



EUROGRADUATE 2022

2nd Phase of the European Pilot Survey of Higher Education
Graduates

Country report on Estonia

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Executive Summary

The social and market research company Saar Poll, in collaboration with Norstat Eesti, conducted the Eurograduate alumni survey, polling graduates from all Estonian higher education institutions from the 2016/2017 and 2020/2021 academic years. Eurograduate is a pan-European alumni survey in which Estonia is participating for the first time. A total of 18 countries are included in the study. The first Eurograduate pilot took place in 2018, and at that time, only eight countries participated.

This report reflects the results of the Estonian survey on selected topics to provide input for shaping Estonian higher education policy and the development of university education. The report provides an overview of the background related to the studies of Estonian higher education institution alumni, post-graduation activities, labor market performance, and acquired competencies and satisfaction with studies.

The study results show that:

Estonia's universities often stick to traditional classroom teaching, like in many places in Europe, but they also mix in some interactive learning methods, showing they're open to evolving. When it comes to advanced studies, like Master's degrees, they're gradually including more of these modern, interactive ways of learning, hinting at a willingness to adopt new educational styles.

As for students going abroad, fewer Estonian students are studying abroad, a trend that's not unique to Estonia but seen across Europe. Despite this dip, Estonia values international experiences for its students, especially at the Master's level, believing it helps them stand out in the job market worldwide. This approach aims to keep Estonian graduates competitive.

In terms of work experience while studying, Estonia is ahead of the curve. More of its students work in jobs related to their studies compared to other European countries, particularly those pursuing Master's degrees. This strategy not only enhances their skills but also their chances of landing a good job after graduation, showing Estonia's proactive stance in linking education with real-world work.

When we look at how happy and secure Estonian graduates feel in their jobs, the picture is quite positive. Many prefer jobs with no fixed end date, suggesting they value stable employment. This trend is stronger among those with Master's degrees, indicating that higher education in Estonia is closely aligned with what the job market needs, ensuring a smooth transition from university to work.

Finally, when finding a job that matches the graduates' education level, most Estonian graduates with master's and bachelor's degrees find good fits. As for moving abroad for

work, Estonian graduates are more likely to take this step than their European peers, showing they're well-equipped for global opportunities.

In summary, Estonia's approach to higher education is well-rounded, focusing on traditional teaching, international experiences, and work integration. This has led to high job satisfaction and security among graduates. But, the slight drop in studying abroad indicate areas that could be improved. Overall, Estonia's education system is doing a great job at preparing its students for both the local and international job markets, while also leaving room for future growth.

Glossary and Abbreviations

Core target group	The part of the EUROGRADUATE target group that was surveyed in all countries, namely Bachelor and Master level graduates . Details and deviations are described in section 0.
EG	EUROGRADUATE
Field of study	Categorization of study programmes by thematic orientation. For concise visualization, this report displays 8 condensed fields (see Appendix 4.2).
HE	Higher education
Highest degree	always refers to the highest reported degree according to ISCED classification. Surveyed graduates could, and often do, have attended additional HE programmes besides the → reference degree . Countries that only surveyed essential information (see chapter 0) only surveyed follow-up, but not previous degrees.
ISCED	International Standard Classification of Education, a categorization scheme for educational degrees and thematic fields of education introduced by UNESCO. ISCED allows for international comparability and is the base for classifying degree levels, fields of study, and other educational attainments in this report and the EUROGRADUATE project.
Reference degree	Respondents in the EG 2022 survey were surveyed with focus on the degree they have attained as one of the → target cohorts , but could report on other degrees as well. "Reference degree" always refers to the graduation and degree on the basis of which a person was selected for the survey, as opposed to additional degrees.

Target cohorts **2016/17 and 2020/21 higher education graduates.** EG 2022 collected data on two specific graduation cohorts (by academic year) to have clearly distinguishable groups for the comparison of the situation of graduates short- and mid-term after graduation.

Target group Specific set of persons a study aims to provide information about. In the context of EUROGRADUATE, this entails all persons with a higher education degree obtained in the academic years 2016/17 or 2020/21 of the participating countries with the exception of PhD. Details and deviations are described in section 0.

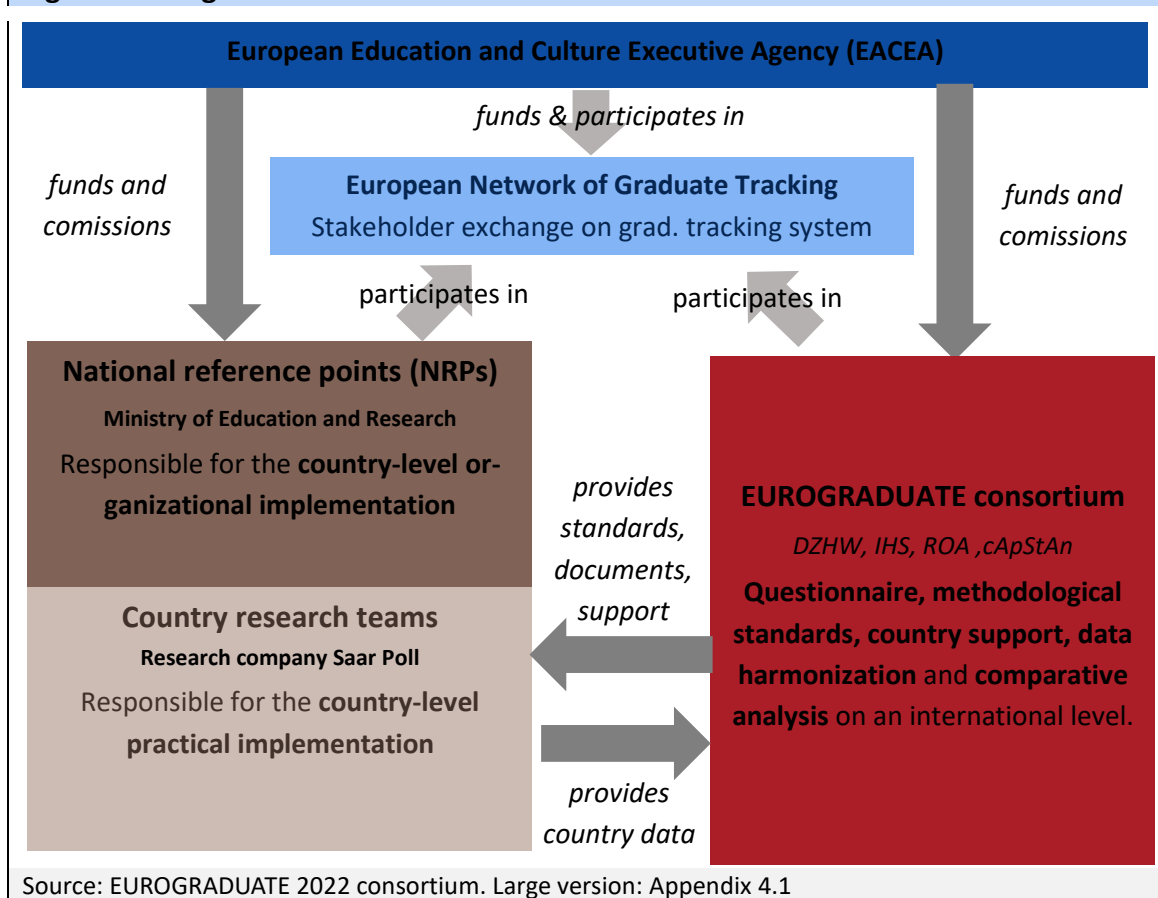
Introduction

Overview on the EUROGRADUATE 2022 survey

The EUROGRADUATE 2022 survey is the second pilot run for an European survey aiming to track higher education graduates. Its main goal is to provide data and analyses on the outcomes of attaining higher education in a way that allows for:

- both international comparison and research on a national level;
- linking graduate background, education experience, employment, mobility, and social outcomes;
- distinguishing different levels and fields of higher education;
- comparison of short- and mid-term outcomes (1 and 5 years past graduation).

Following a feasibility study and a first pilot survey in 2018, EUROGRADUATE 2022 continues the path towards providing a cohesive information source on higher education graduates based on a structured, systematic data collection. The survey was rolled out in 17 pilot countries (following 8 pilot countries in Eurograduate 2018), applying standards and methods to create comparable and reliable data.

Figure 0.1: Organisational context of EUROGRADUATE 2022

The implementation of EUROGRADUATE 2022 is commissioned and funded by the European Education and Culture Executive Agency (EACEA). National research teams are responsible for survey implementation, data cleaning and analysis on country level. The national data collections were guided by standards provided by the EUROGRADUATE 2022 consortium which laid out the questionnaire and methodological standards and supported the country teams with the implementation of those standards to ensure analytical potential and international comparability of the resulting data. Figure 0.1 shows structures and responsibilities within the project.

From the master questionnaire provided by the EUROGRADUATE consortium, countries were able to choose between surveying one module (essential questions), two modules (adding recommended questions) or three modules (adding questions on social outcomes, sustainability, and health). Of the 18 countries contributing to EUROGRADUATE 2022

- 10 countries surveyed the complete set of questions: **Austria, Bulgaria, Cyprus, Czech Republic, Germany, Latvia, Malta, Portugal, Slovenia, Slovakia;**
- 4 countries surveyed the two-module package: **Estonia, Croatia, Hungary and Norway;**
- 3 countries surveyed essential information only: **Greece, Italy, Romania;**

- 1 country (**Ireland**) did not provide microdata, but only aggregate indicators for its HE system.

Countries with a pre-existing graduate survey had the option to provide the information from their existing survey results rather than implementing the master questionnaire; this option was used by Germany and Italy.

Methodology of the EUROGRADUATE survey

Whom this report is about - target group definition

The EUROGRADUATE core target group entails all graduates who achieved an ISCED level 6 (Bachelor's degree or equivalent) or level 7 (Master's degree or equivalent) degree in the academic years 2016/17 and 2020/21. The target group explicitly includes international students (graduates born, raised, and/or having attended secondary school outside the survey country) and mobile graduates who left the survey country after graduation. **The only persons excluded** to whom these conditions can apply were graduates of exclusively employer-run higher education institution, such as military academies or study programmes provided by public administration institutions exclusively to their civil servants.

ISCED-8 (PhD-level) graduates are not included in the target group. Graduates from ISCED-5 (Short-cycle)-programmes were eligible for inclusion into a country's target group if the programme they had graduated can be considered higher education. This criterion is necessary because vocational or secondary ISCED-5-degrees are offered in some survey countries as well. To establish a standard for all countries, **ISCED-5 graduates were to be included if their degree was offered by an institution that also offered programmes concluding with a degree at ISCED level 6 or higher.**

What topics were surveyed? The questionnaire

The EG consortium provided a master questionnaire¹ based on (a) the questionnaire of the first EUROGRADUATE pilot survey 2018, enhanced and modified based on the methodological insights from the pilot,² (b) recommendations of the European Network on Graduate Tracking, (c) current policy-relevant interests (such as the impact of Covid-19 and sustainability as a topic in study programmes) and (d) the comparability with other international surveys on education and employment. The questionnaire consisted of the following sections (in order):

¹ The full questionnaire files, as well as the questionnaires for the previous pilot survey, are publicly available at the [EUROGRADUATE website](#).

² Meng, C. et al. (2019): Eurograduate pilot study. Technical assessment of the pilot survey and feasibility of a full rollout. [Available online](#).

- A. Education History: details on the reference HE programme (field and degree, institution, learning modes), HE access, other tertiary and non-tertiary education and training, international and work experience alongside studying.
- B. Work history: details on employment during survey and in 2018 (for 2016/17 graduates), labour market entry, job conditions and characteristics, satisfaction, education-employment match.
- C. Competencies: respondents' level and required level in their job for 12 competencies (respondent-assessed).
- D. Mobility: place of residence during the reference programme, in 2018 (2016/17 graduates) and at the time of survey; reasons for mobility.
- E. Personal and social background: age, sex, migration and citizenship, family background, partner- and parenthood details, general health.
- F. Social outcomes: personal life, political engagement and attitudes.

The questionnaire was translated, adapted, and implemented into an online survey by each national research team for the respective country. The EG consortium provided linguistic quality control to maximise cross-language comparability of the results. The national surveys were only accessible with access links individually distributed to target group respondents, preventing illegitimate responses by persons out of the target group or automated software.

How the data was collected – sample, representativity and field phase

Country research teams had two options for inviting eligible graduates to the survey: either to invite the whole target group (census), which was especially recommended to countries with a smaller yearly number of higher education graduates, or to draw a sample³ from it. In either case, the resulting responses underwent a statistical weighting procedure to account for nonresponse and over- and underrepresentation of certain sub-groups of graduates in the survey. This weighting adjusted for graduation year, degree level, field of study, age, and gender; in some countries, additional weighting characteristics such as type and region of the higher education institution graduated from were also taken into account.

With regards to the sampling frame and contact information, two important details must be considered: Firstly, some countries' research teams were able to select and contact graduates based on a central register, while other countries needed to involve the separate higher education institutions to contact graduates – those generally opted for the census method (letting institutions invite all target group graduates), which was suggested to simplify coordination with the numerous institutions. Secondly, a person

³ In countries where a sample was drawn, the standard procedure was a disproportionally stratified random sample which was stratified at least by study fields, cohort, and degree level (additional stratification characteristics were applied by some countries). Deviating from this, the German data is based on a clustered and stratified random sample; the Italian data is based on a census of ~90% of the Italian HE institutions engaging in regular graduate tracking for 2016/17 and a random sample out of those institutions' graduates for 2020/21.

can hold two or more higher education degrees from the target years, especially when continuing with a Master programme after a Bachelor degree. Such cases were only identifiable when both/all such programmes were registered in the same contact database (e.g. same institution or same country with a central database). Due to the small number of persons concerned in countries that identified such cases (~1%) and the response effort, the possibility that a person replied more than once is assessed as negligible.

The core field phase took place between November 2022 and February 2023. Cyprus, Latvia, Malta, Slovenia and Germany conducted delayed and/or extended data collection ranging from the core field phase to July 2023. This needs to be considered when interpreting analyses of time-sensitive outcomes.

Crucial information on the survey methodology in the countries can be found in appendix 4.3.

How EUROGRADUATE was implemented in Estonia

The target group for the survey consists of graduates from all levels of higher education provided by educational institutions in Estonia during the academic years 2016/2017 and 2020/2021. The sample included 17 Estonian higher education institutions, including seven universities and 10 universities of applied sciences (see Table 1). The analysis treated private universities and private universities of applied sciences as one group, and the other group consisted of public universities together with the Ministry of Education and Research and state-managed universities of applied sciences.

The survey was conducted from November 14 to December 19, 2022. The total population size was 19,200 alumni, of whom 3,616 responded. International students accounted for 9% (323 respondents) of the respondents. A total of 18,836 unique contacts were obtained from universities, and one higher education institution sent out email invitations to respondents themselves (about 100). The response rate was 19%.

The survey was conducted as an online questionnaire using Confirmat survey software. The first invitations to participate in the survey were sent out on November 14, 2022, the first reminder on November 22, 2022, followed by reminders on November 30, December 8, December 9 (partial), and the last one on December 14, 2022. To increase the response rate, 40 gift cards each worth 50 EUR were raffled among those who completed the questionnaire.

