



REPUBLIC OF ESTONIA
MINISTRY OF EDUCATION
AND RESEARCH

Doctoral Studies in Estonia

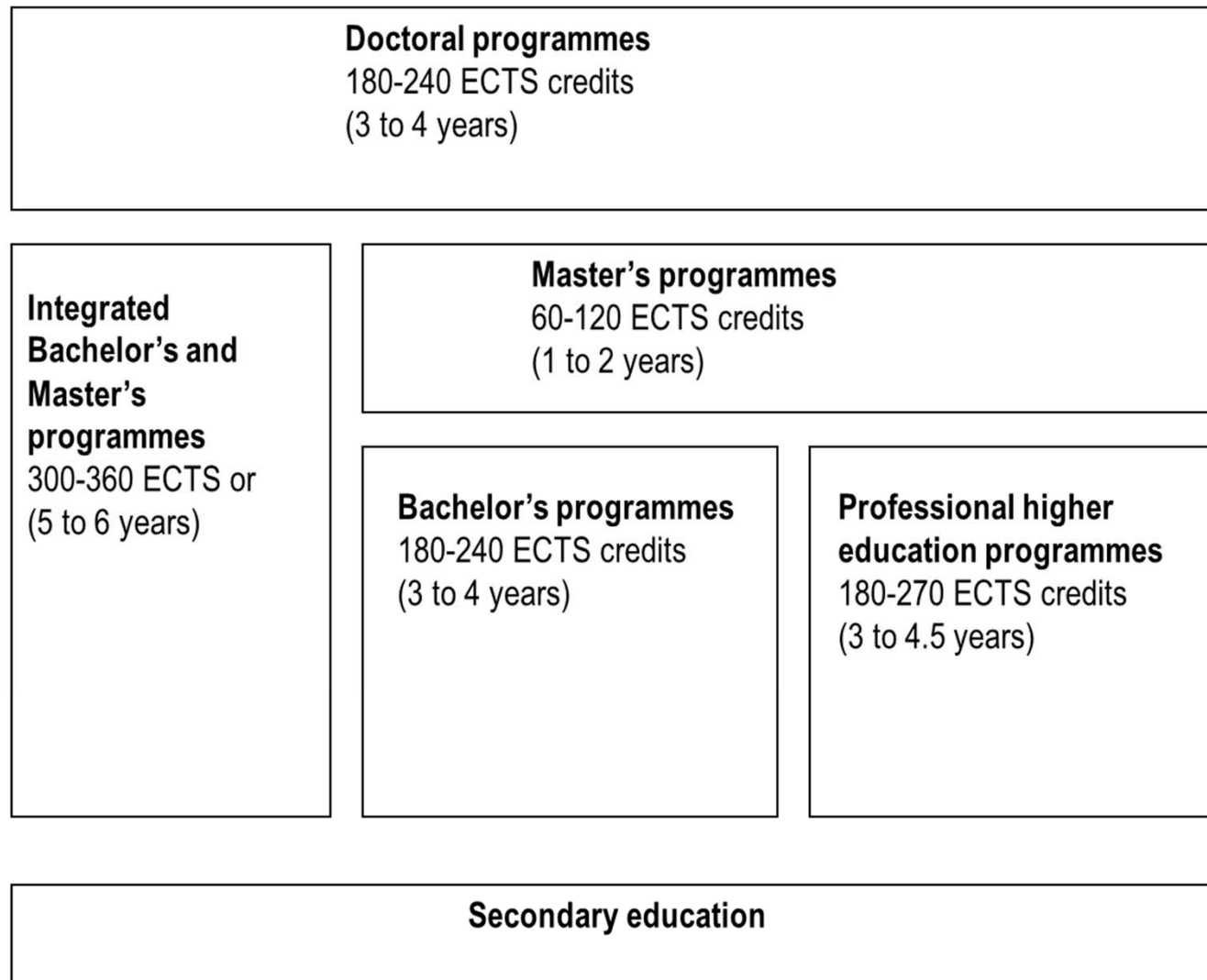
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Estonian higher education system



- **Estonian Lifelong Learning Strategy 2020**
- **RD&I strategy "Knowledge Based Estonia 2014-2020"**
 - ensure new generation of researchers
 - increase the number of doctoral graduates, target: number of new doctorate graduates in an academic year: 300
 - increase of the efficiency of doctoral studies
 - increase the remuneration of young researchers, including social guarantees



Universities' funding model (government sector expenditure)

HE funding (213 mill euro in 2016, 1,01% of GDP):

- HE operational funding = baseline funding + performance funding
- Targeted funding (performance funding for PhD graduates)

R&D funding (127 mill eur in 2016, 0,6% of GDP.):

