

## Preparing for the Impact of Megatrends on International Education

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#### Studyportals

Founded in 2009, Studyportals' global team of 200 people is making education choice transparent and helping international students and institutions connect through digital platforms.



Rahul Choudaha, Ph.D.

A San Francisco-based scholarpractitioner with over a decade of
experience in advising,
presenting and publishing on
data-informed, future-oriented
internationalization strategies
and student mobility, choices,
and experiences.







### "Things we should be talking about in International Education"

• "Our sector casts a long shadow and there may be other things we should be talking about...our culling of the top economic strata from the global South's burgeoning middle classes (our emerging markets) to **fill our classrooms**, **quotas and coffers**; our wilful ignorance of the **demography** and **elitism** of study abroad, building programs and pedestals for the **1%** to springboard their careers." -- BCCIE Summer Conference Theme

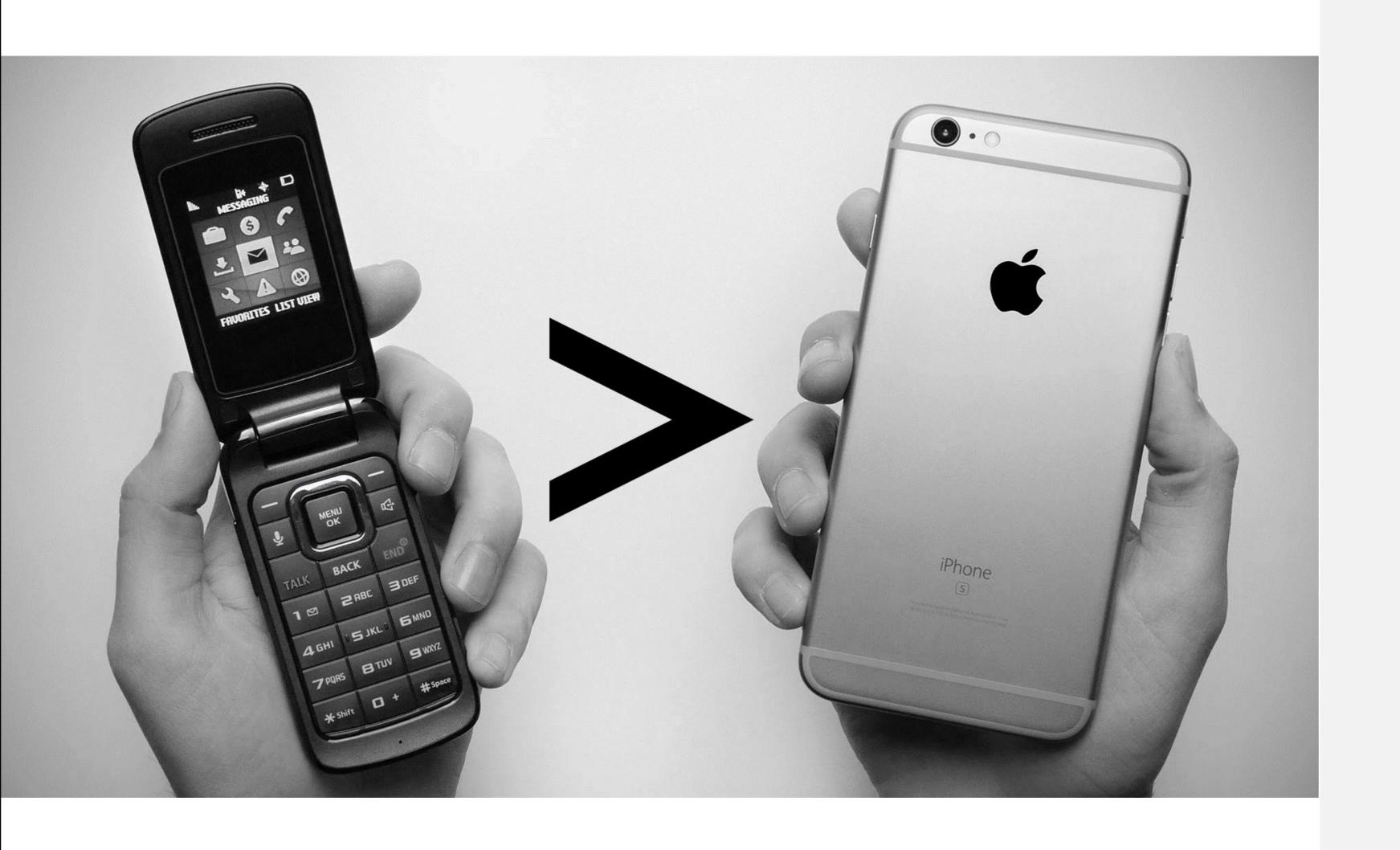




## Megatrends affecting the world around us <a href="http://bit.ly/Megatrends2030">http://bit.ly/Megatrends2030</a>



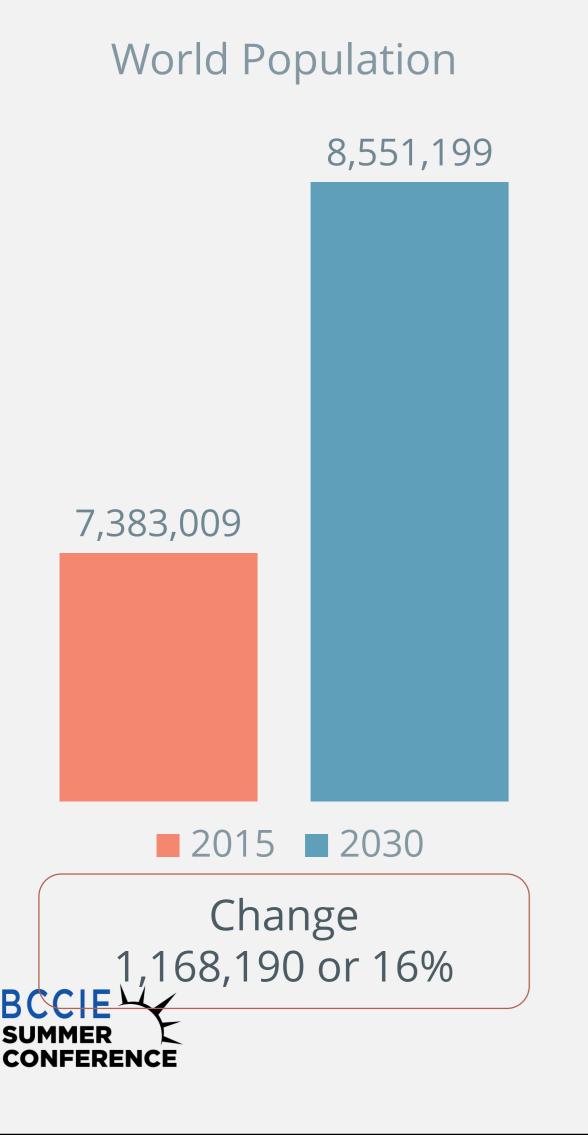