Table 1. Participating Higher Education Institutions and the Number of Respondents

TYPE OF INSTITUTION	HIGHER EDUCATION INSTITUTION	Number of Respondents
Public Universities	University of Tartu	1123
	Tallinn University of Technology	699
	Tallinn University	679
	Estonian University of Life Sciences	212
	Estonian Academy of Arts	76
	Estonian Academy of Music and Theatre	45
Private University	Estonian Business School	92
Private Universities of Applied Sciences	Estonian Entrepreneurship University of Applied Sciences Mainor	40
	Estonian Free Church Theological Seminary	4
	Baltic Methodist Theological Seminary	4
Ministry of Education and Research-managed Universities of Applied Sciences	Tallinn University of Applied Sciences	194
	Tallinn Health Care College	129
	Tartu Health Care College	121
	Estonian Aviation Academy	20
	Pallas University of Applied Sciences	20
Other State Universities of Applied Sciences	Estonian Academy of Security Sciences	59
	Estonian Military Academy	6
TOTAL		3523

To enhance the representativeness of the survey results, the data were weighted based on the institution (figure 2.2.1), field of study, respondent's gender, age, and cohort characteristics in accordance with the requirements of the Eurograduate consortium (figure 0.1.1).

Figure 0.1.1. Background information of respondents (%; N=3523)

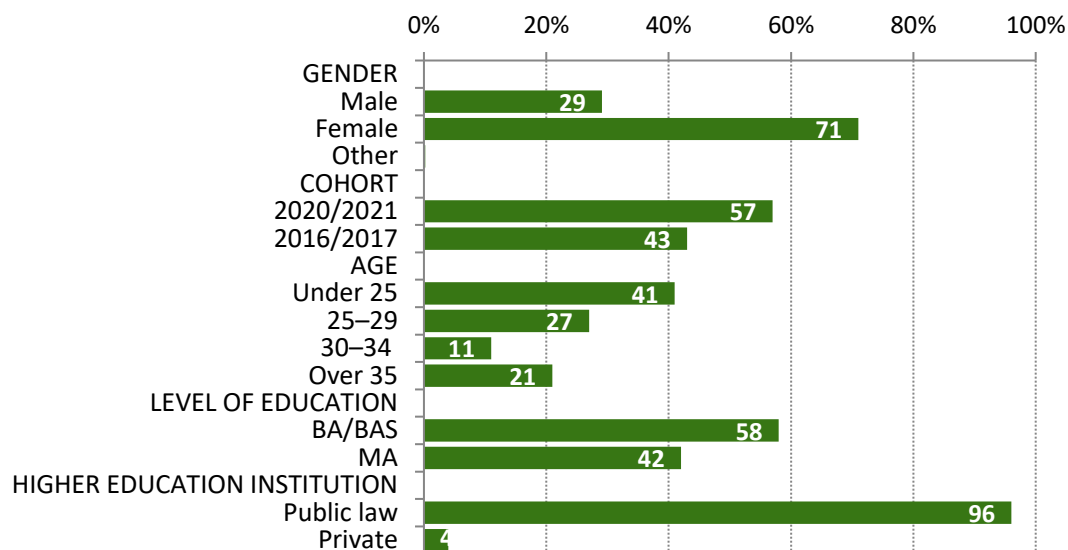
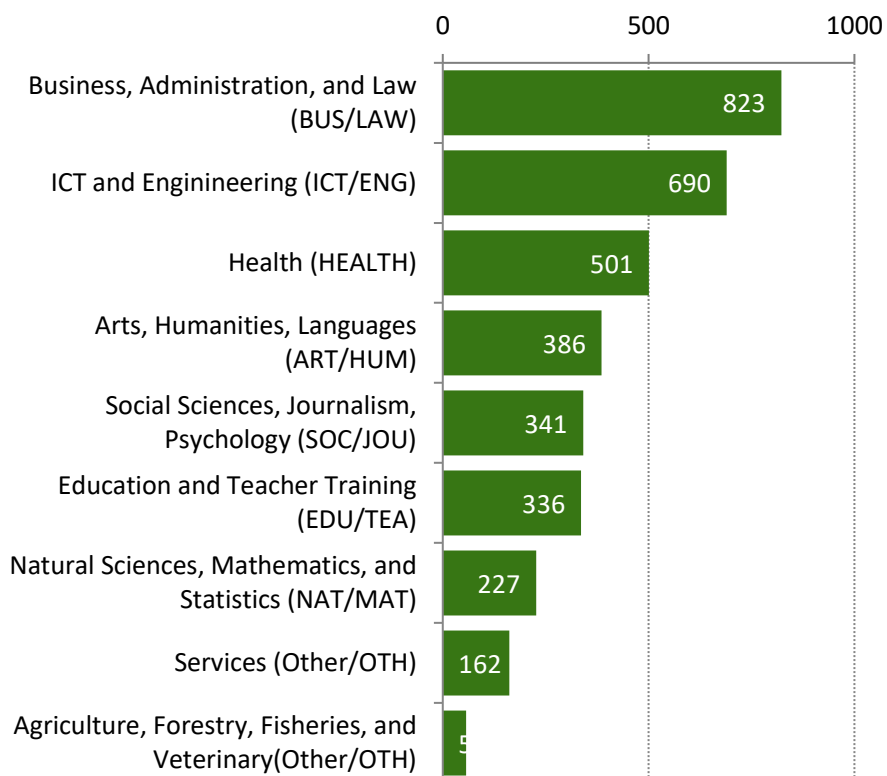


Figure 0.1.2. Distribution of fields of study (Number of respondents, N=3523)



Higher education systems and demographic profile of graduates

The higher education system in Estonia shares several similarities with the European system, demonstrating a commitment to alignment with international standards and the principles of the Bologna Process. Following a qualitative reform, Estonia transitioned its degrees into a bachelor and master structure in 2002, contributing to increased equivalence within the European Higher Education Area.⁴

A distinctive feature differentiating Estonia is its commitment to providing free Estonian-language-based higher education, with only a few private institutions charging tuition fees. This commitment stems from the belief that higher education should be accessible to individuals irrespective of socioeconomic status, fostering inclusivity and equal opportunities. Consequently, most Higher Education Institutions (HEIs) in Estonia are public.

Estonia's higher education is offered through various institutions, including universities, applied higher education institutions, and other professional higher education institutions. The University of Tartu, Tallinn University of Technology, and the Estonian Academy of Arts are prominent examples. Altogether, seven institutions are devoted to offering bachelor's, master's, and doctoral programs, ensuring a comprehensive educational framework in Estonia.

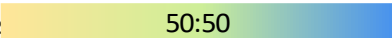

As we explore the dynamics of the Eurograduate 2022 survey, the data sheds light on the intricate composition of Higher Education (HE) institutions and the distribution of graduates across various ISCED levels (Figure 1). Estonia boasts a total of 18 higher education institutions, comprising 7 universities and 11 non-university institutions. The share of universities, standing at 39%, underlines a balanced diversity within the Estonian higher education landscape.

The distribution of graduates across different ISCED levels reflects the multifaceted nature of higher education in Estonia. At the Bachelor's level (ISCED 6) 5,502 graduates completed their studies in 2017 and 5,522 in 2020, illustrating a commitment to foundational education. The Master's level (ISCED 7) number of graduates is somewhat lower 3,327 (2017) and 3,874 (2020).

⁴ <https://www.riigiteataja.ee/akt/625490>

Figure 1: HE institutions (2020) and graduates in EG countries (2017 and 2020)

	HE institution 2020				HE graduates						Total
	Univer- sities	Non- Univ.	Total	Share Univ.	ISCED 5		ISCED 6		ISCED 7		
					2017	2020	2017	2020	2017*	2020	
AT	38	35	73	52%			28 592	33 758	26 537	27 945	
BG	45	7	52	87%			29 671	25 099	23 412	21 002	
CY	8	18	26	31%	705	892	3 003	3 625	4 744	7 678	
CZ	28	32	60	47%			37 568	33 066	33 171	28 957	
DE	171	201	372	46%			260 117	243 857	211 719	205 382	
EE	7	11	18	39%			5 502	5 522	3 327	3 874	
GR	24	23	47	51%			47 952	56 565	20 569	22 950	
HR	11	29	40	28%	20	7	18 039	17 942	14 997	15 358	
HU*	27	25	52	52%	2 835	2 644	38 068	37 624*	20 705	20 891*	
IE	18	4	22	82%	9 493	12 390	40 703	43 905	18 878	23 750	
IT	92	116	208	44%			211 265	266 450	164 645	179 895	
LV	6	35	41	15%	2 550	2 932	7 267	6 656	4 154	4 352	
MT	1	6	7	14%	371	319	2 178	3 030	1 196	1 363	
NO	18	16	34	53%	658	775	52 781	56 097	18 175	18 531	
PT	37	55	92	40%	3 593	5 073	48 325	55 272	24 940	28 027	
RO	52	38	90	58%			28 830	7 766	15 025	4 703	
SI*	5	47	52	10%			8 901	8 405	5 149	4 678	
SK	18	13	31	58%			22 267	17 304	23 944	18 038	

More Non-Univ. institution:  50:50  more Univ.-type institutions

Source: European tertiary education register (ETER). HU: Most recent referenced year is 2019 (used for 2020 value); SI: HE graduates numbers from EUROSTAT (ETER data only available for 2016 and earlier).

Based on the sociodemographic characteristics of Estonian graduates (Figure 2), Estonia shows a moderate to high percentage of female graduates, indicating a relatively balanced gender distribution in higher education. The age profile of Estonian graduates includes a lower proportion of individuals under 25 compared to some countries. At the same time, the segment over 35 is notably higher, suggesting that Estonian higher education attracts a significant number of mature students or that graduation is postponed for some reason.

Regarding migration background, both first- and second-generation migrant graduates are less represented in Estonia than in several other countries in the dataset, which may reflect the migration patterns or the integration of migrants into the higher education system in Estonia. Furthermore, over half of the Estonian graduates have parents with higher education degrees than those in other European countries; this is higher than most EU countries but lower than, for example, Norway.

Lastly, the distribution across fields of study for Estonian graduates shows considerable variation. Specific fields appear more popular or have a higher representation among Estonian graduates than others, such as business and law or engineering; this may highlight specific academic strengths or preferences within Estonia's higher education landscape.

Figure 2: Sociodemographic characteristics of EG country samples (weighted):

Cells: % of all graduates in the column-indicated category within the respective country. **Gender:** f=female, nb/o=non-binary/other – remaining up to 100: male; **Age:** in years, only bottom and top age group; **Migration BG:** 1st generation (not born in survey country) an 2nd generation (born in survey country, at least one parent born abroad) migration background. **Parent with HE:** at least 1 parent/guardian with an HE degree; **HEI type Univ:** Reference programme from university **Fields of study:** see Appendix 8.2.

	Gender		Age		Migra- tion BG	Parent with HE	HEI type: Univ.	Field of study (reference programme)							
	f	d	< 25	35+				EDU TT	ART HUM	SOC JOU	BUS LAW	NAT MAT	HEA LTH	ICT ENG	OTH
Cohort 2016/17:															
AT	60	0,3	0,0	18	22	31	53	21	4,4	13	28	7	5	22	0,5
BG	68	0,2	0,1	25	3,6	50	94	8	8	12	50	1,9	7	8	6
CY	66	0,0	0,5	36	41	42	93	31	8	9	27	1,8	8	12	2,1
CZ	61	0,5	0,0	16	14	44	95	12	9	13	20	6	11	20	9
DE	0,0	n.a.	0,0	0,0	13	55	61	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
EE	63	0,0	0,1	25	14	60	79	7	13	6	23	6	13	22	9
GR	64	0,4	0,1	51	0,0	2,7	100	11	25	6	18	13	11	14	1,4
HR	0,0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
HU	58	0,0	0,0	19	9	52	98	11	10	11	24	5	8	21	9
IT	58	0,0	0,0	0,0	0,0	31	100	7	11	15	20	8	16	18	4,2
LV	67	0,0	0,0	15	11	32	99	6	10	10	31	2,7	15	18	7
MT	0,0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
NO	60	0,3	0,0	100	19	64	79	15	16	12	9	6	18	16	8
PT	58	0,3	0,0	0,0	16	31	64	5	10	11	23	7	16	19	9
RO	60	0,4	0,0	0,0	0,0	41	100	4,1	8	13	21	9	6	36	2,0
SI	67	0,2	0,0	0,0	11	32	0,0	15	8	13	14	12	10	20	7
SK	58	0,0	0,0	14	4,4	35	85	9	2,3	13	35	3,7	11	20	5
Cohort 2020/21:															
AT	61	0,5	24	8	23	38	56	19	4,0	7	34	6	9	21	0,5
BG	64	0,5	18	24	9	52	90	10	4,3	4,4	34	1,4	21	21	3,9
CY	66	0,0	21	30	57	53	89	27	7	10	33	2,6	10	6	3,5
CZ	58	0,3	26	12	16	45	92	12	8	10	21	4,9	10	25	9
DE	0,0	n.a.	0,0	0,0	16	53	60	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
EE	63	0,0	27	21	17	60	82	9	12	8	25	4,7	13	23	6
GR	63	0,5	25	23	0,0	3,3	100	10	22	7	18	10	12	17	4,3
HR	0,0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
HU	58	0,0	26	17	13	54	98	13	9	11	22	3,4	9	22	9
IT	57	0,0	0,0	0,0	0,0	32	100	6	14	17	18	8	12	18	6
LV	64	0,0	24	23	11	33	100	8	10	9	28	3,1	13	16	13
MT	0,0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
NO	66	0,5	0,0	0,0	17	64	72	12	17	12	6	5	16	22	10
PT	62	0,6	0,0	0,0	22	35	66	4,1	12	13	24	6	16	17	8
RO	64	0,2	0,0	0,0	0,0	43	100	3,2	6	15	27	4,8	4,8	34	5
SI	64	0,4	0,0	0,0	11	42	0,0	14	9	14	16	12	9	21	4,6
SK	63	0,0	35	13	8	40	83	13	3,2	10	25	2,3	20	19	8

SOURCE: Eurograduate Survey 2022. Percentages per column category within country in %.

1 The Education Experience

1.1 Modes of teaching and learning

Compared with other European nations, the analysis of teaching modes within higher education in Estonia (Figure 3) shows that at the Bachelor's (BA) level Estonia demonstrates a pronounced preference for lecture-based instruction, which is mirrored across the majority of the surveyed countries. However, Estonia shows a slight downward trend in this regard, aligning with a modest continental shift toward more interactive teaching styles.

Problem-based learning (PBL) has been utilized minimally as the primary teaching method in most European countries. Rather than using PBL as a standalone approach, it is commonly combined with traditional lecture styles in educational settings. In Estonia, the use of PBL as the sole teaching method has been even less prevalent, indicating a more cautious approach towards fully integrating this pedagogical strategy. At the same time, in Estonia and other parts of Europe, there has been an increased use of lecture style and PBL (Problem-Based Learning) together.

At the Master's (MA) level, a similar pattern emerges, with lecture-based teaching showing a discernible decrease over time. Estonia's increase in PBL usage is notable but not as high as in Cyprus, suggesting room for growth in adopting these modern educational practices.