- Baseline funding (PhD graduates is one of the indicators)
- Research grants

Structural Funds measures (Doctoral Schools, mobility programmes, ASTRA, Centre of Excellences)

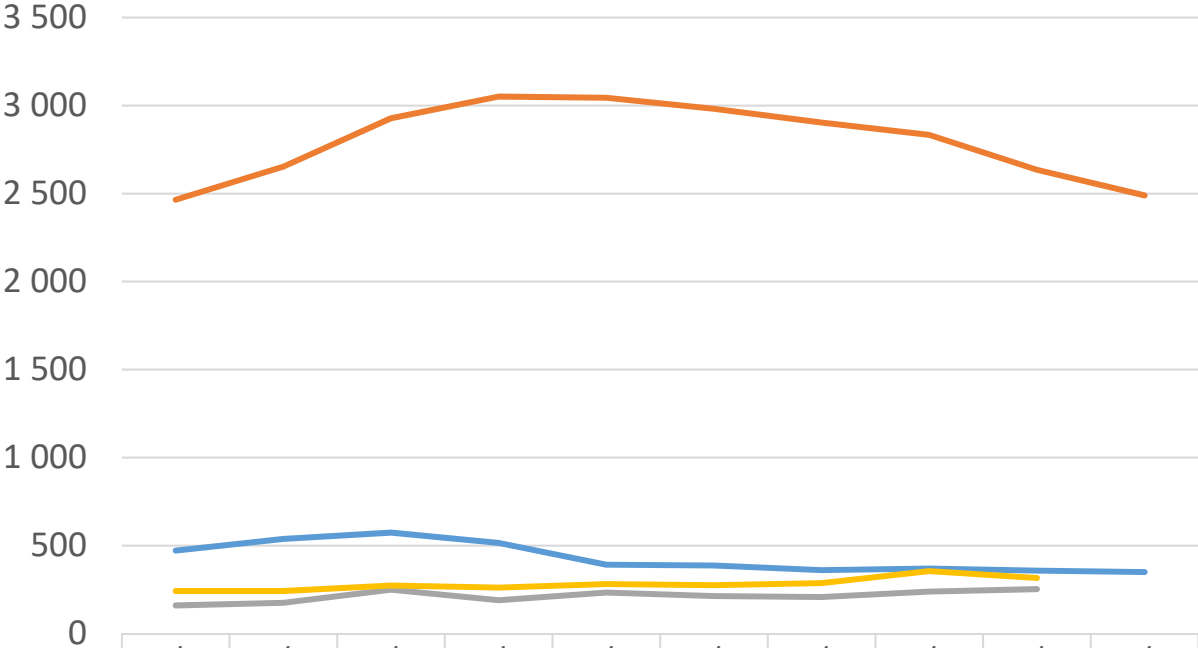


Funding of PhD students

- Tuition fee is rare
- Doctoral allowance 660 euros per month
(including social guarantees since 2015)
- Fellowships to support International mobility
(Kristjan Jaak, DoRa, Doctoral Schools)
- For Industrial PhD additional stipendium 440 euros per month
- Research fellowships from grants
- Salary as early-stage researcher



