, social sciences, humanities)	No significant academic research activity
Total	**8**	**20**	**25,064**				

Source: Statistics Estonia; Estonian education information system

[a]Tartu University

[b]Pedagogical University, Technical University, Agricultural Academy, Academy of Music and Theatre, Academy of Arts

[c]Maritime Academy, Academy of Security Sciences, College of Engineering, Teacher Education College, and two regional colleges, most reorganised from previously vocational institutions, except Estonian Academy of Security Sciences founded in 1992

[d]The Institute of Humanities and the Estonian Business School were newly established before 1990 as private HEIs that became private universities later in the 1990s

[e]Institute of Humanities, School of Social Sciences, three business schools and two theological institutes

tutional autonomy. The collapse of the communist regime in Estonia was reflected in a strong liberal discourse on education curricula, with explicit neoliberalism in attempts to introduce the notions of decentralisation, deregulation, market rules and values, the rhetoric of choice and an ideology of service provision (Aava 2009). The most significant development in Estonian higher education, however, was the emergence of new actors.

Tomusk (2004) identifies three periods in late and postsocialist reforms of Estonian higher education. He characterises *the first period* (1988–1992) as "a period of chaotic, individually and institutionally driven changes" (Tomusk 2004, 36). As the forces for greater freedom and, evidentially, independence began to build at the end of the 1980s, Estonia developed a strong, indigenous, grassroots movement for education renewal, even while still formally within the framework of the Soviet Union. Gorbachev's administration legalised cooperative enterprises in 1986. In this form, the first private HEI in Estonia was established, the Estonian Institute of Humanities. At the beginning of the 1990s this institute was very popular among young people. In 1989, a second private HEI emerged, the Estonian Business School (EBS). The EBS was clearly directed to the emerging class of newly rich and their children.

In 1989, the Council of Tartu State University deleted the word 'state' from the institution title and declared the university to be academically autonomous. Other public HEIs also changed their titles and became universities. In 1990, there were three types of HEIs: one university; five specialised institutes; and two private professional HEIs. By 1993 new types had emerged and there were now six universities; seven state-owned professional HEIs; and seven private professional HEIs (see Table 6.1). That indicates how rapidly the number of private HEIs increased, while also demonstrating that during this period, several formerly specialised secondary schools started to form a new sector in Estonian higher education, both as a result of pressure from economic and political insecurity and to boost their status: professional higher education (*rakenduskõrgkoolid*, ISCED 5b). The German higher education (*Fachhochschulen*) structure was taken as an example (Tomusk 2004).

This is an indication that institutions drifted towards higher status in an attempt to increase funding by opening higher education level tracks. There was confusion, because the government declared concern about this development and uncertainty regarding the structure of the higher education sector, but at the same time authorised these programmes (Tomusk 2004). As a result, the quality of teaching deteriorated because state-owned vocational schools did not have the capacity to provide higher education. It created a binary divide in Estonian higher education.

Reaching the Turning Point: Expand, Then Regulate

The second period (1993–1998) saw the expansion of the higher education system in combination with the development of legal frameworks and quality assurance mechanisms for the various sectors. Already by the academic year 1993/1994, the HEI landscape had changed considerably: from the previous six public HEIs (consisting of the state university, four specialised institutes and one conservatory in 1988), it had grown into 20 HEIs, with 2 private HEIs established at university level. The Law on Education was adopted in March 1992. Within the new higher education legislation, each institutional type was given its own law, but the University of Tartu was able to persuade the Ministry of Education to draft a law to protect its privileged and special status. According to Tomusk (2004), this indicates the level of political influence a single university can exert in a small country with regard to the national legislative process.

Regarding the management of the higher education system, there was a move from Soviet overly centralised education to extensive decentralisation. Universities became more autonomous from the government, with academic senates playing an increasing role in administration, while professional HEIs were under more direct financial control of the ministry than the universities (OECD 2001).

