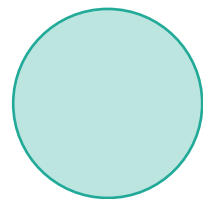
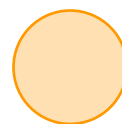


PLACING HSE ON THE GLOBAL UNIVERSITY MAP

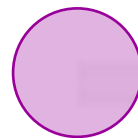
FROM PROLIFERATION TO STRATEGIC BREAKTHROUGHS



5/100
universities total



Fudan
University



Harvard
University



HSE Lab
for Algebraic Geometry



HSE Lab
for Representation Theory

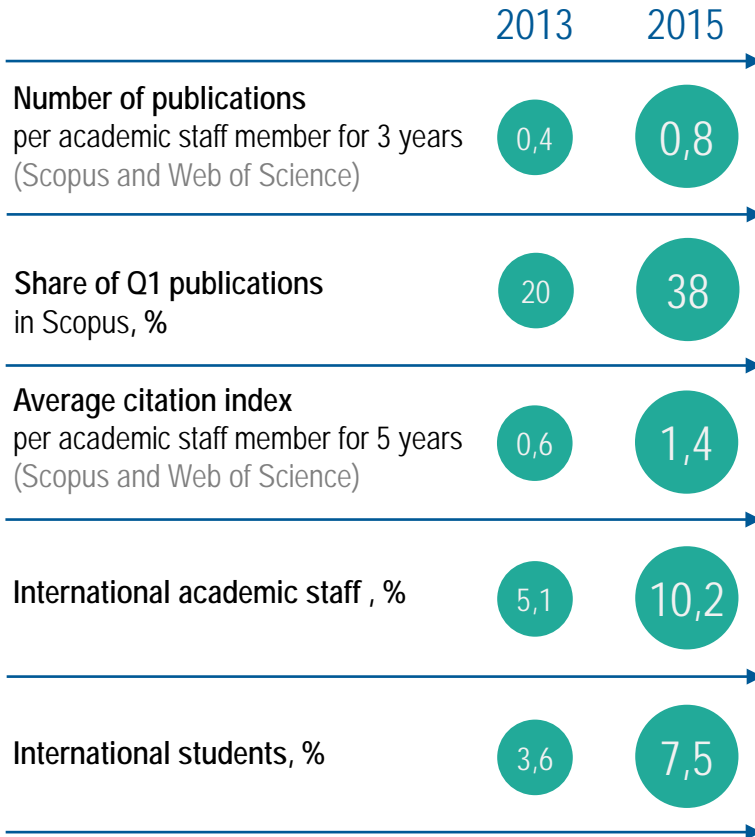


HSE Faculty
of Mathematics



NATIONAL RESEARCH
UNIVERSITY

RAPID GROWTH since the start of 5-100 program



QS rankings by subject, 2015

51-100 Development Studies

151-200 Economics & Econometrics
Sociology
Philosophy

QS rankings by faculty, 2015

161 Social Sciences & Management (since 2014)

289 Arts & Humanities

QS Top Under 50, 2015

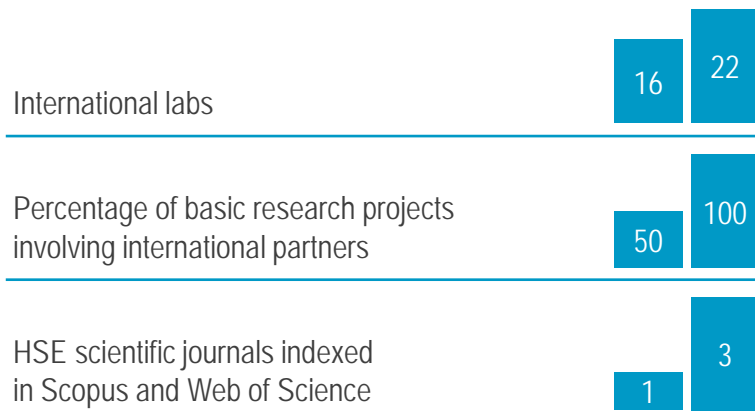
81-90

MAJOR TRANSFORMATIONS

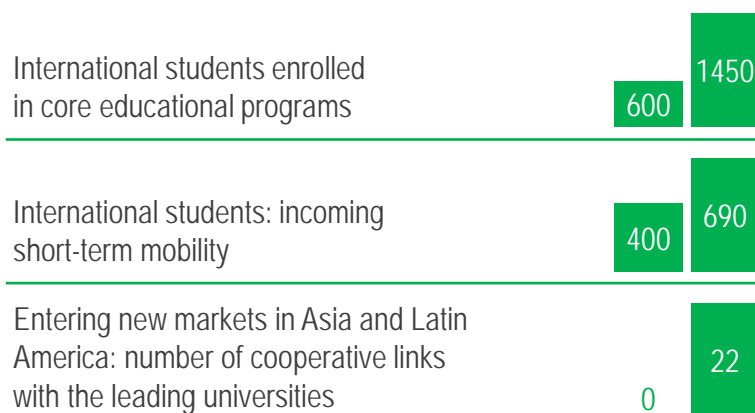


NATIONAL RESEARCH
UNIVERSITY

Integrating research into the global agenda



Expanding into new markets



New educational model



Staff renewal



CHALLENGES: old and new

ACADEMIC

Large gap between national and global academic standards in Social Sciences

HSE focus on Social Sciences and Humanities lacking the same global recognition as Math and Natural Science in Russia

Underdeveloped national academic market does not create sufficient demand for the high-quality HSE graduates

Maintaining healthy balance between research and education (a common problem for Russian research universities)

ECONOMIC

Ruble devaluation negatively affects:

- international recruitment
- academic mobility
- all kinds of international exchanges