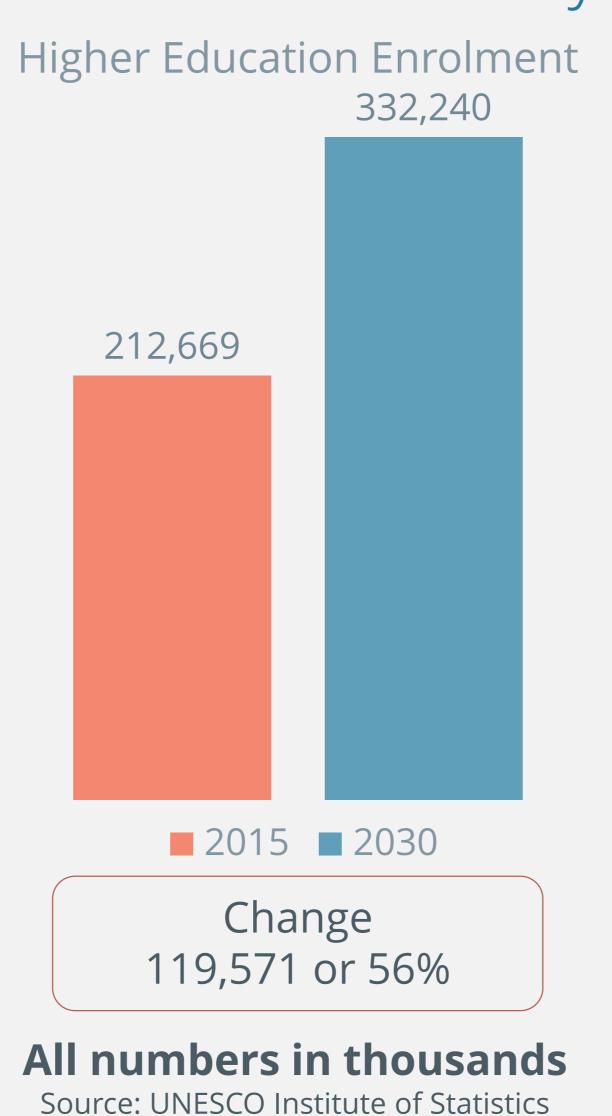


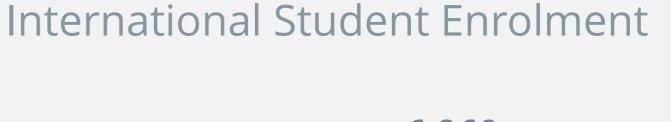
Megatrend:
 a long-term,
 transformation
 al process with
 global reach,
 broad scope,
 and a dramatic
 impact (John Naisbitt, 1982)

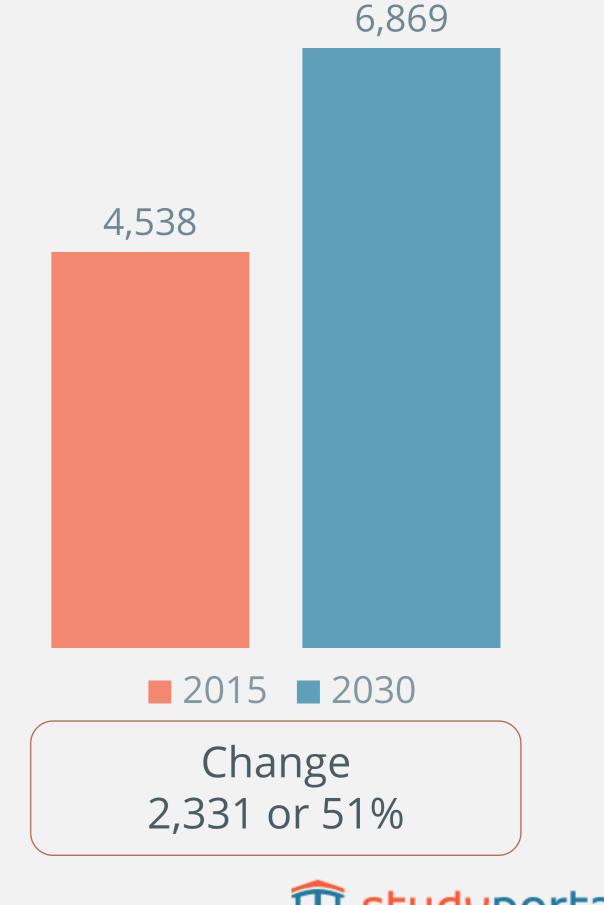


## By 2030, an estimated increase of nearly 120 million students in higher education and 2.3 million internationally mobile students











### 8 Megatrends

Envisioning pathways to 2030: Megatrends shaping the future of global higher education and international student mobility. <a href="http://bit.ly/Megatrends2030">http://bit.ly/Megatrends2030</a>