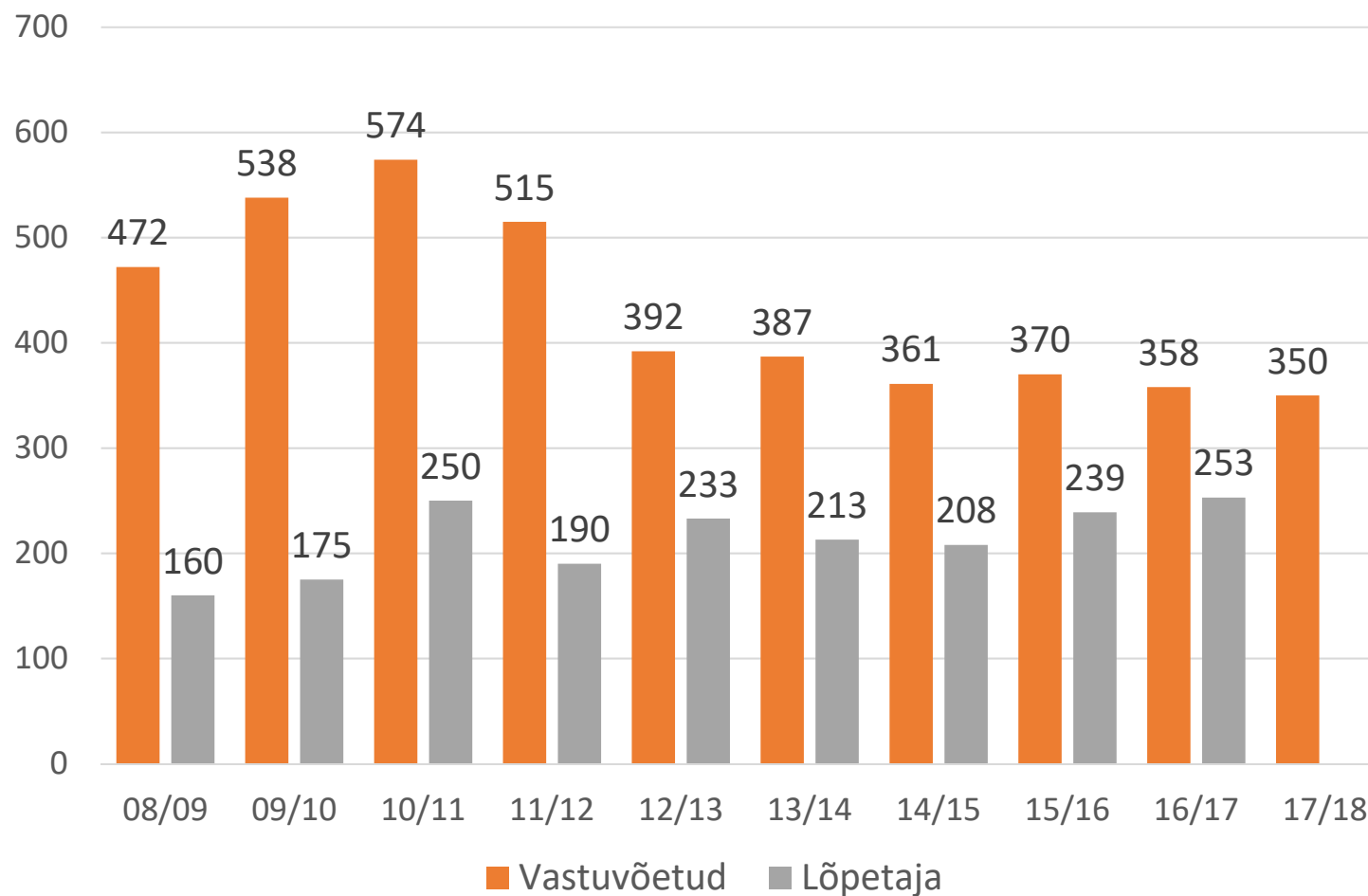
Dynamics in doctoral student numbers



	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18
— Number of admitted students	472	538	574	515	392	387	361	370	358	350
— Number of students	2 465	2 653	2 928	3 051	3 044	2 982	2 903	2 833	2 635	2 490
— Number of graduates	160	175	250	190	233	213	208	239	253	
— Number of interruption cases	242	242	273	262	282	275	287	355	316	



Number of admitted students and number of graduates



Characteristics of doctoral students in Estonia

- They are students in 7 universities
- 90% work in parallel: 35% in full-time, 45% work in the university
- They prefer academic career
- Industrial PhD initiative is there, but not too attractive
- Share of women and men is balanced
- 66% follow traditional linear study progression
- Most study natural sciences, mathematics and statistics and humanities
- In average, it takes them 6 year to graduate
- In average, PhD graduates are 36 year old
- ~17% are international students
- Estonian doctoral students prefer short-term mobility to degree studies