At the same time, a dramatic decrease in public funding not only made universities dependent on private sources of financing, including tuition fees, but also raised serious concerns about equity of access to higher education. The government introduced a formula funding mechanism: funds were distributed to universities according to student places, weighted by fields of study and level. However, the various weights of the funding formula reflected the power positions of particular universities more than any objective criteria (Tomusk 1995). Experts from the OECD (2007) point out two key issues in their review of the funding mechanism. The first is a misunderstanding of the modern 'knowledge' economy in Estonian policy-making in general, and the second is a public funding focus on the allocation of state-commissioned study places to the 'hard' disciplines (sciences and engineering) with inadequate funding for the service sector programmes (particularly financial and business services).

Due to the liberal HE policy, the number of HEIs grew very quickly to 49 institutions in 2002 (see Fig. 6.1). By 2001, 13 vocational schools offered HE programmes (now this number is much lower, only 2). For a population of just 1.3 million, Estonia probably had the highest ratio of HEIs per inhabitant in Europe at the time.

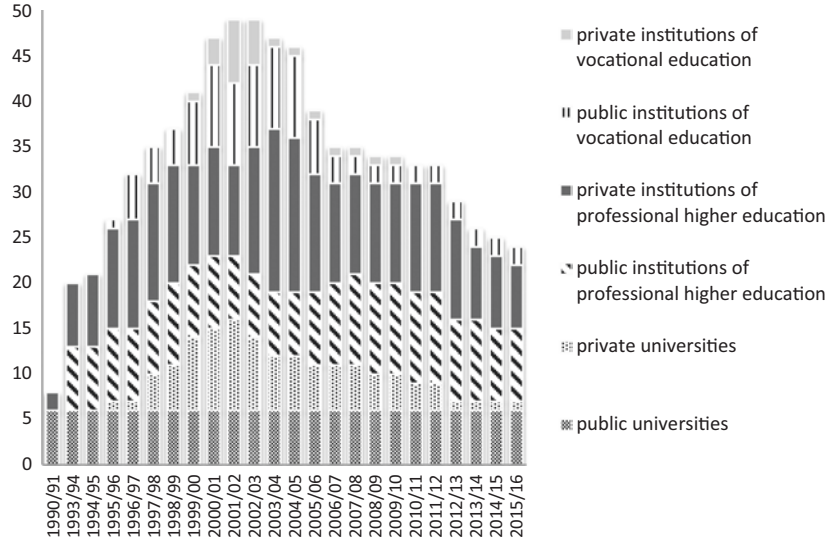

Fig. 6.1 Number of HEIs in Estonia 1990–2015 (Source: Statistics Estonia; Estonian ministry of education)

Expansion of higher education occurred through: (1) the establishment of new private universities and professional higher education schools; (2) the reorganisation of specialised secondary schools as public professional higher education schools; and (3) new legislation allowing foreign universities to establish branches in Estonia (Saar and Unt 2011). With the aim of maximising revenue and keeping costs low, private HEIs tend to concentrate on programmes in more lucrative professions such as law, business management and psychology, which do not require an expensive infrastructure. Parallel to the establishment of new, intellectually and socially exclusive HEIs, institutions emerged that have been referred to as diploma mills. These institutions attracted young people unable to find a place in public universities or meet the high fee requirements at elite private institutions. The Ministry of Education declined to issue an operating licence to some of them. By early 1996, eight private HEIs had been licenced. Most private HEIs were small: the number of students rarely exceeded 1,000. They often relied on part-time teaching staff coming from public universities. Many private HEIs were caught in a vicious cycle of limited funding, problems with recognition and low-quality students.

However, some private institutions were doing important work in offering alternative courses and serving non-traditional students who would otherwise have no access to higher education (see Saar et al. 2013c).