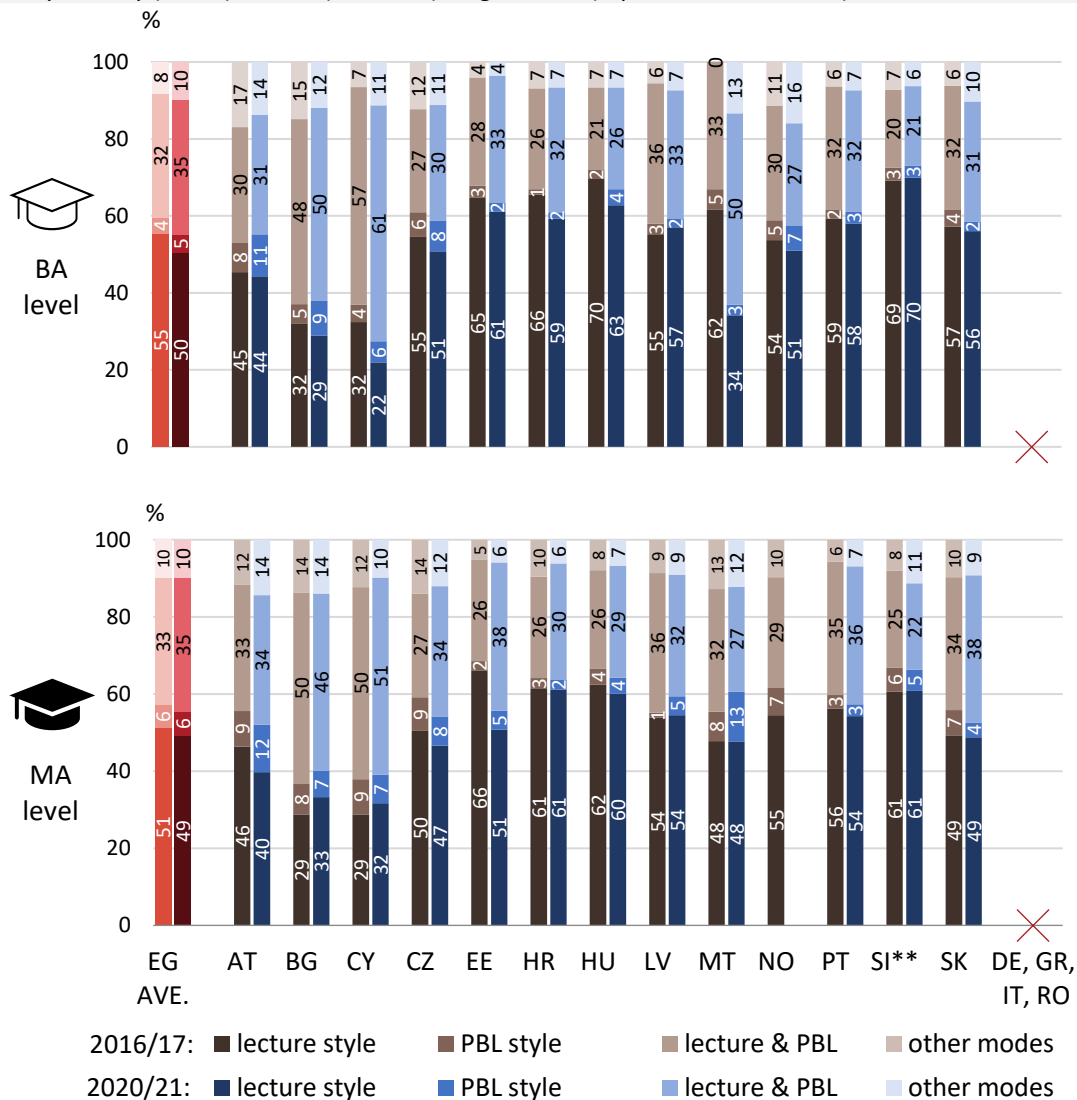
The utilization of 'other modes' of teaching—encompassing a variety of alternative methods—is minimal across all countries, including Estonia. This consistency points to a potential area for innovation within higher education, where diversification of teaching modes could respond to evolving student needs and learning preferences.

Figure 3: Learning types – international comparison

Learning Types: Teaching modes in the reference programme: “lecture style” indicates high extent of lectures and low extent of “problem and/or project based learning” (PBL); “PBL style” a high extent of PBL and low extent of lectures; “lecture&PBL” a high extent of both; “other modes” a low extent of both.

All graduates by:

Survey country (X-Axis), cohort (twin bars), degree level (top/bottom chart area)



Source: Eurograduate Survey 2022; Notes: n =1549939; DE,GR,IT,RO: not surveyed

If we take a closer look at the Estonian example the data showcases a notable reliance on the "lecture style" teaching mode (Figure 4), characterized by a high extent of lectures and a low extent of Problem-Based Learning (PBL) across various disciplines at both Bachelor's and Master's levels. This trend underscores the traditional orientation of higher education teaching methods.

The "PBL style" teaching mode, which emphasizes a high extent of PBL and a low extent of lectures, displays a some presence in disciplines where applied knowledge and practical skills are paramount, such as ICT/ENG, ART/HUM and EDU/TEA. This reflects an

increasing recognition of the importance of interactive and experiential learning approaches in these areas.

An integrated "lecture & PBL" mode, representing a balanced high extent of both lectures and PBL, is used frequently in all fields. Yet, it is more evident in the Arts and Humanities fields, suggesting an innovative approach to pedagogy in these sectors that prepares future educators with a blend of traditional and interactive teaching methodologies. The "other modes" category, which indicates a low extent of lectures and PBL, remains the least represented across the board. This could suggest a limited application of alternative teaching strategies or a lack of comprehensive data capturing these modes.

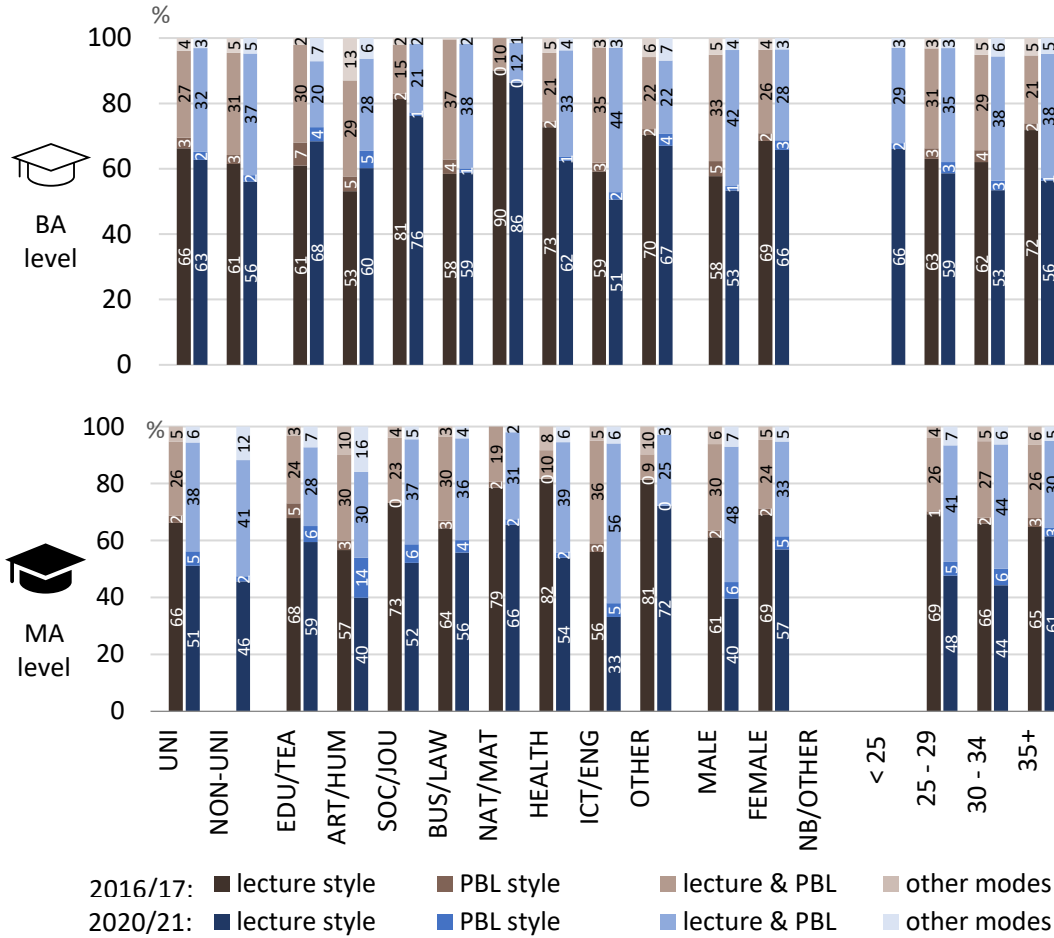
Demographically, the application of these teaching modes does not show significant variation. That may be because in Estonia, there aren't many universities and colleges that offer the same courses but with different ways of teaching. This means that when people decide what they want to study, they usually go for the subject they're interested in, rather than looking for a school that teaches in a specific way. Since there are so few options to choose from, students don't really pick their school based on how the courses are taught. Because of this, trying to figure out if certain ways of teaching work better for different kinds of people doesn't really make sense in Estonia. The situation shows that in Estonia, what you learn is more important than how it's taught.

Figure 4: Learning types for Estonia

Learning Typ: Teaching modes in the reference programme: “lecture style” indicates high extent of lectures and low extent of “problem and/or project based learning” (PBL); “PBL style” a high extent of PBL and low extent of lectures; “lecture&PBL” a high extent of both; “other modes” a low extent of both.

All target group graduates of Estonia by:

cohort (twin bars); Type of HE institution, Field of study, Gender, Age (X-Axis)



Source: Eurograduate Survey 2022; Notes: n = 3523

1.2 Experience abroad as part of the study programme

This chapter delves into the international experiences of Estonian Bachelor's level graduates, drawing a comparative analysis with other European countries (Table 2). The trend in Estonia reflects a general decrease in the proportion of students studying abroad from 8.2% in the 2016/17 cohort to 8.0% in the 2020/21 cohort. This slight decrease is modest in comparison to the broader European average (EG AVE.), which saw a reduction from 9.6% to 7.3% in the same periods. The decline suggests external factors may be influencing Estonian students' ability or inclination to study abroad, a trend that is consistent with the overall European experience such as COVID-19.

Table 2: Proportion of BA-level graduates with different types of experience abroad

Experience abroad: Stay outside of the survey country during the reference study programme (multiple stays per respondent possible - up to 5 could be reported), shares of all respondents.

ISCED-6 (Bachelor level) graduates by:

Survey country (rows), type of experience abroad (columns) cohort (subcolumns)

Type	study abroad		internship/work		language course		summer school, workshop		other stay abroad	
	2016/17	2020/21	2016/17	2020/21	2016/17	2020/21	2016/17	2020/21	2016/17	2020/21
EG AVE.	9,6%	7,3%	5,1%	3,1%	0,9%	0,9%	2,2%	1,4%	0,5%	0,3%
AT	16,2%	11,0%	8,2%	4,6%	1,5%	1,1%	3,3%	2,7%	0,1%	0,1%
BG	7,6%	5,2%	7,6%	5,5%	1,5%	0,7%	1,1%	0,7%	1,5%	1,3%
CY	9,6%	8,5%	8,0%	7,0%	1,0%	1,8%	1,4%	2,4%	0,0%	0,3%
CZ	8,3%	7,9%	3,2%	2,3%	1,5%	1,9%	3,4%	1,8%	0,5%	0,5%
EE	8,2%	8,0%	6,5%	4,9%	0,9%	1,3%	2,0%	2,7%	0,3%	0,0%
GR**										
HR	5,3%	2,8%	4,5%	2,0%	0,4%	0,3%	1,7%	1,0%	0,0%	0,0%
HU	6,1%	5,3%	3,1%	2,1%	0,4%	0,4%	1,1%	1,3%	0,0%	0,1%
IT*	5,4%	6,8%	1,4%	0,6%	0,0%	0,0%	0,0%	0,0%	1,9%	0,8%
LV	13,6%	14,4%	6,8%	4,7%	1,1%	1,2%	5,7%	2,4%	0,7%	1,2%
MT	16,8%	8,8%	5,7%	2,7%	1,4%	2,1%	1,0%	0,0%	0,0%	0,0%
NO	11,7%	8,1%	4,5%	1,2%	0,4%	0,2%	1,4%	1,2%	0,2%	0,2%
PT	10,0%	6,6%	4,0%	1,5%	0,2%	0,4%	1,8%	0,7%	0,0%	0,1%
RO	8,6%	2,1%	6,8%	3,4%	0,2%	0,4%	4,7%	2,6%	0,0%	0,0%
SI**	12,1%	7,6%	3,6%	1,6%	1,5%	1,1%	2,9%	1,3%	1,9%	0,5%
SK	4,9%	6,7%	2,6%	3,0%	1,2%	0,1%	0,7%	0,7%	0,2%	0,0%

Source: EUROGRADUATE 2022 survey. N=1336345: IT: Limited comparability.

In the realm of internships and work placements abroad, Estonian graduates also exhibited a reduction from 6.5% in the 2016/17 cohort to 4.9% in the 2020/21 cohort. This is in line with the general downturn seen across Europe, where the average has decreased from 5.1% to 3.1%. This could indicate changes in the job market or the accessibility of

international student work opportunities. External factors could also influence such changes as the COVID-19 pandemic. This situation warrants further investigation, as this is not within the scope of this study.

Language courses abroad have seen a minimal increase in Estonia, from 0.9% in the 2016/17 cohort to 1.3% in the 2020/21 cohort. The participation of Estonian graduates in summer schools or workshops abroad has similarly increased, from 2.0% in the 2016/17 cohort to 2,7% in the 2020/21 cohort. This increase differs from the European average, which saw a decline from 2.2% to 1.4%. Other types of stays abroad remain relatively low in Estonia, with a slight decrease from 0.3% to 0.0%.

Table 3 : Shares of MA-level graduates with different types of experience abroad

Experience abroad: Stay outside of the survey country during the reference study programme (multiple stays abroad per respondent possible - up to 5 could be reported), displayed as shares of all respondents.