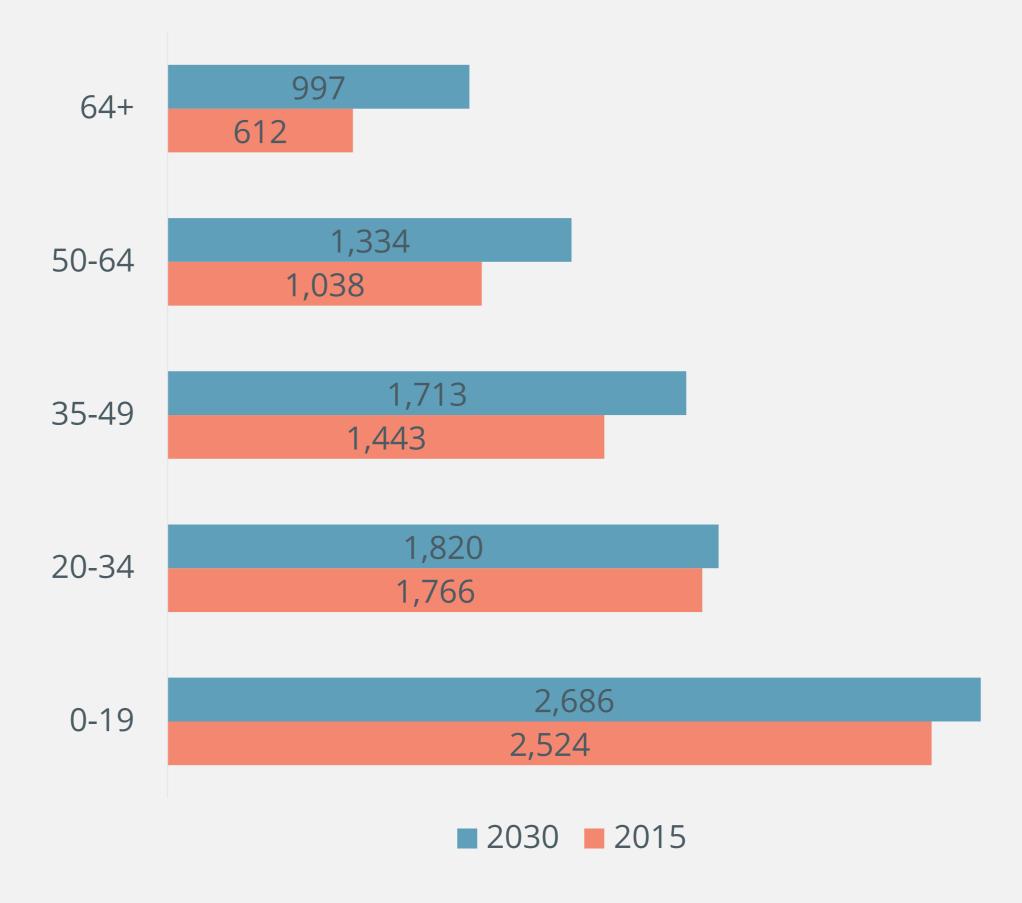
- Aging world: finding new opportunities of education and employment
- Labour market shifts: increasing automation to affect global workforce
- Skills mismatch: gap between what employers demand vs. what education provides
- Rapid urbanisation: shift towards cities in search of jobs and career advancement
- Stricter immigration policies: more barriers for mobility to high-income destinations.
- Economic shifts: dependence on emerging markets for economic growth.
- Capacity imbalance: demand in emerging economies vs. supply in developed economies
- Budget pressures: higher education is facing decline in public funding





# Aging world: finding new opportunities of education and employment

• Eighty-two percent of growth in population between 2015-2030 will be driven by people aged 35 and over