This rapid expansion of the higher education sector created a need for the establishment of a national higher education quality assurance system. Since 1996, the *Standard of Higher Education* has regulated the establishment of HEIs and determined the requirements that they and their programmes must meet in order to obtain an appropriate education licence. Quality assurance is a strange mixture of the new quality movement in European higher education and Soviet bureaucratic practices (Tomusk 2004). The accreditation process is run by the Higher Education Evaluation Council (HEEC, a unit under the auspices of the Ministry of Education). A negative decision by the Council means the closure of the programme or institution. However, several authors (Tomusk 1997; OECD 2007; Kroos 2010) have indicated that the HEEC seems to represent the quality perceptions of traditional universities and may be biased against private institutions.

While Estonian higher education policy seems to be part of the more general neoliberal agenda, there is a complexity in the approach used to steer Estonian higher education. "Far from being totally decentralised, its governance partially resembles the sovereign, rationality-bounded steering model. More specifically, in terms of political leadership and public (including EU) funds, the Estonian government, together with its Estonian Higher Education Quality Agency and various commissions, has an increasing will to intervene, as well as the power to do so" (Kroos 2013, 48).

From the mid-1990s in connection with the accreditation of HEIs and the introduction of state/national exams in upper secondary schools (in 1997), there has been evidence of some shift toward centralisation (see Loogma 1999). Since this time, a certificate of state examinations has been one of two general requirements for admission to higher education (another is a secondary school leaving certificate).

The number of students enrolled in higher education increased 2.7 times between the academic years 1994/1995 and 2008/2009, growing from 25,000 to 68,000 (Tõnisson 2011). Over the past decade, the number of higher education graduates has doubled as well. This expansion was accompanied by differentiation of the higher education system. The proportion of students enrolling in professional higher education increased until 2001, then started to slightly decrease (see Fig. 6.2). Since the

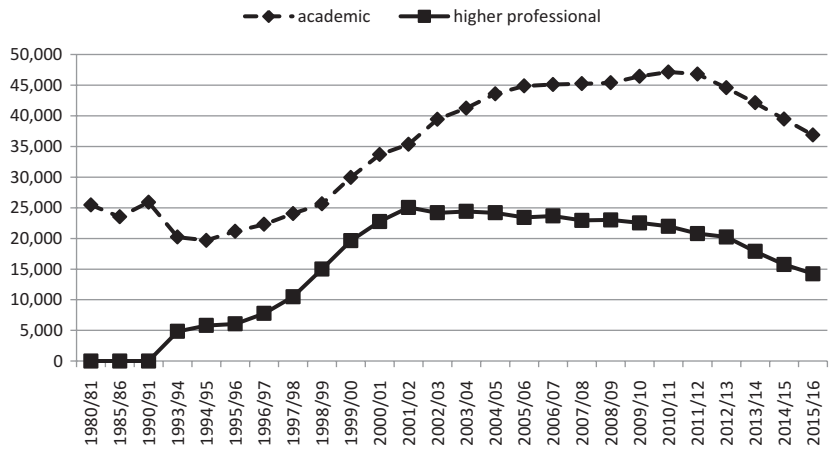

Fig. 6.2 Number of students in Estonian HEIs, 1980–2015 (Source: Statistics Estonia)

academic year 2005/2006, the proportions of students in academic and professional higher education (66 per cent and 34 per cent, respectively) have remained the same (Tõnisson 2011). Despite the large number of private HEIs in Estonia, less than one-quarter of students have studied in them.

From the 1990s, Estonia has experienced a substantial decrease in enrolment in engineering, manufacturing and construction; the proportion of students in these areas fell from 23 per cent in 1994 to 13 per cent in 2000. The agricultural fields also declined in popularity from 6 to 2 per cent in the same period. Enrolment also declined, but less significantly, in education. The number of students studying business increased dramatically between 1994 and 1999 and then levelled out at about 23 per cent (Saar and Lindemann 2008; Tõnisson 2011). Enrolment in social sciences and media can be seen as U-shaped, with higher proportions of students enrolling during the mid-1990s and mid-2000s. An inverted U-shape is evident for law specialities, with almost 10 per cent of all students choosing this subject area in 1999.