ISCED-7 (Master level) graduates by:

Survey country (rows), type of experience abroad (columns) cohort (subcolumns)

Type	study abroad		internship/work		language course		summer school, workshop		other stay abroad	
	2016/17	2020/21	2016/17	2020/21	2016/17	2020/21	2016/17	2020/21	2016/17	2020/21
EG AVE.	11,7%	8,6%	6,8%	5,0%	0,9%	0,8%	3,6%	2,8%	0,8%	0,5%
AT	20,6%	12,6%	11,1%	7,6%	1,6%	2,1%	5,8%	4,1%	0,2%	0,2%
BG	7,7%	3,1%	6,7%	3,9%	1,2%	0,7%	1,3%	1,4%	1,1%	0,9%
CY	8,0%	6,3%	5,7%	4,7%	1,3%	1,5%	1,7%	3,3%	0,0%	0,0%
CZ	15,4%	13,7%	8,5%	7,0%	1,8%	1,4%	4,4%	3,7%	0,5%	0,6%
EE	9,6%	7,6%	7,3%	5,8%	1,5%	1,2%	5,3%	3,7%	0,1%	0,2%
GR**										
HR	9,0%	6,1%	5,4%	4,8%	1,2%	0,8%	4,1%	2,7%	0,2%	0,0%
HU	7,8%	7,9%	8,7%	3,4%	0,5%	0,4%	3,4%	2,1%	0,0%	0,1%
IT*	15,1%	12,6%	3,4%	2,9%	0,0%	0,0%	0,0%	0,0%	2,6%	0,8%
LV	10,8%	5,3%	9,1%	5,5%	0,5%	0,5%	7,5%	3,2%	0,0%	0,0%
MT	10,2%	15,3%	5,5%	2,5%	0,0%	0,0%	2,4%	6,4%	0,0%	0,0%
NO	24,9%		3,9%		0,9%		6,5%		1,7%	
PT	9,9%	7,0%	8,5%	4,2%	0,6%	0,5%	3,1%	1,1%	0,2%	0,3%
RO	7,2%	1,3%	4,2%	3,9%	0,9%	0,3%	1,4%	1,4%	0,0%	0,0%
SI**	10,9%	12,9%	8,7%	7,9%	1,3%	1,5%	6,3%	4,8%	5,1%	3,1%
SK	8,6%	8,9%	5,0%	5,3%	0,3%	0,2%	1,4%	1,7%	0,0%	0,0%

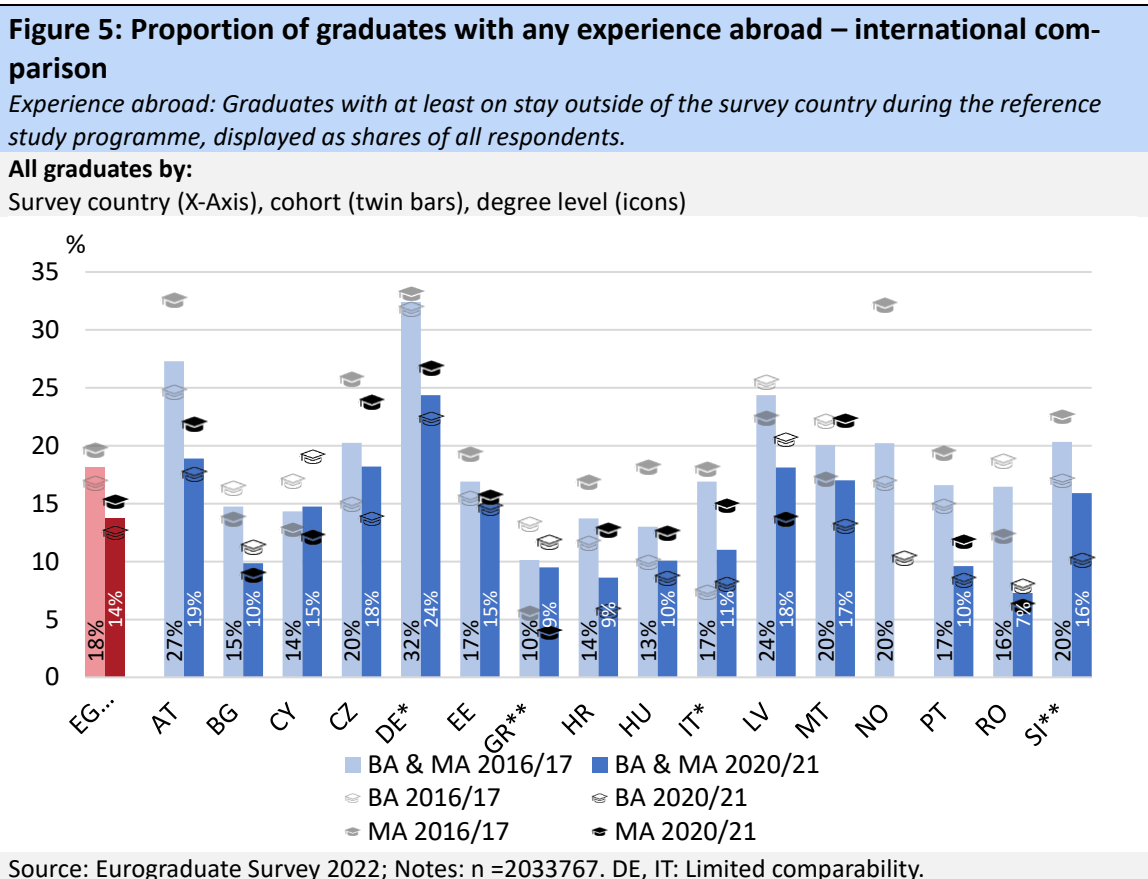
Source: EUROGRADUATE 2022 survey. N=715123 . Norway: Master t+1 not surveyed. IT: Limited comparability.

The data on Master's level graduates (Tabel 3) from Estonia indicates a decline in international experiences, which aligns with an overarching trend observed throughout Europe. For instance, the percentage of Estonian students studying abroad decreased from 9.6% to 7.6%, which, while a modest decline, is still less than the European average

drop from 11.7% to 8.6%. This suggests that Estonian students are slightly more resilient in maintaining their study abroad rates compared to the broader average.

When we consider internships and work experiences abroad, Estonia's decrease from 7.3% to 5.8% is reflective of the European average decrease from 6.8% to 5.0%. However, Estonia's figures remain above the 2020/21 European average, indicating a relatively stronger inclination towards international work experience among its students.

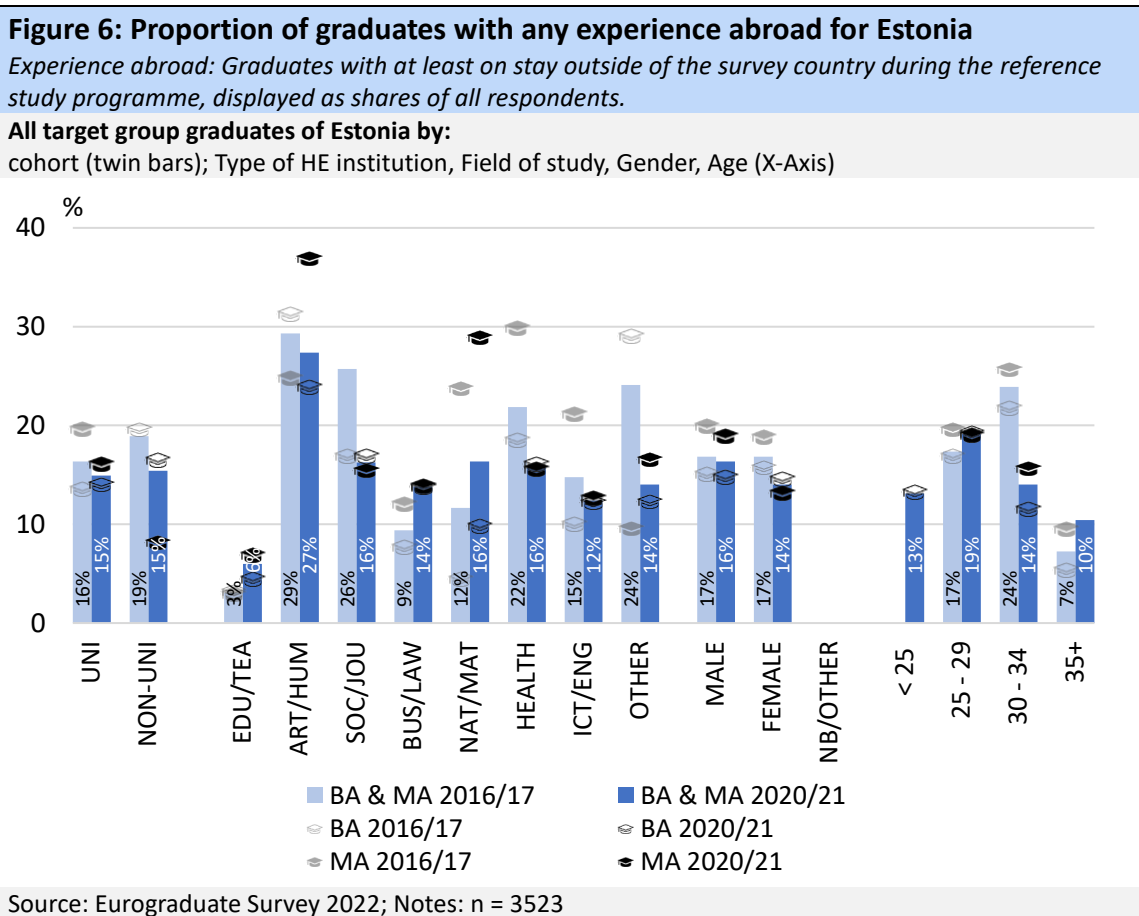
For language courses, Estonia's engagement is relatively low but mirrors the European trend, with a small decline from 1.5% to 1.2%, close to the European average which saw a decrease from 0.9% to 0.8%. Meanwhile, countries like the Czech Republic (CZ) maintain a higher participation rate, with 1.4% in 2020/21, suggesting varying priorities or opportunities for language immersion across different nations. Data on attendance at summer schools or workshops abroad is similar to that in Europe, which is experiencing a drop. Lastly, the 'other stay abroad' category remains the least utilized, with a negligible increase from 0.1% to 0.2% in Estonia. This reinforces the idea that such experiences are not a primary focus for Estonian students.



The analysis of graduates with any international experience highlights Estonia's proactive stance in promoting international exposure at the Master's level, being at the same level as the European average (Figure 5). At the Bachelor's level, while Estonia did not

exceed the European average, it showed resilience in maintaining its international engagement with a slight decrease from 15,5% to 14.6%, which is commendable given the overall declining trend observed in Europe.

The data suggests that Estonia values international experience as an integral part of higher education, especially at the Master's level, which is pivotal in today's globalized job market. This commitment to fostering global competencies amongst its graduates can be seen as a strategic move to enhance their employability and adaptability in diverse professional environments. However, the slight decrease at both educational levels indicates there may be challenges to address, such as providing adequate support and resources to encourage even greater participation in international opportunities.



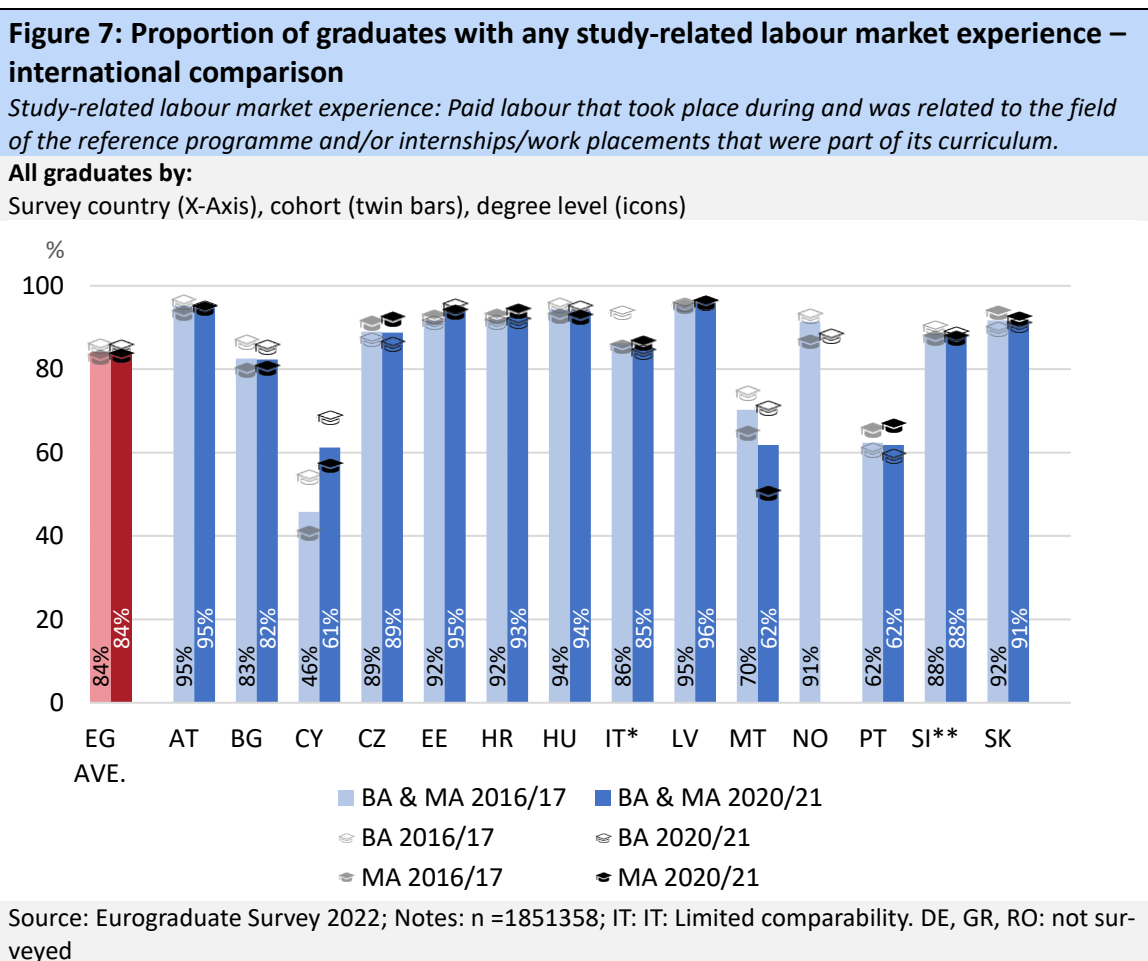
The data on Estonian graduates' international experiences reveal patterns about who studies abroad and how this has changed. For example, university graduates, particularly in disciplines of the Arts and Humanities (Figure 6), had the highest rates of international experience, with over 30% in the 2016/17 cohort. This suggests robust institutional support or need for global exposure in these academic areas. In contrast, fields like Education/Teaching saw lower participation, with less than 10%, indicating potential areas for growth or the need for targeted international opportunities.

Gender-wise, male graduates had a marginally higher international experience than females. For instance, 16% of male graduates had international experiences in 2020/21 compared to 14% of females. Also, age trends show that younger students are more internationally mobile.

Overall, while Estonian graduates show a commendable level of international engagement, the decline across almost all categories between the two cohorts, from university versus non-university graduates to the various age groups, is noticeable. These changes prompt a closer examination of the factors that may be influencing Estonian students' international experiences, such as changes in the global context, domestic policies, or the evolving priorities of students themselves.

1.3 Labour market experience during studying

This chapter will analyze the graduate's labor market experience during their study. In a comparative analysis of European countries, Estonia demonstrates a higher-than-average proportion of graduates with study-related labor market experience. Notably, this trend is pronounced at the Master's level, where Estonia exceeds the European average and shows an upward trajectory from the 2016/17 to the 2020/21 cohort (Figure 7).



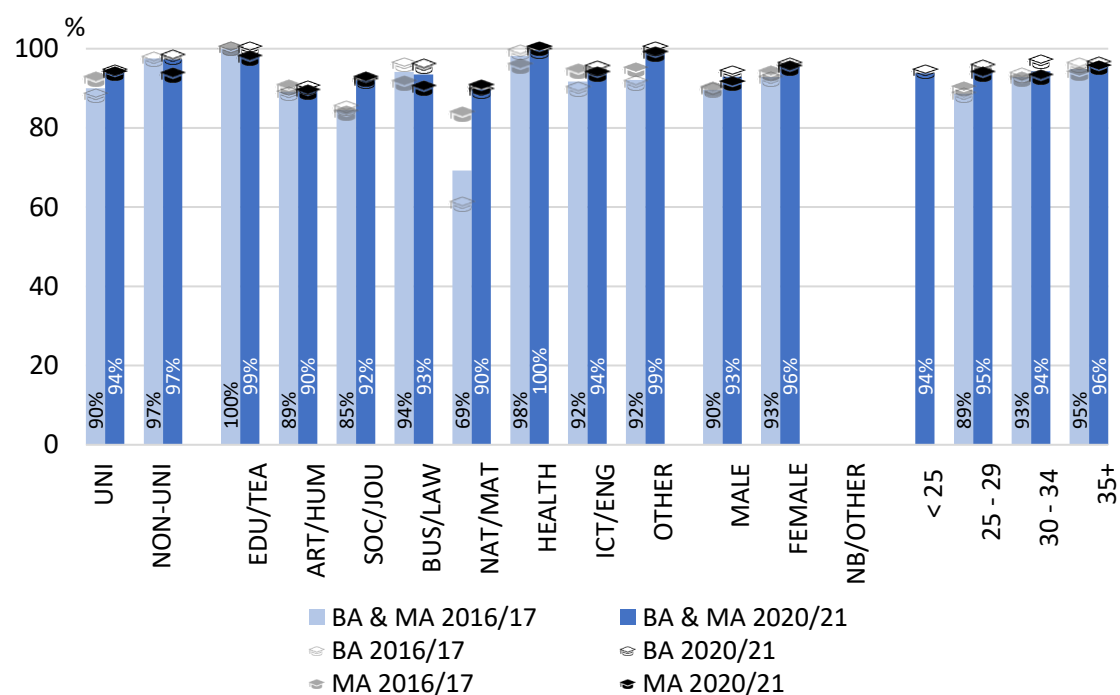
The data suggests that Estonia's higher education policies effectively integrate practical work experiences into their curricula, potentially enhancing Estonian graduates' employability and practical skills. By emphasizing learning that integrates work experiences, Estonia enhances its graduates' readiness for the job market, positioning it advantageously relative to other European countries.