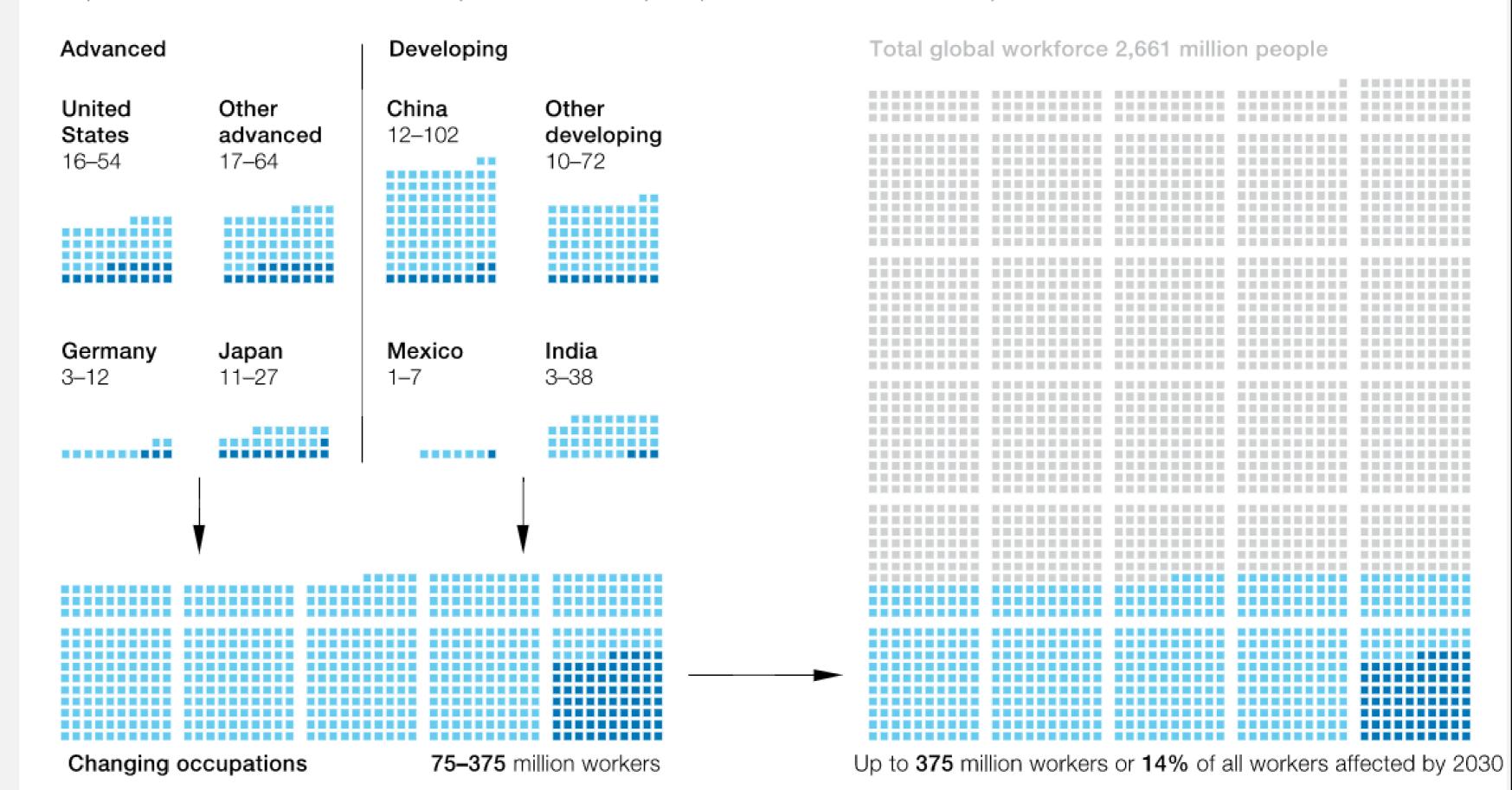


Labour market shifts: increasing automation to affect global workforce

Globally, up to 375 million workers may need to switch occupational categories.