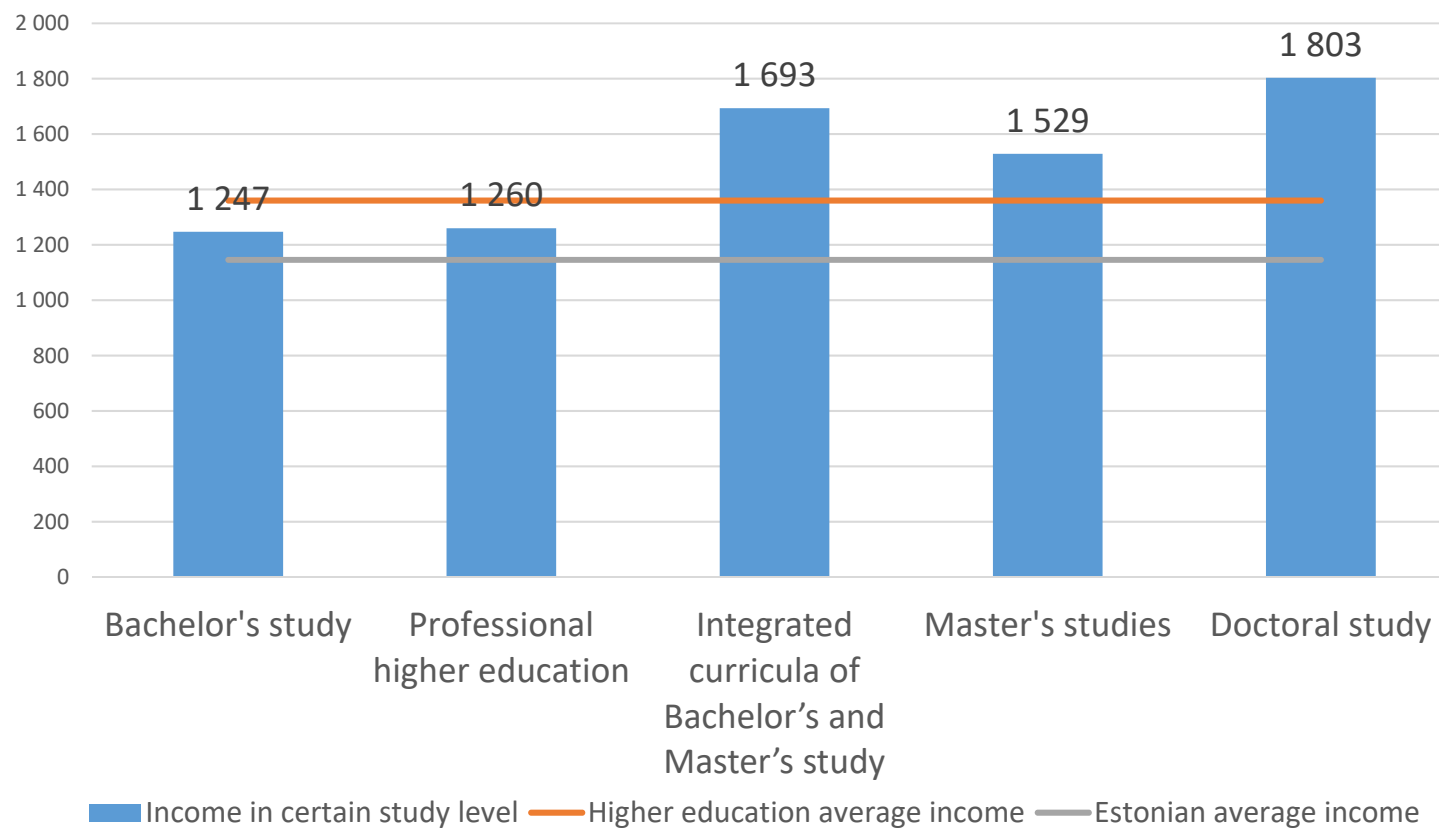


Charecteristics of PhD holders

- ~1% of population over 24 year olds have PhD
- 10-15% of graduates continue with non-academic career
- 60% stay in academia
- ~60% work in higher education sector, 9% in public and 30% in private sector
- ~50% are older than 50 years (~33% older than 65! and ~25% are active in labour market)
- ~20% are non-active, retired or in parental leave
- More men in private sector (32% vs 16%); more women in higher education (69% vs 60%) public sector (13% vs 6%)
- 1% of jobs available in main online job-portals mention PhD, non as it as a mandatory requirement (2017 June); same time 60% jobs offers in the universities require PhD



Average income by level of education



Main result and challenges of the R&D evaluation 2017, quality assessment of PhD study programme groups 2017-2018 and recommendation of the Government's Office' Task Force of R&D and HE 2018

- **The scientific basis is very good**
- **Funding for international mobility** must continue
- Financing of PhD students should be competitive.
Implementation of the **career model** – students vs early-stage researchers?
- **Value of a PhD degree outside the academia and development of entrepreneurship skills.** How to improve Industrial PhD scheme?
- **Doctoral studies efficiency** - inflexibility of requirements regarding publications?
- **Mobility between sectors**
- More attention to the supervisors: training, work load, recognition



References:

- *Statistics Estonia*
- *Reports of R&D evaluation*
<http://www.etag.ee/tegevused/evalveerimine/korraline-evalveerimine/korraline-evalveerimine-2017/>
- *Reports of the quality assesement of PhD study porgramme groups*
<http://ekka.archimedes.ee/hindamisotsused-ja-aruanded-doktoriope/>
- *Studys about researchers career, 2018 (RITA programme), University of Tartu*
<http://tips.ut.ee/img/image/TIPSprapordoktorippetulemuslikkusest27.03.141.pdf>, Academy of Science, Tallinn University (soon availabel)
- *Study about doctoral studies in Estonia, 2014, University of Tartu*
<http://tips.ut.ee/img/image/TIPSprapordoktorippetulemuslikkusest27.03.141.pdf>





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Thanks!

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