Characteristic for this phase was rapid growth in the numbers of tuition-paying students, both in terms of absolute numbers and as a proportion of all students. To obtain additional funding in the mid-1990s, universities began to admit fee-paying students. The Ministry of Education tried to

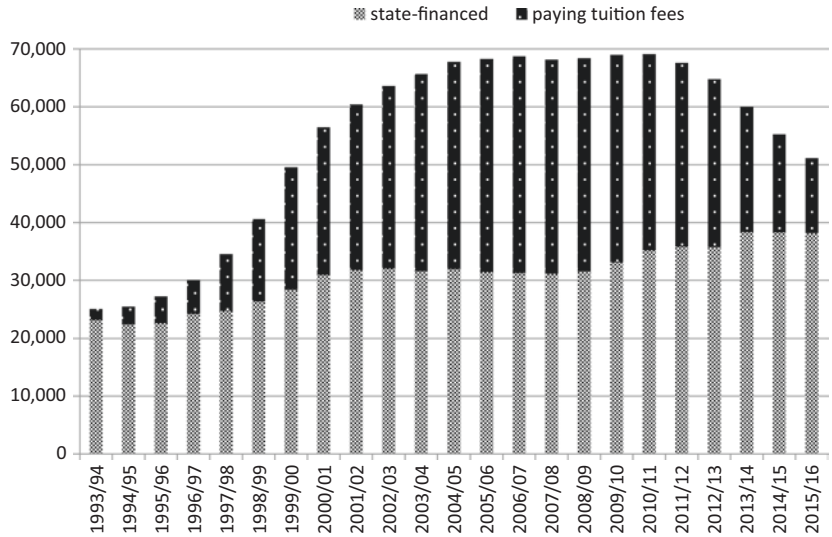

Fig. 6.3 Number of state-financed and fee-paying students in Estonian HEIs, 1993–2015 (Source: Ministry of education and research)

find a legal compromise that would allow universities to charge fees for some groups but at the same time maintain the official free-of-charge higher education policy (Tomusk 2004). As a result, the student admission quota was restructured, allowing universities to admit additional students (up to 20 per cent) on a fee-paying basis. The actual number of fee-paying students, however, exceeds this percentage. In the early 1990s, the majority of students were publicly funded, but by the end of the 1990s half of all students were fee paying. The proportion of students paying tuition fees increased from 7 per cent in 1993 to 54 per cent in 2004 (see Fig. 6.3).

Rapid Decline: Reform, Then Consolidate

The third period (1999–2005) indicated the next wave of reforms, hallmarked by a higher education reform plan in 2002. The growth of the system was considered too fast, and competition within the system was deemed fierce. In addition, the system was not fully geared towards the expectations established in the Bologna Declaration. Since 2000, changes in the higher education area have followed the principles of the Bologna

Process and have been primarily directed towards the new qualification structure and supporting mobility. The higher education reform was adopted by the Government of the Republic in the summer of 2001. Transition to new study programmes in Estonian HEIs took place in the academic year 2002/2003. The new system of higher education has two main cycles, following the bachelor/master model of the European Higher Education Area. The study programmes in some fields have been integrated into a single long cycle. Universities provide professional higher education, bachelor, master and doctoral programmes. Professional HEIs and some vocational education institutions provide professional higher education. A professional HEI may also provide master programmes. In terms of ownership, institutions are divided into state, public and private institutions. In 2004, a Diploma Supplement was introduced, as was a system of recognising how qualifications awarded under different qualification systems correspond to current degrees. The Bologna Process has, however, entailed changing the previous educational credential systems. Such a change has inevitable effects in undermining the value of bachelor-level higher education on the one hand, and not recognising the value of master-level education on the other hand. Compared to previous generations with more years spent in higher education, this is certainly unfair, even if the five-year higher education degrees are now considered comparable to master-level degrees.

Shrinking but Stable: Compete, Then Sustain, Then Excel?

The fourth period (2006-present) indicates new measures for strengthening the competitiveness and sustainability of the shrinking higher education sector. An overview of the changes in student numbers by study field is presented in Table 6.2.

It can be noted that the largest change occurred in the fields of social sciences, business and law, mostly due to the closure or merger of a number of private HEIs.