Figure 8: Proportion of graduates with any study-related labour market experience for Estonia

Study-related labour market experience: Paid labour that took place during and was related to the field of the reference programme and/or internships/work placements that were part of its curriculum.

All graduates of Estonia by:

cohort (twin bars); Type of HE institution, Field of study, Gender, Age (X-Axis); degree level (icons)

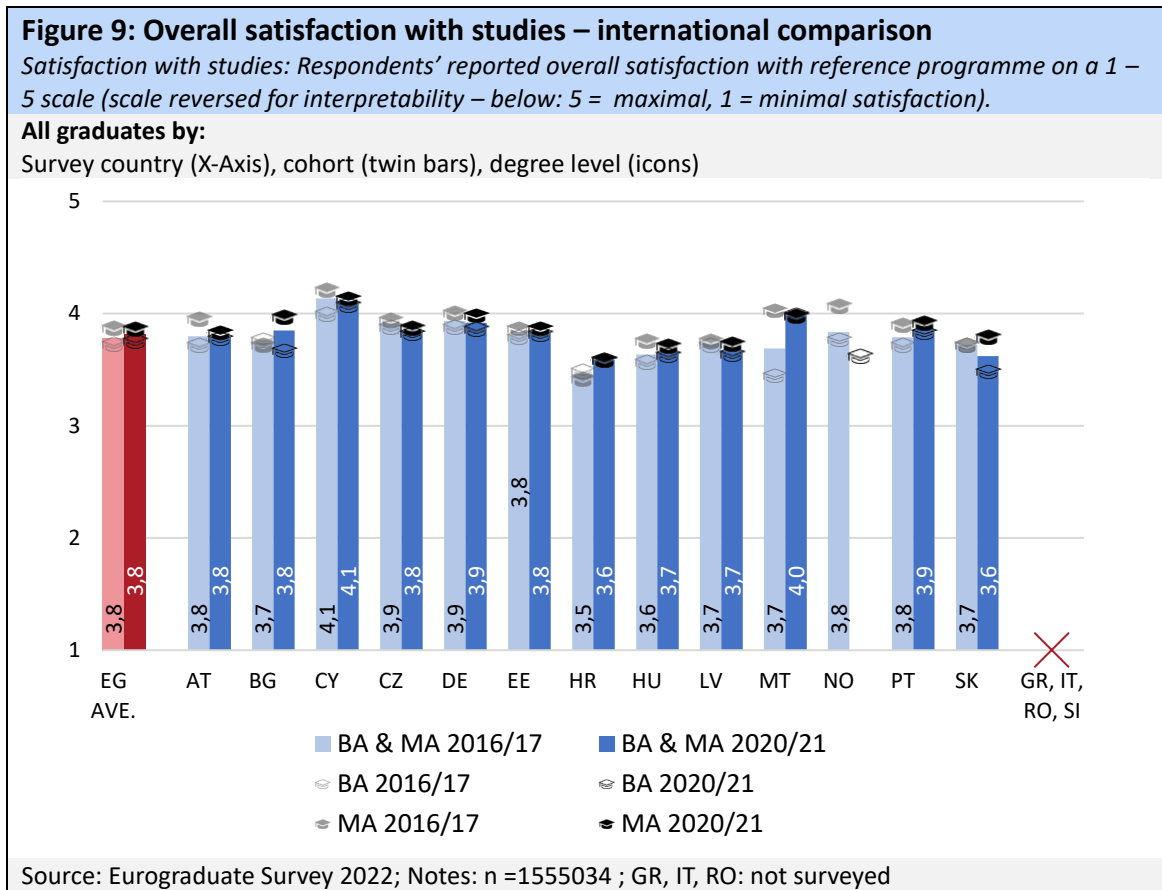


Source: Eurograduate Survey 2022; Notes: n =3523

The data suggests that in Estonia, there is generally a high level of study-related labour market experience among graduates across all fields of study, with some variations between fields and over time (Figure 8). The proportion of graduates with work experience is consistently high, especially in fields like Education/Teaching and health, and less so in natural sciences and mathematics. There are slight gender differences and variations across age groups, but these are generally minimal. Overall, the data indicates a stable or slightly increasing trend in graduates' labour market experience over the years examined.

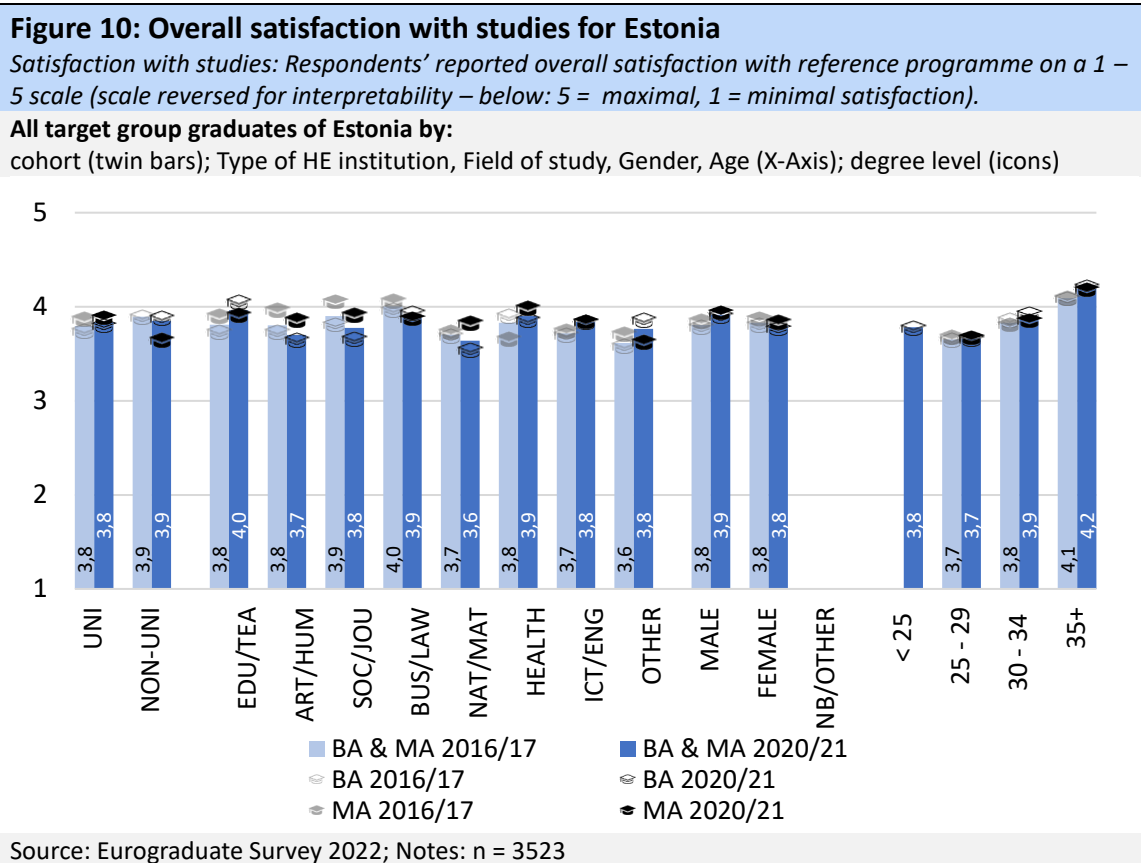
1.4 Overall satisfaction with studies

This chapter deals with higher education graduates' satisfaction with their studies (Figure 9). The European average is a favorable 3.8, reflecting a generally good sentiment towards higher education quality.



The Cyprus leads in satisfaction, scoring above 4.1, while Estonia aligns with the European norm, indicating contentment with the educational offerings. Notably, satisfaction levels have remained stable across cohorts from 2016/17 to 2020/21, with a marginal uptick in some countries in the latter period.

In essence, European graduates exhibit a high degree of satisfaction with their studies, with no significant divergence between Bachelor's and Master's levels, and Estonia's educational satisfaction is on par with this positive trend.



The Estonian case analysis (Figure 10) shows no significant discrepancy in satisfaction between university and non-university institutions, suggesting a parity in quality and student experience across these educational settings. Similarly, there's a remarkable consistency in satisfaction between genders.

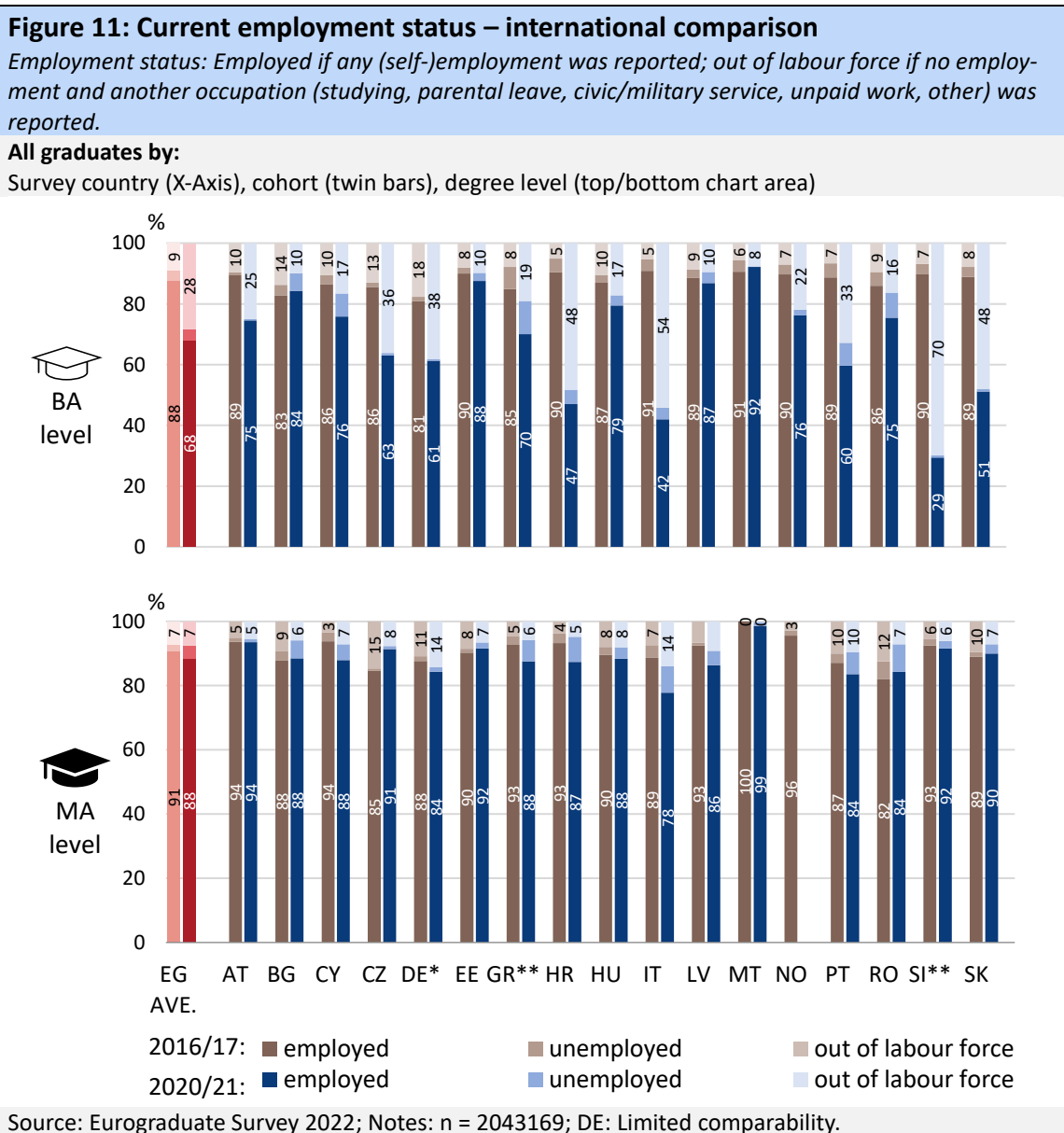
Notably, there's a trend of increasing satisfaction with age. Graduates over 35 years old express the highest satisfaction, which could be reflective of a more mature perspective on the value of education or a better alignment between their studies and career aspirations. Over the cohorts from 2016/17 to 2020/21, there is a slight uptick in satisfaction, indicating potential improvements in the educational system or its perceived value among recent graduates.

In conclusion, Estonian higher education is meeting or exceeding the expectations of its graduates across a range of key factors, leading to high levels of satisfaction. This positive outcome is consistent over time and suggests that the educational offerings in Estonia are well-tuned to the needs and aspirations of its student population.

2 Labour Market Participation and Labour Market Outcomes

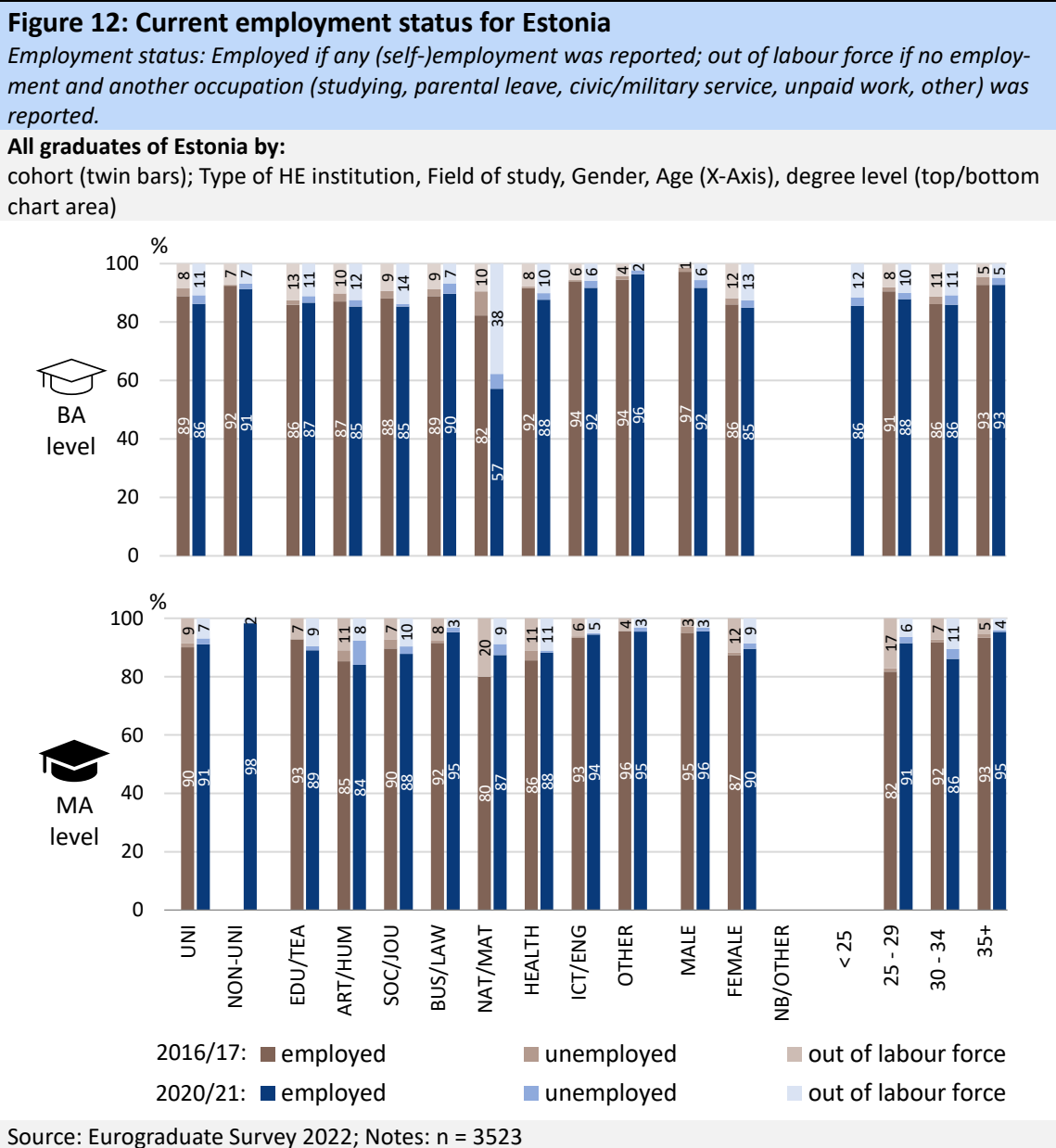
2.1 Current employment status

In this chapter, the focus will be on the labour market and the participation of university graduates in it. Estonian higher education graduates demonstrate robust employment outcomes that align with or surpass the European average (Figure 11).