HSE revenues are much lower compared to the global competitors

Economic recession reduces revenues obtained from the domestic markets

HSE RESPONSE: updating long-term strategy to meet economic constraints



NATIONAL RESEARCH
UNIVERSITY

2010-2012	2013-2015	2016-2018
ENTERING NEW MARKETS IN RESEARCH AND EDUCATION	UNIVERSITY-WIDE INTEGRATION OF RESEARCH AND EDUCATION	FOCUSING ON STRATEGIC BREAKTHROUGHS

International standards in areas of research and education that were underdeveloped in Russia

Excellence-targeting recruitment, merit-based compensation and promotion system

Establishing large multidisciplinary faculties

Participatory governance model based on shared academic governance

Focusing on research and education areas in which HSE is able to achieve global competitive advantages

Concentration of major resources in these research and education areas

STRATEGIC ACADEMIC UNITS

First type (STRA-Us I)

Created on the basis of mega-faculties and associated research units

Key areas in research and education, in which HSE occupies leading positions in Russia and receives international recognition

Implement large globally oriented Bachelor's, Master's, and PhD programs

Facilitate multidisciplinary linkages in research and education

Number of students per one STRA-U:

- Undergraduate programs – ranging from 1,250 to 4,550
- Master & PhD programs – ranging from 400 to 1,850

Second type (STRA-Us II)

Created on the basis of centers of excellence and produce world class research

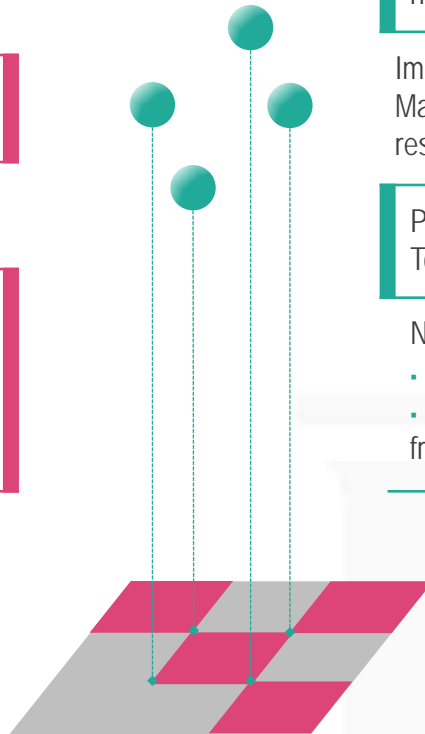
Promising interdisciplinary areas – new points of growth