The Estonian Higher Education Strategy 2006–2015 was approved by the government in 2006. This strategy addressed four main challenges for the sector. First, the number of students entering higher education was expected to diminish by about 60 per cent by 2016. Second, the strategy indicated a clear need to strengthen the international dimension of HEIs. Third, additional funding for both infrastructure and human resources was mentioned as vitally important for the sustainability of the system.

Table 6.2 Number and share of students in Estonian HEIs by study field

	Number of students			*Proportion of students, %*		
Field of study	*1993/1994*	*2005/2006*	*2013/2014*	*1993/1994*	*2005/2006*	*2013/2014*
Educational sciences	671	1,457	1,013	11	7	7
Humanities and arts	724	2,401	1,888	12	12	13
Social sciences, business and law	1,954	7,180	4,081	32	37	28
Natural and exact sciences	499	2,251	2,316	8	12	16
Technical sciences, production, construction	1,498	2,586	2,295	24	13	16
Agriculture	198	480	328	3	2	2
Health and well-being	283	1,588	1,425	5	8	10
Services	328	1,677	1,260	5	9	9
Total	**6,155**	**19,620**	**14,606**	**100**	**100**	**100**

Source: Statistics Estonia 2014; Estonian education information system

Fourth, the strategy emphasised the needs of the Estonian economy and society. The following specific measures were planned: clarification of HEI profiles; a focus on quality issues; changing the recognition of diplomas (independent of accreditation results); advancing the Bologna Process; a new scheme for steering higher education by means of three-year contracts with individual HEIs; and more attention to career services and guidance to better inform young people about professional prospects. An overview of the institutional changes is presented in Annex 1.

As a result of these measures and general developments in society and the economy, and as an effect of the global economic crises of 2008, the current HEI landscape in Estonia can be described as presented in the following table (Table 6.3). In general, in the Estonian binary HE system the main differentiation is still between academic universities *(ülikool)* and professional HEIs (*rakenduskõrgkool)*. This is similar to the situation in 2003, but also quite like the situation in 1993, when professional HEIs were not considered part of HE system, but six HEIs could be divided

Table 6.3 Main types of HEIs in Estonia in the 2013/2014 academic year

Type of HEI	*2013/ 2014*	*Number of students*	*Examples*	*Location*	*Educational profile*	*Research activity*	*International activity*
Public universities	1 national university (*with own Act*)	15,785	University of Tartu	Tartu, with regional colleges[a]	Multidisciplinary, full university, largest (Tartu)	High-level academic research activity	High
	1 university (*with own Act)*	12,903	Tallinn university of Technology	Tallinn, with regional colleges	Multidisciplinary big university		High
	4 other universities	16,077	Tallinn University, Academy of music and theatre, Academy of arts, university of life sciences	3 in Tallinn (1 with regional colleges), 1 in Tartu	Medium-size universities		High/ medium
Private universities	1	1,508	Estonian business school	Tallinn	Small university, one field of study	Low	High (in teaching)/ low (in research)

(*continued*)

Table 6.3 (continued)

Type of HEI	*2013/ 2014*	*Number of students*	*Examples*	*Location*	*Educational profile*	*Research activity*	*International activity*
State-owned professional HEI	9	8,520	Maritime Academy, aviation Academy, Academy of security sciences, College of Engineering, health care colleges, regional colleges	2 in Tallinn, others regional	Specialists for particular sector of national economy	Low	Low
Private professional HEIs	8	4,024	Business schools; theological institutes; ICT/ computer science College	All in Tallinn, but some with regional branches	Specialists in narrow fields	Low	Low
State vocational education institutions	2	1,181	Tallinn School of Economics, Võru County vocational training Centre	Across country	Specialists in narrow fields	Low	Low
Total	**26**	**58,817**					

Source: Statistics Estonia; Estonian education information system

[a]Regional colleges were previously independent state institutions of professional higher education (and sometimes vocational schools during the Soviet period), but by now have been merged with universities

between the general (state) university and five more specialised institutes. Formally, there is no differentiation within the group of public universities; they all provide education at all academic levels (bachelor, master and PhD) and are engaged in high-level, internationally visible research activities. However, as the universities differ by size and fields of (main) specialisation, their research profiles also differ.