Bachelor's graduates in Estonia enjoy high employment rates, low unemployment, and a small percentage are out of the labour force, suggesting effective integration with the job market. Master's graduates, in particular, show a strong employment performance, with both employment rates and job market integration indicators being favorable. The trends from the 2016/17 to 2020/21 cohorts indicate that the employability of Estonian

graduates remains stable or is improving, a positive sign in comparison to many other European countries. Overall, the data indicates that Estonia's higher education system is successful in facilitating a smooth transition for its graduates into the labour market, especially at the Master's level.



Estonian graduates have strong employment prospects, particularly evident at the Master's level where employment rates surpass those of Bachelor's degree holders (Figure 12). For instance, employment rates for Bachelor's graduates vary from 57% to 89%, depending on the field and demographic, whereas Master's graduates often see employment rates exceeding 90% in fields such as Information and Communication Technologies (ICT) and Engineering. This underscores the added value of pursuing a Master's degree in Estonia.

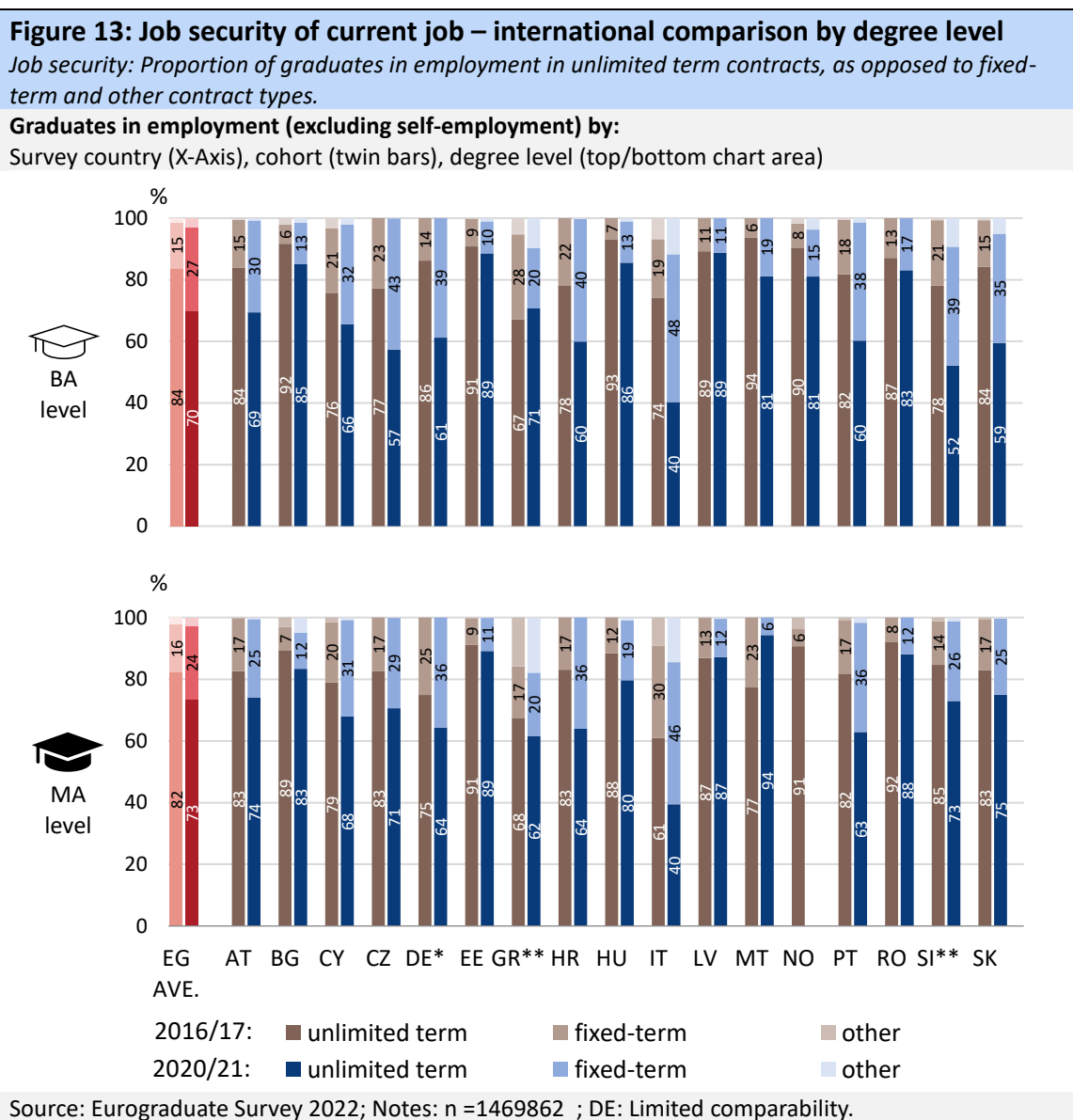
The data also reveals a positive shift over time, with the 2020/21 cohort showing improved employment rates compared to the 2016/17 cohort. For example, in the field of ICT/Engineering, the employment rate for Master's graduates in the 2020/21 cohort is higher than in previous years, reflecting the growing demand for advanced skills in the tech sector.

Additionally, demographic factors play a role in employment outcomes. Graduates over the age of 35 tend to have the highest employment rates, potentially due to their accumulated work experience and professional networks. Conversely, unemployment rates, which are relatively low across the board (around 5-11% for BA graduates and 1-5% for MA graduates), suggest a favorable job market for Estonian higher education graduates.

In summary, the Estonian higher education landscape offers significant employment advantages, especially for those with advanced degrees. The improving trend over recent years and the success in fields such as ICT/Engineering highlight the alignment of educational offerings with labour market demands.

2.2 Job security

Estonian graduates experience higher job security compared to their European counterparts, with a notable preference for unlimited term contracts over fixed-term employment. This trend is more pronounced among Master's (MA) level graduates, indicating that higher education significantly enhances employment stability in Estonia (Figure 13).



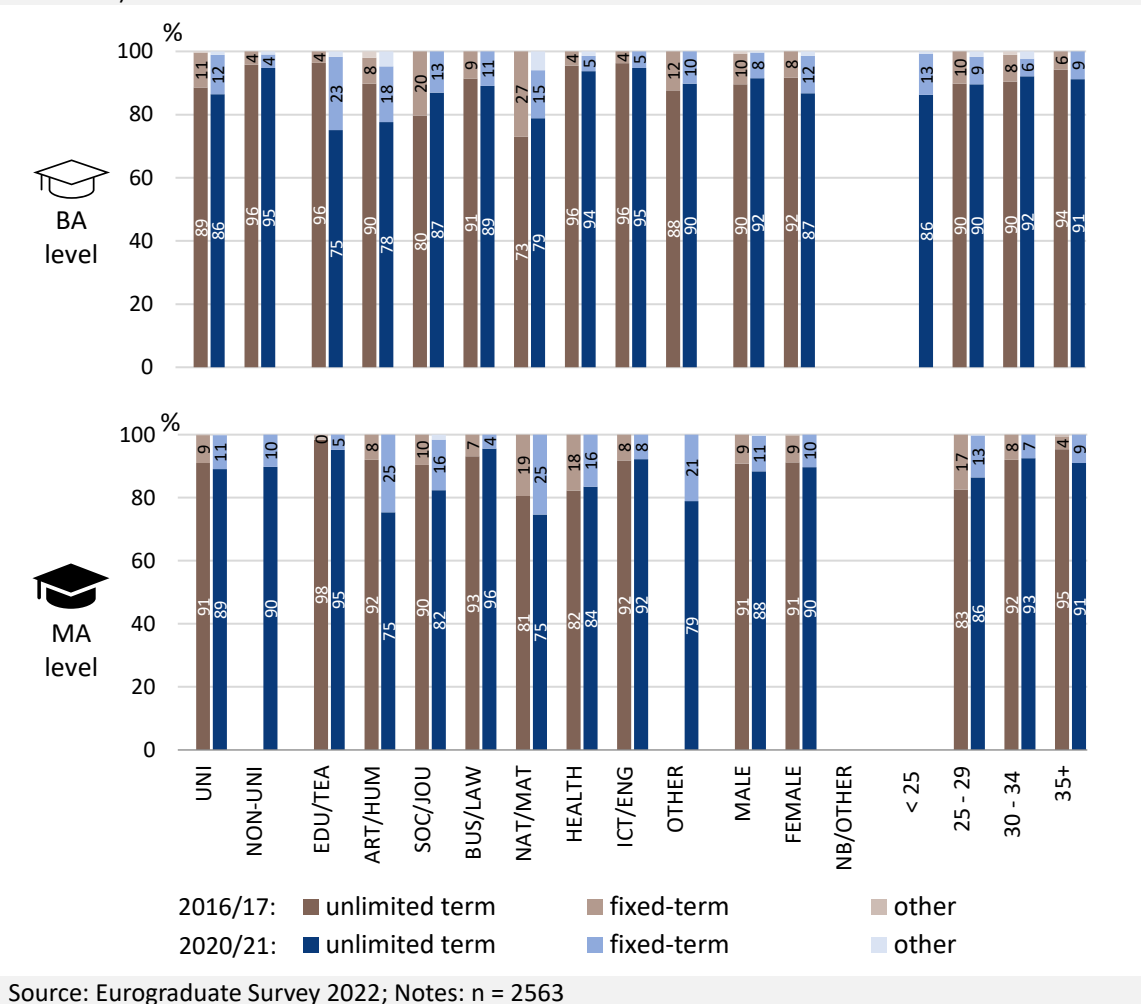
The employment landscape in Estonia is characterized by stable job conditions, especially for those with advanced degrees, aligning with the broader European trend that correlates higher education with greater job security. The consistency of this trend from the 2016/17 to 2020/21 cohorts underscores the resilience and robustness of Estonia's education-to-employment pathway, highlighting the country's successful integration of higher education graduates into the labour market with favorable employment terms.

Figure 14: Job security for Estonia

Job security: Proportion of graduates in employment in unlimited term contracts, as opposed to fixed-term and other contract types.

Graduates in employment (excluding self-employment) of Estonia by:

Cohort (twin bars); Type of HE institution, Field of study, Gender, Age (X-Axis), degree level (top/bottom chart area)



Source: Eurograduate Survey 2022; Notes: n = 2563

In Estonia, the job security landscape for graduates is characterized by a predominance of unlimited-term contracts, indicating stable employment conditions for individuals with Bachelor's (BA) and Master's (MA) degrees (Figure 14).

For Bachelor's degree holders, the data reveals that a significant majority have secured unlimited-term contracts, illustrating a job market that offers a degree of permanence. For instance, while the fields of study vary, such as ICT/Engineering and Social Sciences/Journalism, the inclination towards unlimited contracts is a common thread. However, a notable segment is engaged in fixed-term contracts, hinting at temporary or project-based work in the early career stages.

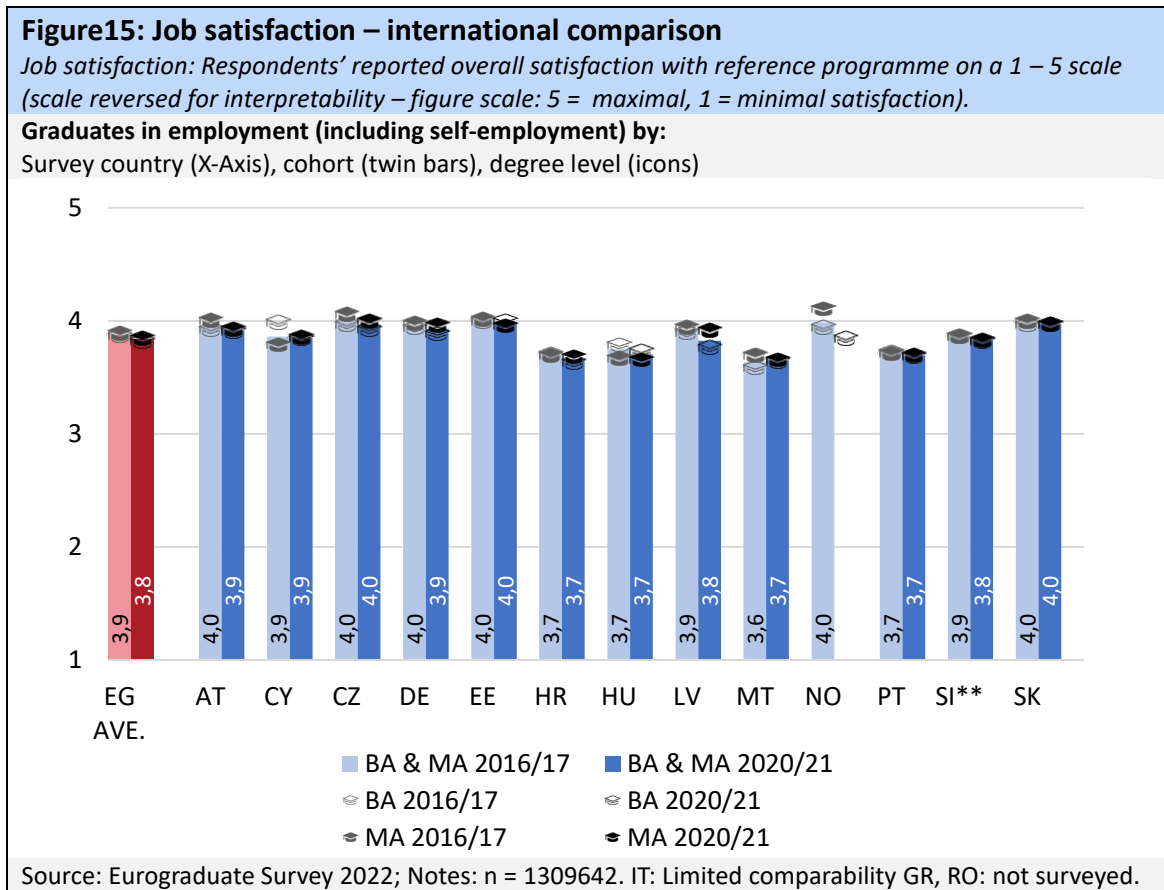
Master's degree graduates in Estonia fare even better regarding job security. A comparison shows that the proportion of MA graduates in unlimited-term contracts is higher than that of BA graduates. This trend is evident across various demographics and fields

of study, suggesting that higher academic qualifications enhance the likelihood of landing a permanent position.