Implement more specialized globally oriented Master's and PhD programs with an extensive research component

Provide research-based policy advice
To National authorities

Number of students per one STRA-U:

- Undergraduate programs – n/a
- Master & PhD programs – ranging from 70 to 550



INTEGRATIVE UNITS / CONSORTIA: STRA-US I

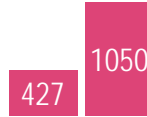


Economics and Management

2015 2020

Centers of excellence in partnership with leading international universities: political economics and institutional transformations, financial economics, theory of markets, business models for companies working in developing markets

International students



Leading analytical center for economic reforms affiliated with the Russian government

Average USE score



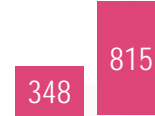
24 double degree programs in economics providing high quality graduates for the Russian economy; EPAS international accreditation of management programs

Challenges for Social Development

2015 2020

Global agenda: elites reproduction, political influence of states and groups of states, social and political destabilization, migration processes, factors of poverty and inequality

Publications indexed in Scopus



Real time data collection and social policy analysis for the Russian Federation public administration

Normalized impact factor for Scopus indexed journals



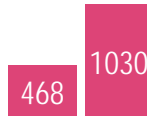
Integrated Master's-PhD educational track with HSE awarding its own academic degrees

Mathematics, Computer Science and IT

2015 2020

Centers of excellence in algebraic geometry, mathematical physics, data analysis, mathematical and computer-based modeling

Publications indexed in WoS



Building international partnerships in the high potential interdisciplinary areas: bioinformatics and medical informatics, mathematical neurology, mathematical modeling in social sciences and humanities

Contribution to publication and citation index



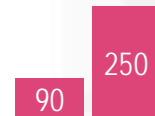
Educational model: faculty-research and study labs – academic institutes – high tech companies

Integrated Humanities Schools 'Humanus'

2015 2020

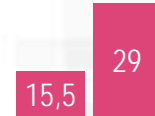
Centers of excellence: linguistic digital technologies, linguistic and cultural transformations

International students



Center of international communications for cultural and humanitarian transformations in Russia

% of academic staff holding PhD



MOOCS in humanities on international online platforms

INTERDISCIPLINARY CENTERS OF EXCELLENCE: STRA-Us II



Foresight and Science, Technology and Innovation Studies

	2015	2020
World class center of excellence in the area of measurement, foresight and policy design in science, technology and innovation, in cooperation with international network of leading global foresight centers	96	225
Leader in the area of foresight, innovation studies and economics of knowledge in Russia	84	95
Unique English-taught Master's program with extensive research component		

Cognitive Neuroscience: From Computational Models to Neurotechnology

	2015	2020
Key projects related to global agenda: neurotechnology for regeneration and enhancement of human brain resources based on integration of neurosciences and computational sciences	2,9	6,3
First national platform for interdisciplinary research of human behavior		
Interdisciplinary English-taught Master's and doctoral program in neurobiotechnology		1,3 →

Education and Human Development in the Changing World

	2015	2020
The first in Russia Center of Excellence on global education and human development; international comparative research in cooperation with research centers from the USA, Europe, and BRIC countries	13	26
Assessment of reforms and innovations in education in Russia		
Inter- and cross-disciplinary graduate programs in psychology, politics, sociology and economics of education	5	72