In terms of further differentiating between public universities, it should be noted that funding varies greatly, including research grant-based funding (see Annex 2). In terms of both research as well as learning output, the University of Tartu as the state university appears the most productive, while different accounts place it as more or less comparable to Tallinn University of Technology. Other universities are smaller and have a much lower share of public funding. Therefore, it would be reasonable to distinguish between three types of universities: "flagship university"; two big universities (Tallinn University and Tallinn University of Technology); and four specialised universities, including the private university.

The Story of the Inverted U: Expansion and Vertical Differentiation of Estonian Higher Education

The expansion of higher education in Estonia was clearly demand-driven rather than designed by the system. Tomusk (2004) differentiates three types of demand. First, there is demand for alternative liberal education. Second, there is demand for studies in fields that state universities did not offer, for example business administration. Third, there is demand for exclusive elitist environments. There was also a fourth, hidden demand for diplomas of any kind requiring minimal effort. With the expansion of higher education, the need for a diploma becomes a symbolic threshold to be considered for certain jobs. On the other hand, the implications for higher education in light of the Bologna Process, by changing the system into three-year bachelor studies and two-year master studies, may make MA degrees more desirable in the labour market.

Rapid higher education expansion has led to vertical differentiation and inequalities. On the one hand, expansion opened up more places in HEIs, and these should have increased the opportunities for under-represented students to attend. On the other hand given the pattern of expansion, socially disadvantaged or otherwise less prepared students might have

gained access to lower-status institutions, including those in smaller towns, and to fee-paying places either in the public or the private sector (see also Saar and Mõttus 2013). The OECD Review of Tertiary Education in Estonia (2007:63) indicates: "as is the case in many other countries, vocationally-oriented tertiary studies still suffer from a lack of parity of esteem relative to university studies". The best secondary education graduates, mostly with higher social origin and affluent urban families, were competing for a limited number of state-subsidied student places in public universities, while less affluent and less prepared students occupied fee-paying places, including those in private universities (Tomusk 2004).

According to the criteria offered by Arum et al. (2007) in their typology, Estonia has a diversified higher education system. While the primary tier is comprised of public university courses, the secondary tier is comprised of both professional higher education programmes as well as most academic programmes in private universities. First-tier institutions are typically rather selective in terms of academic staff and students ('status seekers') and enjoy higher prestige, thus contributing to vertical differentiation between universities. The less-selective, less-prestigious second tier consists of many private institutions, which rely on tuition fees for revenue ('client seekers'). Several authors have described Estonian higher education policy as oligopolistic (Tomusk 2003; OECD 2007; Masso and Ukrainski 2009). This means that even among the same type of HEI, some are more equal than others, for example with their own laws and ability to protect their special status. The leaders of these institutions have an important impact on higher education and research policy, from agenda setting to political leadership in reform implementation. Due to oligopolistic higher education policy, the University of Tartu has a special position in Estonian higher education.

Research indicates that employers also referred to the two-tier system of Estonian higher education (see Saar et al. 2013b). As there is an increasing range of higher education credentials available, employers seem to rely more on institutional status due to uncertainty about the value of various credentials. This indicates the importance of vertical differentiation in higher education. It is noteworthy that employers preferring graduates from the more prestigious, competitive public universities do not connect the preferred degree with better skills, but rather with the sorting power of the staff in these HEIs (Unt et al. 2013).

Conclusion: Post-Postsocialism Arrived

Higher education has gone through four major phases during the postsocialist period:

1. The first period, 1988–1992, can be considered a period of chaotic, individually and institutionally driven changes.
2. The second period, 1993–1998, saw a major expansion of the higher education system in combination with the development of legal frameworks and quality assurance mechanisms.
3. The third period, 1999–2005, indicated a wave of reforms, including following the principles of the Bologna Process.
4. In the fourth period, from 2006 onwards, new measures are being put in place to strengthen the (international) competitiveness and sustainability of the shrinking higher education sector.