Number of workers needing to move out of current occupational category to go find work, 2016-30 (trendline scenario)1

Midpoint automation
 Additional from rapid automation adoption (each block = 1 million workers)



<sup>1</sup> Some occupational data projected into 2016 baseline from latest available 2014 data.

McKinsey&Company | Source: US Bureau of Labor Statistics; McKinsey Global Institute analysis





Skills mismatch:
gap between
what employers
demand vs. what
education
provides

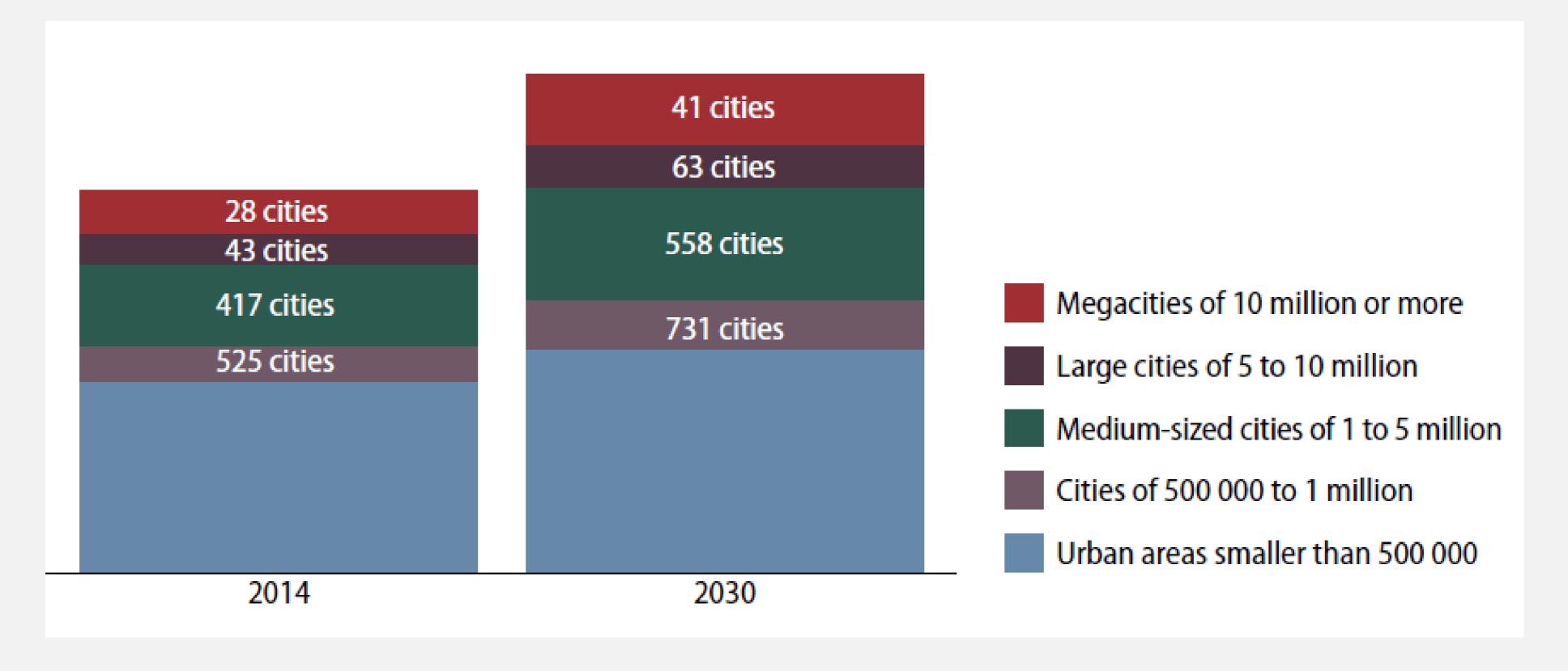
## 

people are currently in jobs where the future of their career, profession, or industry is uncertain