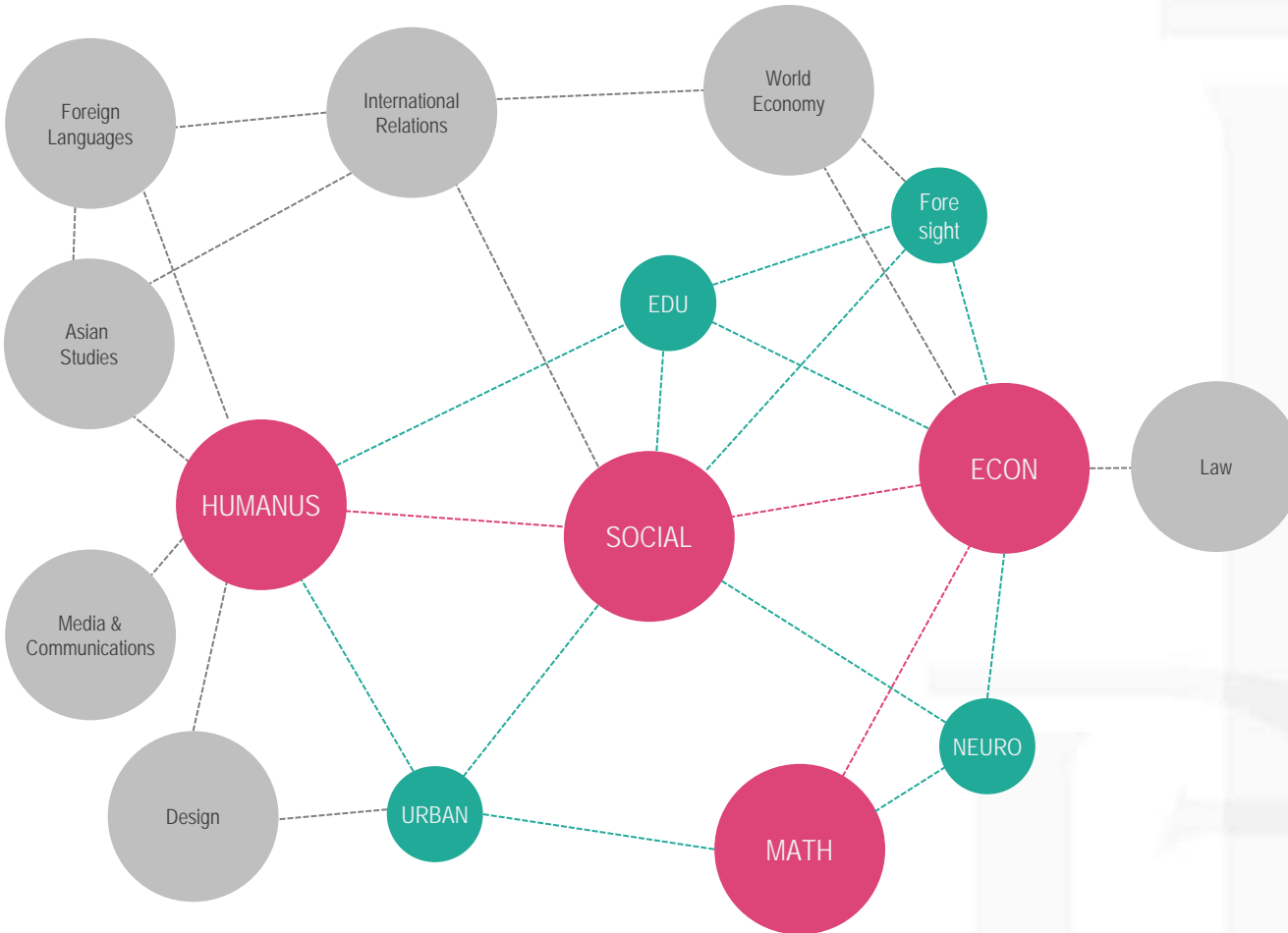
Urban and Transportation Policy in Digital Age

	2015	2020
International center for experimental urbanism that re-formulates urban planning for digital age	20	55
Supporting national projects in urban development and transportation policy		
International Master's programs in urban studies, urban and transport planning	3	36

MAPPING THE STRA-Us



NATIONAL RESEARCH UNIVERSITY



STRA-Us I CONSORTIA

- >ECON< ECONOMICS AND MANAGEMENT>
- >SOCIAL< CHALLENGES FOR SOCIAL DEVELOPMENT >
- >MATH< MATHEMATICS, COMPUTER SCIENCE AND IT>
- >HUMANUS< INTEGRATED HUMANITIES SCHOOLS 'HUMANUS'>