We are inclined to say that the processes of the immediate postsocialist period may have had more impact on the current situation in Estonian HE system than the socialist period.

In the 1990s, the sector was growing rather chaotically in many directions, bringing about some vertical and horizontal differentiation between study programmes and institutions over time. In general, the Estonian binary higher education system differentiates only between academic track (universities) and professional track. While the size of the HE sector has changed over the past 25 years, the current number of HEIs is again comparable to that of 1993. On the other hand, it is worthwhile to distinguish between the (formally) similarly positioned universities: there is one so-called flagship university, and then there are others that can be classified differently depending on the dimensions chosen for comparison.

Expansion has thus led to a number of challenges which demand a priority shift from growth to quality improvement and equality. With respect to higher education access in Estonia, policy has emphasised an overall expansion in enrolment rather than equity of access, which relates more to differences in participation rates among groups of students (OECD 2007). The Estonian Higher Education Strategy 2006–2015 does not put enough emphasis on the equity dimension. Previous studies indicate that the impact of social origin on access to higher education has increased since the 1990s (Saar 2010; Saar and Unt 2011). Enrolment in higher education by students from poor backgrounds is particularly low (OECD 2012).

A review by the OECD (2007) also indicated that Estonian higher education was inequitable in its overall admissions policy and access to state-commissioned places (especially in the best institutions), which were disproportionately granted to students from families with well-educated parents. In Estonia, the main under-represented demographic group in higher education is the Russian-speaking population, which comprises about a quarter of the population. Increased variety in the supply of HE learning opportunities, in the form of both private institutions as well as more vocationally oriented professional learning facilities, has indeed provided those somewhat overlooked by the traditionally state-led educational system with better chances to acquire HE (Saar et al. 2012; Saar et al. 2014).

Among the main driving forces behind the developments in the Estonian higher education system are: the European political agenda, both in terms of a generally neoliberal European social agenda and reliance on foreign expertise in designing policies; the Estonian political agenda, with its neoliberalism and fragmentation but also subsequently re-established intervention patterns; demographic processes and shrinking population; changes in the system of higher education funding as well as in the qualification system and in labour market structure; missing feedback loops between education and the labour market; and internationalisation of both education and labour markets, as well as brain drain, together with the continuously high social value of higher education and the perceived inequality of access to it, which has also resulted in pressure on the system from lower levels of education.

While the main axis of differentiation for Estonian HEIs is between academic universities and professional HEIs, public HEIs are clearly privileged in terms of access to research funds as well as competition for students. Still, the time has inevitably arrived for supply-driven rather than demand-driven reorganisation of the HE system in Estonia, as evidenced by system-level restructuring decisions in all major HEIs suggested by state actors and the Ministry of Education. A report (Okk 2015) commissioned by the government and compiled by a CEO in private banking suggests further consolidation of HEIs as well as other major structural changes in the name of *efficiency* and *excellence* and has been met with rather mixed feelings in academia, as well as more critical analysis of neoliberal trends in academia (e.g. Aidnik 2014, 2015; Aavik and Marling forthcoming). Perhaps this, finally, indicates the arrival of the post-postsocialist period in Estonian HE. To what extent the underlying processes of further neoliberalisation will take hold in the postsocialist context

in Estonia remains an open question, especially as the state is still a major player in defining and redefining the goals and structure of HE provision.