The analysis of the cohorts from 2016/17 to 2020/21 does not indicate significant shifts in the type of employment contracts. This stability is a positive sign, pointing to the enduring nature of job security for Estonian graduates despite the passage of time and potential market fluctuations. Diving into specific categories, while the distribution of contract types is relatively uniform across gender lines, there is a slight uptick in job security for the most mature age bracket (35+), which could be attributed to accumulated work experience and established professional networks that come with age. Although unlimited-term contracts are rarer in international comparison, this is the prevailing practice in the labour market in Estonia.

2.3 Job satisfaction

The job satisfaction of European graduates is generally very positive. Estonian graduates display levels of job satisfaction that align closely with the European average but are a bit higher with 4.0 points (figure 15).



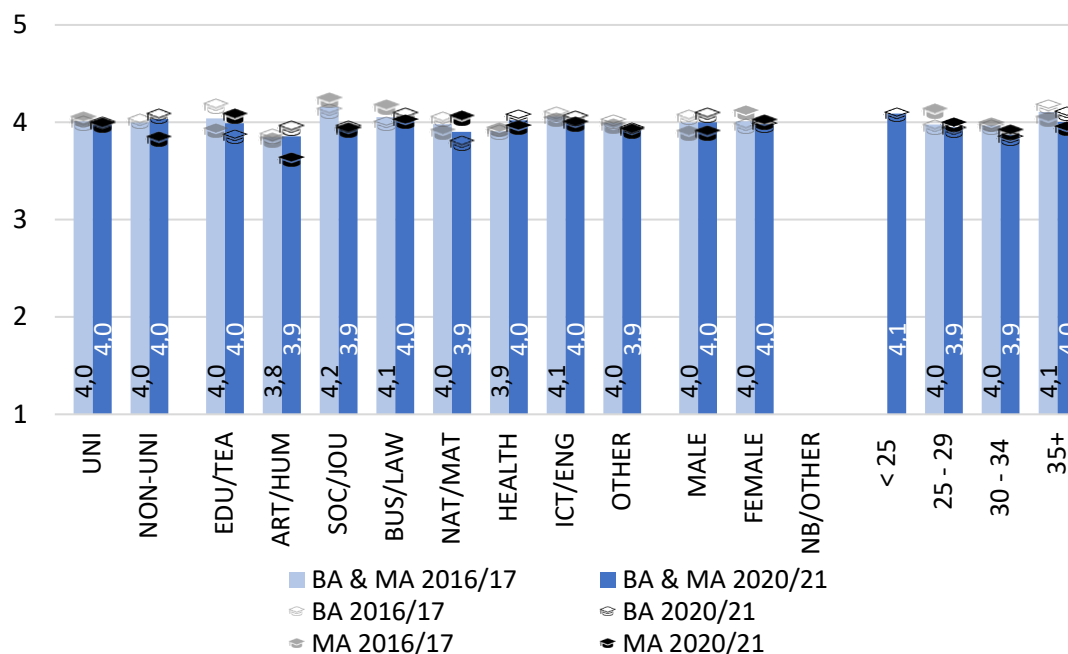
This consistent satisfaction across both Bachelor's and Master's levels suggests that higher education in Estonia effectively meets the expectations of graduates entering the workforce. Furthermore, the stability of these satisfaction levels over time, from the 2016/17 cohort to the 2020/21 cohort, points to a steady job satisfaction trend in Estonia and across the surveyed European landscape. The data conveys a strong message that higher education in Europe serves its graduates well, equipping them for satisfying employment that meets their professional and personal aspirations.

Figure 16: Job satisfaction for Estonia

Job satisfaction: Respondents' reported overall satisfaction with reference programme on a 1 – 5 scale (scale reversed for interpretability – figure scale: 5 = maximal, 1 = minimal satisfaction).

Graduates in employment (including self-employment) of Estonia by:

cohort (twin bars); Type of HE institution, Field of study, Gender, Age (X-Axis); degree level (icons)



Source: Eurograduate Survey 2022; Notes: n = 3162

The analysis of job satisfaction among Estonian graduates reveals a high level of contentment across various metrics, with no significant difference observed between those from universities and non-university higher education institutions (Figure 16). Satisfaction rates hover around the 4.0 mark on average, indicating broad satisfaction regardless of the type of higher education institution. This trend is consistent across different fields of study, with ICT/ENG and BUS/LAW graduates expressing exceptionally high satisfaction, suggesting a good alignment between their education and job experiences.

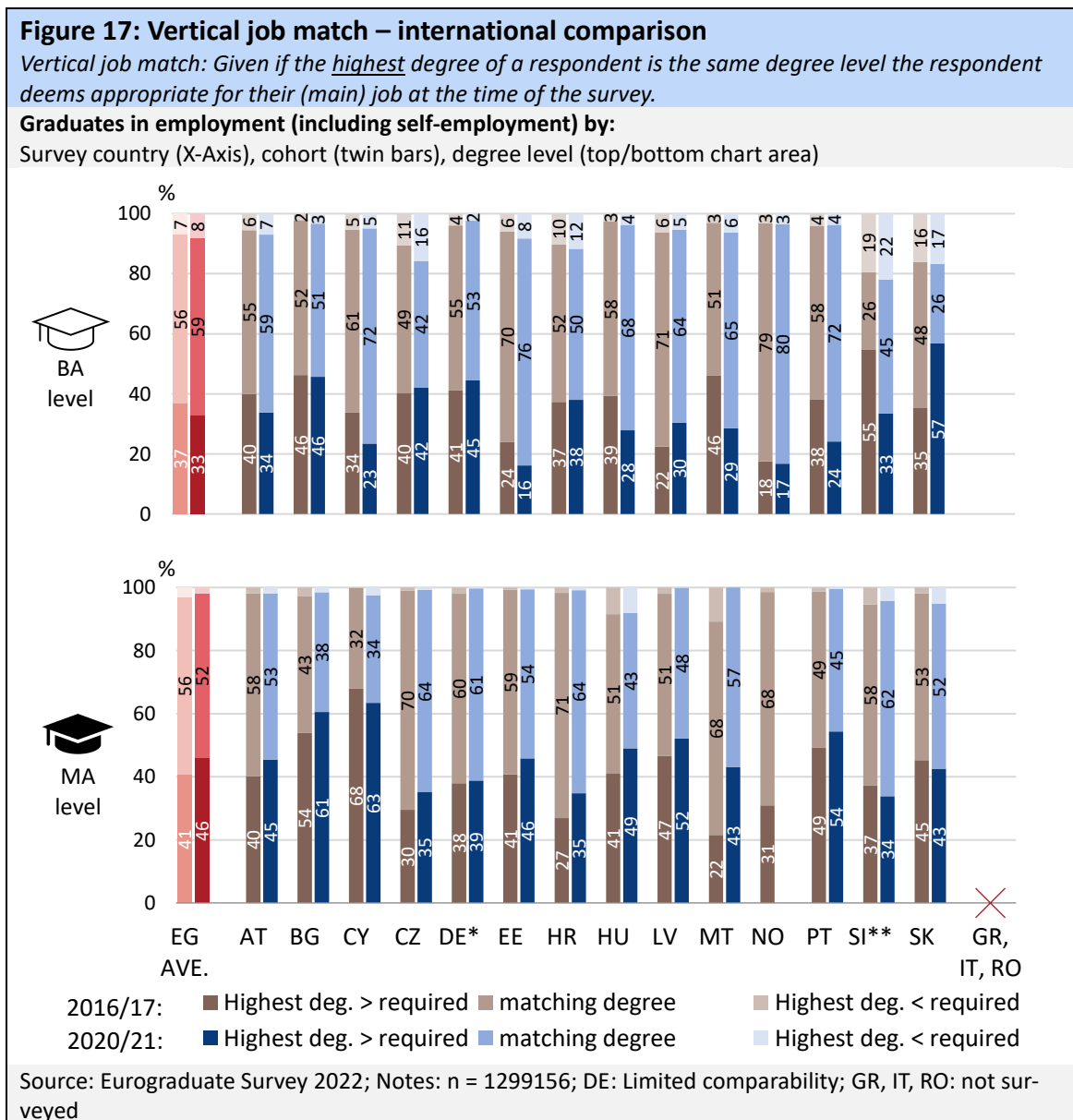
Gender equality in job satisfaction is notable, with both male and female graduates reporting similar satisfaction levels, reflecting an equitable job market in Estonia. The data also shows a stable satisfaction rate from the 2016/17 to the 2020/21 cohorts, indicating that recent shifts in the job market or educational policies have not negatively impacted graduates' job satisfaction.

Furthermore, job satisfaction tends to increase with age, especially for individuals 35 and older, who report slightly higher satisfaction scores. This may reflect a better alignment of job expectations with reality over time or a more positive perception of career advancement.

Overall, the findings demonstrate that Estonian graduates enjoy high job satisfaction, consistent across different educational backgrounds, fields of study, and demographic groups. The enduring satisfaction over time highlights the effectiveness of Estonia's educational system and labour market in meeting or exceeding graduates' expectations for fulfilling employment.

2.4 Education-employment match (vertical)

The vertical job match data for European graduates reveals an exciting pattern of educational alignment with job market demands (Figure 17).

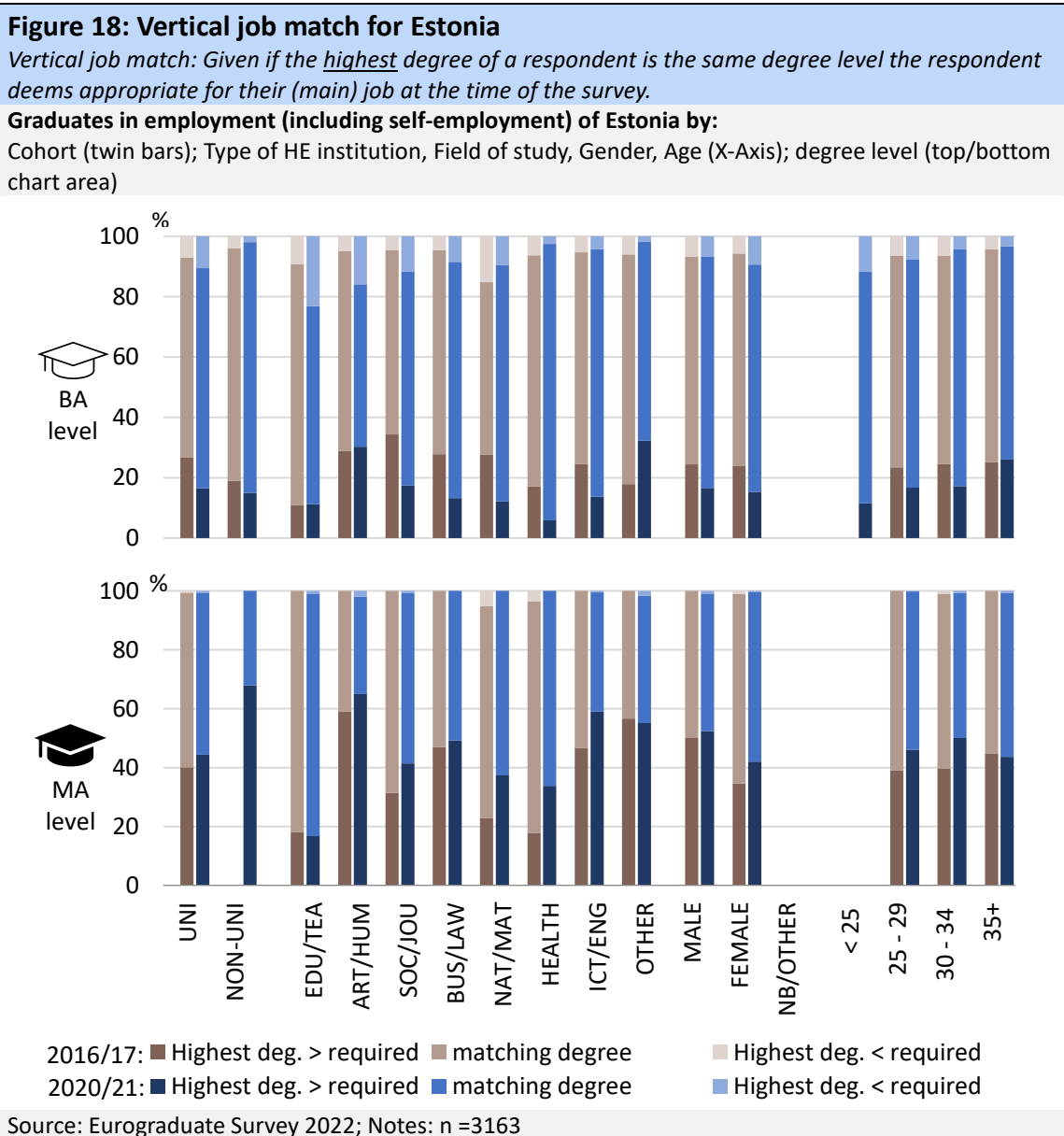


Master's degree holders in Europe mostly report a solid alignment between their

qualifications and job roles. This positive correlation between higher education and employment is a testament to the effectiveness of Europe's higher education system.

Estonia is an excellent example of this. People with Bachelor's and Master's degrees from Estonia feel their jobs are fit for their current education and do better than the average in Europe.

While Europe's higher education system is generally effective, it's essential to acknowledge that overqualification can be a concern in some countries. This issue, which demands attention, reflects the complex dynamics between education and employment and the need for a balanced approach.



Vertical job matches among Estonian graduates reveal a positive alignment between educational qualifications and labour market requirements (Figure 18). Data from two

cohorts, 2016/17 and 2020/21, indicates that a majority of both Bachelor's (BA) and Master's (MA) degree holders find their level of education appropriate for their current employment roles, suggesting that higher education institutions in Estonia are succeeding in equipping students with relevant qualifications.

The analysis shows stability across cohorts regarding the degree-job match, with no significant differences noted between university and non-university institution graduates. This may indicate a uniform respect for qualifications across different educational institutions within the Estonian job market.

When dissecting the data by field of study, specific disciplines, particularly Education/Teaching and Health, demonstrate a high degree of job match, pointing towards a curriculum closely tailored to professional requirements in these areas. Conversely, fields such as Art/Hum and ICT/Engineering, especially at the MA level, exhibit a higher incidence of graduates feeling overqualified for their roles, which could suggest either a highly competitive job market or an opportunity to reassess the balance between academic rigor and practical application in these programs. Gender comparisons show equitable degree-job alignment for males, females, and individuals of non-binary or other gender identifications.

In conclusion, the vertical job match for Estonian graduates is generally high, indicating the effectiveness of the country's higher education system in preparing students for employment. However, compared to MA and BA, we see that BA evaluates its degree more aligned with the job than MA. The consistent job match over time and across different education types is commendable. However, overqualified individuals in specific sectors suggest room for enhancing career guidance and adjusting academic programs to align more closely with the evolving needs of the Estonian labor market.