STRA-Us II EXCELLENCE CENTERS

- >Foresight< FORESIGHT AND SCIENCE, TECHNOLOGY AND INNOVATION STUDIES>
- >NEURO< COGNITIVE NEUROSCIENCE: FROM COMPUTATIONAL MODELS TO NEUROTECHNOLOGY>
- >EDU< EDUCATION AND HUMAN DEVELOPMENT>
- >URBAN< URBAN STUDIES AND TRANSPORTATION POLICIES>

○ [OTHER UNITS]

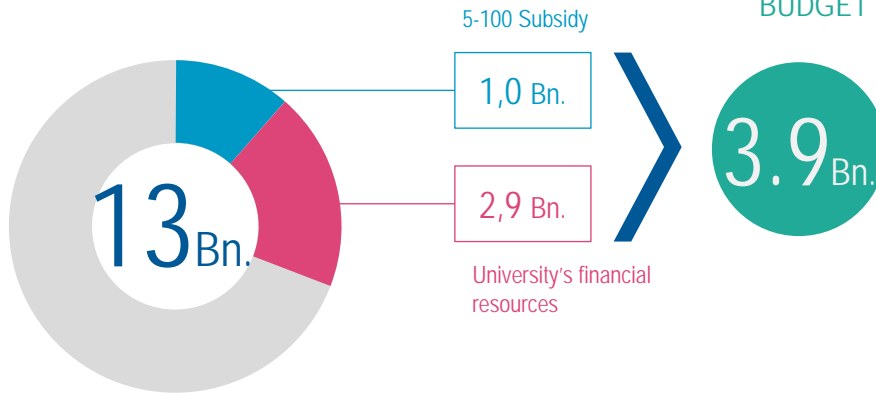
Share of academic staff attributed to STRA-Us **66%**

Share of students attributed to STRA-Us **72%**

MAINTAINING FINANCIAL SUSTAINABILITY

HSE operating budget* 2015	13 Bn. Rubles (45% growth since 2012)	Necessary growth* by 2020	At least 30% up to 17 Bn. Rubles p.a.
Extra resources to obtain within 5 years		14 Bn. Rubles cumulative	

UNIVERSITY'S INCOME



DEVELOPMENT BUDGET

RUBLE DEVALUATION EFFECT
= 1,4 Bn. Rubles deficit

COVERING THE DEFICIT

- Current income growth – conservative scenario
- Concentrating resources in key areas or research and education
- Capitalizing on intellectual resources (future MOOC market)
- Faculty and staff: higher quality but limited or “0” growth in number
- Operational improvements
- Investing into cost-efficient programs

Income growth**
2015 / 2020
(Bn. Rubles)

Education	8,5 / 12,3 – by 45%
Research	2,65 / 3,2 – by 20%
Donations	0,27 / 0,4 – by 50%
Other revenues	1,7 / 1,7
TOTAL	13,1 / 17,6

Non-budgetary income share	Increase from 38% to 42%
----------------------------	--------------------------

Conclusion:

HSE maintains financial sustainability, while the amount of 5-100 subsidy allocated to the University remains the same

* Exclude state capital investments

** Conservative, given current economic constrains

ACADEMIC SUSTAINABILITY: Response to Challenges



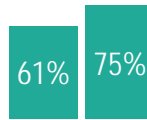
Academic staff sustainability builds upon HSE staff development model: the University cultivates young researchers affiliated with global academic networks

Gradual replacement of experienced but oriented on national market professors with younger and globally oriented scholars

Example

2015 2020

International Laboratory of Representation Theory and Mathematical Physics :
Publications with young scholars' participation, %

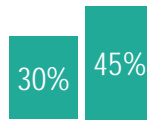


Expanding HSE grant support to finance academic mobility and field and lab research

Example

2015 2020

Supporting mobility of academic staff, %

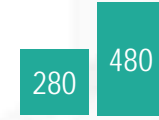


Mitigating brain drain risk (foreign universities offer much more lucrative conditions) – young researchers with high potential can join teams working on well-funded applied research projects, which will bring their income level closer to their expectations

Example

2015 2020

Median income of lead researcher under 35 years of age (at research institute), thousand rubles monthly



Individual grant support for young researchers

Example

2015 2020

Academic staff under 40 years of age receiving the university research grants, %