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Annex 1

Timeline of institutional changes in Estonian HE 1988–2015

First period—chaotic, individually and institutionally driven changes	1988	First private university, Estonian Institute of Humanities, established as a cooperative
	1989	June – ESSR CoEd discussed bill setting out new by-lays for Tartu ~~(state)~~ uni Second private university, Estonian business school, established
	1990	(during the period, other public HEIs became Unis, and specialised secondary schools—professional higher education)
	1991	Credit-based system reform (from academic year system) (bottom up) Introduction of MA study programmes
	1992	Education act passed in parliament
Second period—expansion of HE system, development of legal frameworks and quality assurance mechanisms = decentralisation	1993	
	1994	
	1995	Universities Act; **Tartu University Act** 4+2 curriculum reform, start of 4-year BA programmes (not 5 year HE) HE Quality Assessment Council
	1996	
	1997	HE Accreditation Centre, launch of accreditation of curricula. Also, launch of nationally standardised state exams for high school graduates, later to be used as entrance exams in HE
	1998	Institution of Professional Higher Education Act

Third period—new wave of reforms, including initiating Bologna reforms	1999	4+2 MA degree in TUT equal to European PhD Rapid growth in student numbers, after "Universities Act" and "Professional HE Act" enabled demanding reimbursement by public entities. By 2002, 42 HEIs—up from 6 in 1988
	2000	Building of quality assessment systems at HEIs started
	2001	3+2 curricula reform concluded, legal acts amended, incl standard of HE
	2002	3+2(+4) reform introduced to universities—Bologna Estonian e-university programme launched
	2003	Uni "Quality Agreement Concerning Curricula, Acad. Professions and Academic Degrees" 2003–2010
	2004	Share of fee-paying students more than half, most in public Unis
	2005	Doctoral programmes reformed in all universities Launch of common electronic admissions platform (2014–15/22 HEI use it) Prof HEI declaration "Development of Professional HE system Quality Assurance"
Fourth period—strengthening competitiveness and sustainability of shrinking HE sector. Increasing inequality of access	2006	Strategy of HE 2006–2015/launch of curricula in English, promote student mobility, labour market demands set as objective
	2007	Agreement on good practice in internationalisation
	2008	Most numerous young cohorts enter HE, 82 % graduates in social sciences pay tuition
	2009	Inadequate HE financing—only 1.3 % of GDP—and downtrend HE Quality Agency formed. Bologna related outcome-based learning/ECTS reform deadline postponed from 2006 to 2009
	2010	Most Bologna goals declared achieved…
	2011	
	2012	Full-time, Estonian language HE programmes free of charge
	2013	Introduction of needs-based income support for students
	2014	**Tallinn University of Technology** Act + relaunch of entrance exams in HE

Annex 2

Typology of Estonian public universities, 2010s

		Public universities[a]						
		TU	*TUT*	*TLU*	*EMÜ*	*EKA*	*EMTA*	*year*
Size	N of study programmes opened	60	51	56	18	17	10	2014
	N of students	17,200	13,926	10,330	4,514	1,177	736	2012
	Students, compared to TUT	124%	100%	74%	32%	8%	5%	2012
	% of PhD graduates	60%	24%	8%	6%	0%	1%	2011
	Students/academic staff ratio	11	15	22	12	17	6	2012
Faculty	**Total academic personnel**	**1,513**	**930**	**470**	**370**	**69**	**124**	2012
	Academic personnel, compared to TUT	163%	100%	51%	40%	7%	13%	2012
	Share of professors + research professors	**12%**	**16%**	**12%**	**10%**	**36%**	**23%**	2012
	Share of foreigners among faculty	**8%**	**8%**	**9%**	**4%**	**1%**	**3%**	2012
	Relative pay of female faculty across academic positions	101%	86%	91%	90%	102%	103%	2012
Research intensity	% of public institutional support	55%	25%	9%	10%	0%	0%	2012
	% of project-based national funding of academic research	55%	26%	6%	8%	3%	3%	2012
	% of other R&D contracts	41%	40%	4%	14%	1%	0%	2011
	High-level peer-reviewed, internationally published academic publications per academic employee per year	1.2	1.16	1.26	0.8	n/a	n/a	2014

[a] *TU* University of Tartu, *TUT* Tallinn University of Technology, *TLU* Tallinn University, *EMU* Estonian University of Life Sciences, *EKA* Estonian Academy of Arts, *EMTA* Estonian Academy of Music and Theatre

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