3 Mobility after Graduation

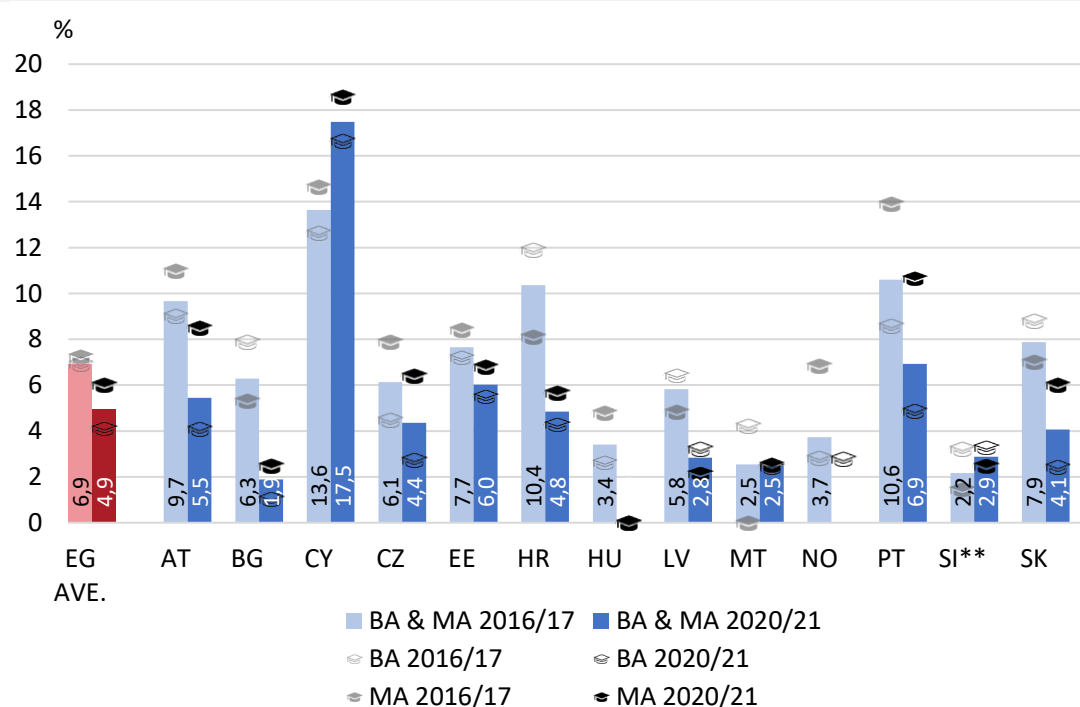
The international mobility data for European graduates paints a diverse picture of post-graduation migration patterns (Figure 19). The average of two survey years shows that, 5.9% of European graduates move abroad, which serves as a benchmark for individual countries' mobility rates.

Figure 19: International mobility of graduates after graduation – international comparison

International mobility: Graduates who lived in the survey country during their reference programme and in another country when they answered the survey, as proportion of all graduates.

All graduates by:

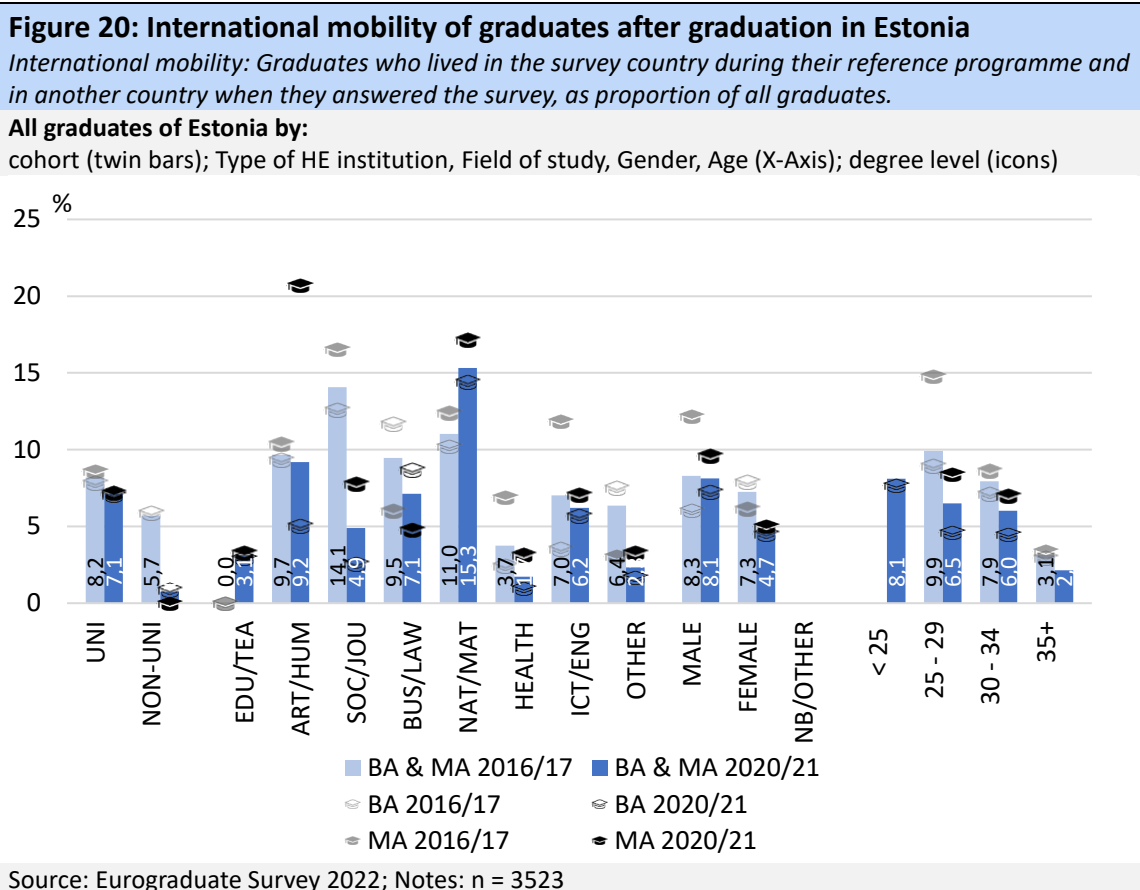
Survey country (X-Axis), cohort (twin bars), degree level (icons)



Source: Eurograduate Survey 2022; Notes: n = 1805765 ; DE,GR,IT,RO: not surveyed

With a mobility rate of around 7%, Estonia surpasses the European average, indicating a relatively higher propensity among Estonian graduates to relocate internationally. This rate suggests that Estonian higher education may equate graduates with skills attractive in the broader European job market or that Estonian graduates have a greater inclination for international experiences.

This analysis, including the comparison with Estonia, reflects the varying degrees of economic integration and the attractiveness of domestic opportunities within Europe. Estonian graduates' higher mobility could indicate the country's success in fostering a globally competitive workforce and the personal aspirations of its graduates to expand their horizons. Also, the data show significant differences between the 2 cohorts, which may be the lasting effect of COVID-19.



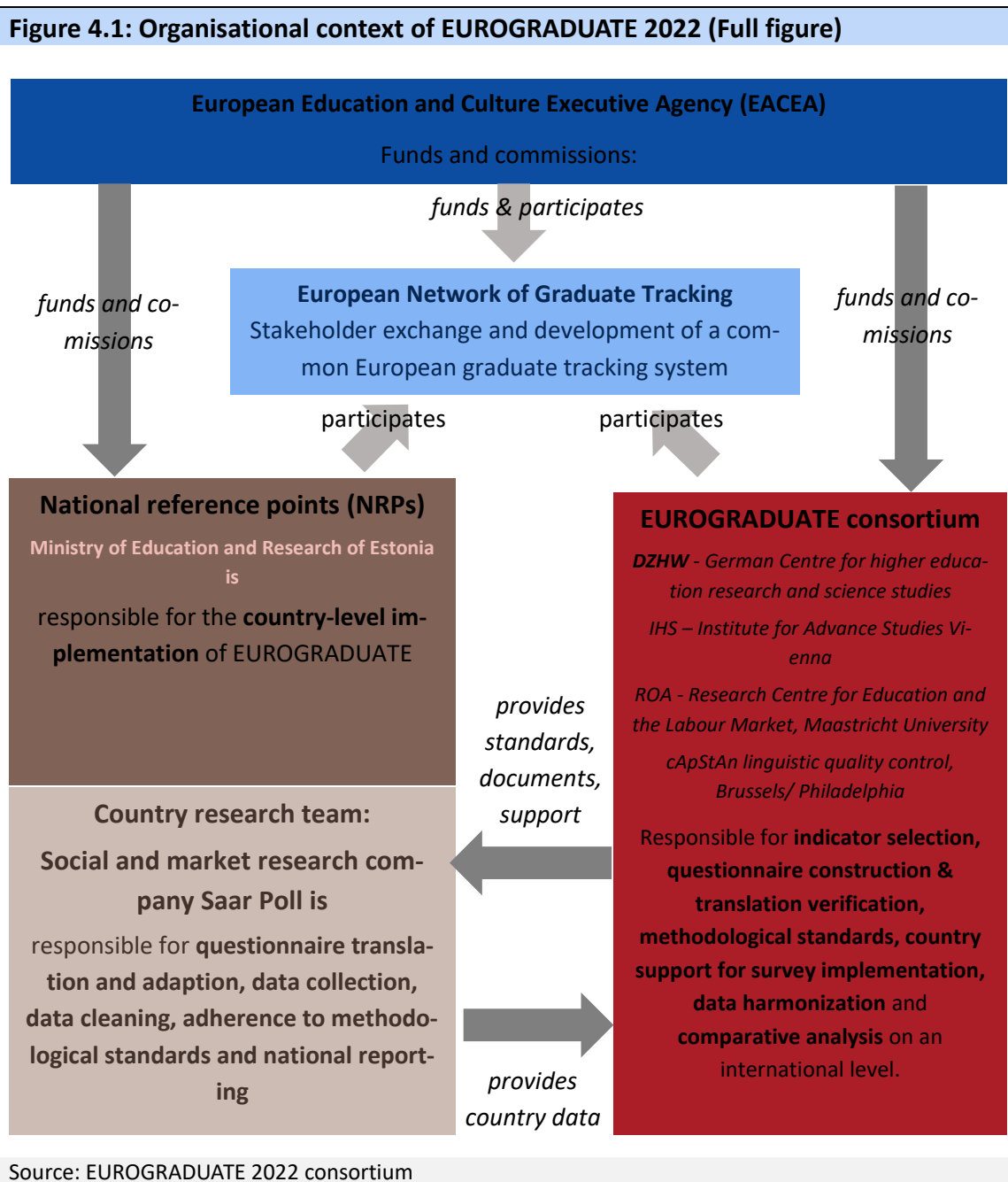
Looking closely at the Estonian case, the data on Estonian graduates' shows that graduates from the Arts/Humanities, Social Sciences/Journalism, and Natural Sciences/Mathematics show higher international mobility (figure 20). This could reflect the globalized nature of these sectors or a search for diverse cultural experiences. On the other hand, graduates from education and health professions travel less, which may be due to the specific training of their disciplines and their high suitability for the Estonian labour market. Additionally, the results may reflect peculiarities of the labor market; for example, there is a significant shortage of educational and healthcare workers in Estonia, ensuring ample job opportunities for them.

Interestingly, university graduates tend to relocate internationally more than their non-university counterparts, with approximately 8.2% of the 2016/17 cohort moving abroad. Gender does not appear to be a significant factor in mobility, as both male and female graduates show similar patterns. Age is a determining factor; younger people are more mobile, and the 35+ age group shows less interest in traveling.

Additionally, Master's degree holders show a marginally higher rate of mobility than those with a Bachelor's degree, implying that advanced degrees may offer better or more opportunities abroad. Across the two surveyed cohorts, international mobility rates have remained relatively consistent, indicating stable influences driving Estonian graduates to pursue careers abroad.

4 Appendix

4.1 Organisational context of EUROGRADUATE – extended



4.2 Fields of study: Correspondence of dataset categories, report categories, and ISCED fields

Report categories (8-cat)	EG Field of study (survey categories)	Corresponds to ISCED fields
OTH - Other	0 Generic and unknown	00; UNK
EDU/TEA - Education and Teacher Training	1 Education Science	0110, 0111, 0119, 018
	2 Teacher Training	0112, 0113, 0114
ART/HUM - Arts, Humanities, Languages	3 Arts	021
	4 Humanities	020, 022, 028, 029
	5 Languages	023
SOC/JOU - Social Sciences, Journalism, Psychology	6 Social sciences, journalism and information	0310, 0311, 0312, 0314, 0319, 032, 038, 039
	7 Psychology	0313
BUS/LAW - Business, administration, law	8 Business and administration	040, 041, 048, 049
	9 Law	042
NAT/MAT - Natural sciences, mathematics, statistics	10 Natural sciences, mathematics and statistics	05
ICT/ENG - ICT and Engineering	11 ICT	06
	12 Engineering, manufacturing and construction	070, 071, 072, 073, 0, 0732, 078, 079
	13 Architecture and town planning	0731
OTH - Other	14 Agriculture, forestry, fisheries and veterinary	08
HEALTH - Health	15 Medicine, Dental Studies	0911, 0912
	16 Health	0910, 0913, 0914, 0915, 0917, 0919, 098, 099
	17 Pharmacy	0916
	18 Welfare	092
OTH - Other	19 Services	10

4.3 Survey methodology and response details for EG countries

	valid responses 2016/17 cohort				valid responses 2020/21 cohort				Total valid re-sponses	Invited to survey	net response rate	Sample/census	Contact data source	Field phase start	Field phase end
	ISCED level			Total	ISCED level			Total							
	5	6	7		5	6	7								
AT		2.455	3.008	5.463		3.450	3.520	6.970	12.433	22.000	56,5%	sample	central	10/2022	01/2023
BG		577	751	1.328		946	1.330	2.276	3.604	67.734	5,3%	census	decentral	01/2023	02/2023
CY	24	228	271	523	55	339	493	887	1.410	22.159	6,4%	census	decentral	01/2023	04/2023
CZ		1.624	1.867	3.491		1.980	1.846	3.826	7.317	80.745	9,1%	census	decentral	11/2023	03/2023
DE		453	446	899		2.942	2.824	5.766	6.765	50.586	13,4%	census	central	11/2022	05/2023
EE		907	607	1.514		1.133	876	2.009	3.523	18.725	18,8%	sample	central	11/2022	12/2022
GR		1.045	867	1.912		5.543	2.127	7.670	9.582	83.731	11,4%	census	decentral	11/2022	02/2023
HR		-	-	-		-	-	-	7995	57.370	13,9%	census	--	12/2022	02/2023
HU		1.749	1.062	2.811		2.351	1.633	3.984	6.795	94.891	7,2%	census	central	11/2022	12/2022
IT		5.177	64.225	69.402		1.562	1.778	3.340	72.742	~112600	~65%	census	central	11/2022	02/2023
LV		356	255	611		523	320	843	1.454	19.347	8,0%	sample	central	01/2023	05/2023
MT		-	-	-		-	-	-	-		5,0%	census	--	03/2023	05/2023
NO		1.457	1.745	3.202		1.662	-	1.662	4.864	24.343	20,0%	sample	central	12/2022	02/2022
PT	220	4.450	2.782	7.452	451	6.446	3.313	10.210	17.662	138.390	12,8%	census	decentral	11/2022	03/2023
RO		332	209	541		610	394	1.004	1.545	149.069	1,0%	census	central	11/2022	04/2023
SI	599	798	1084	2481	659	899	804	2362	4.843		9,0%	census	central	05/2023	07/2023
SK		543	1.058	1.601		555	1.203	1.758	3.359	4.2443	7,9%	Sample	central	11/2022	02/2023