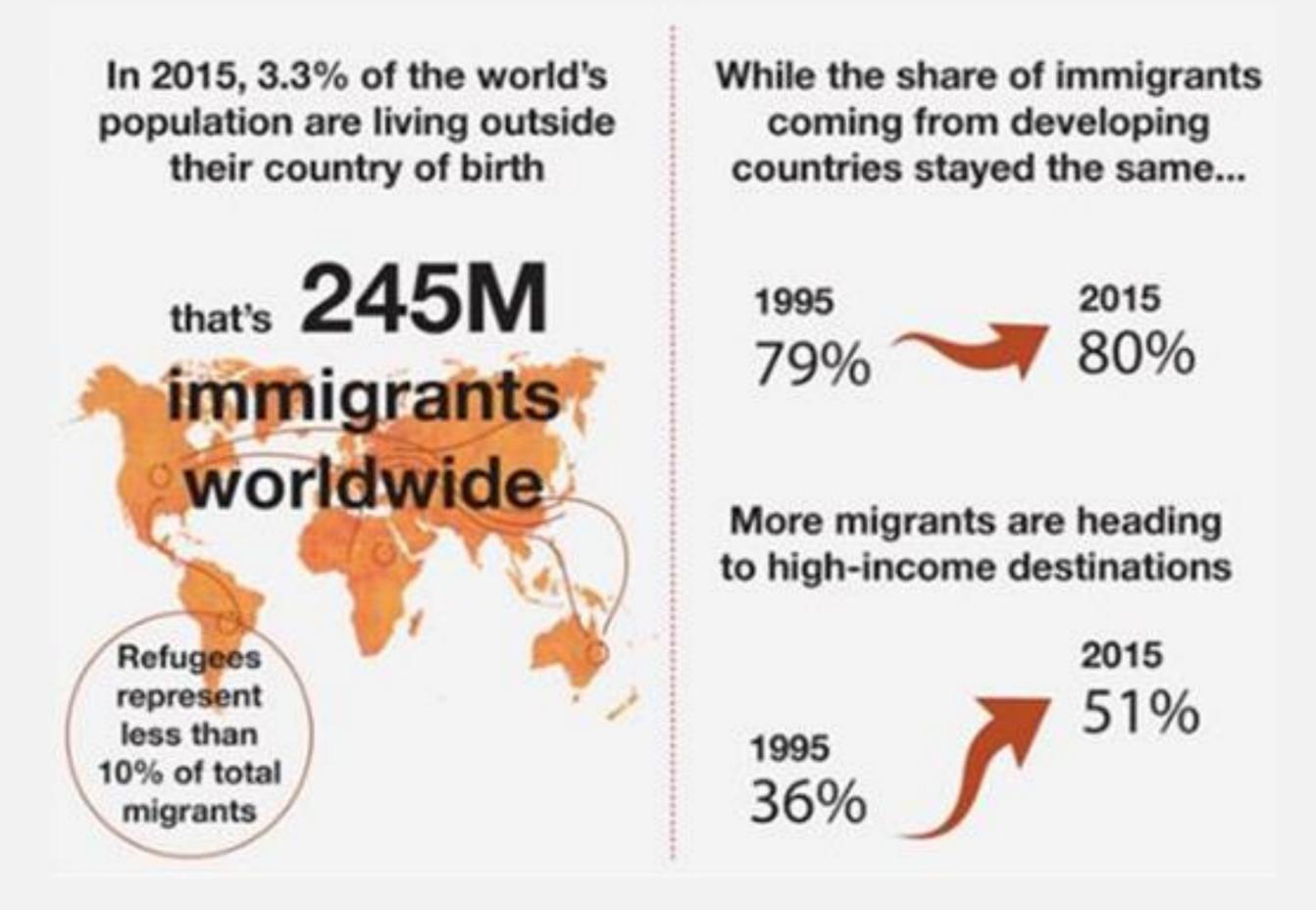
### Rapid urbanisation: demographic shift towards cities in search of jobs and career advancement







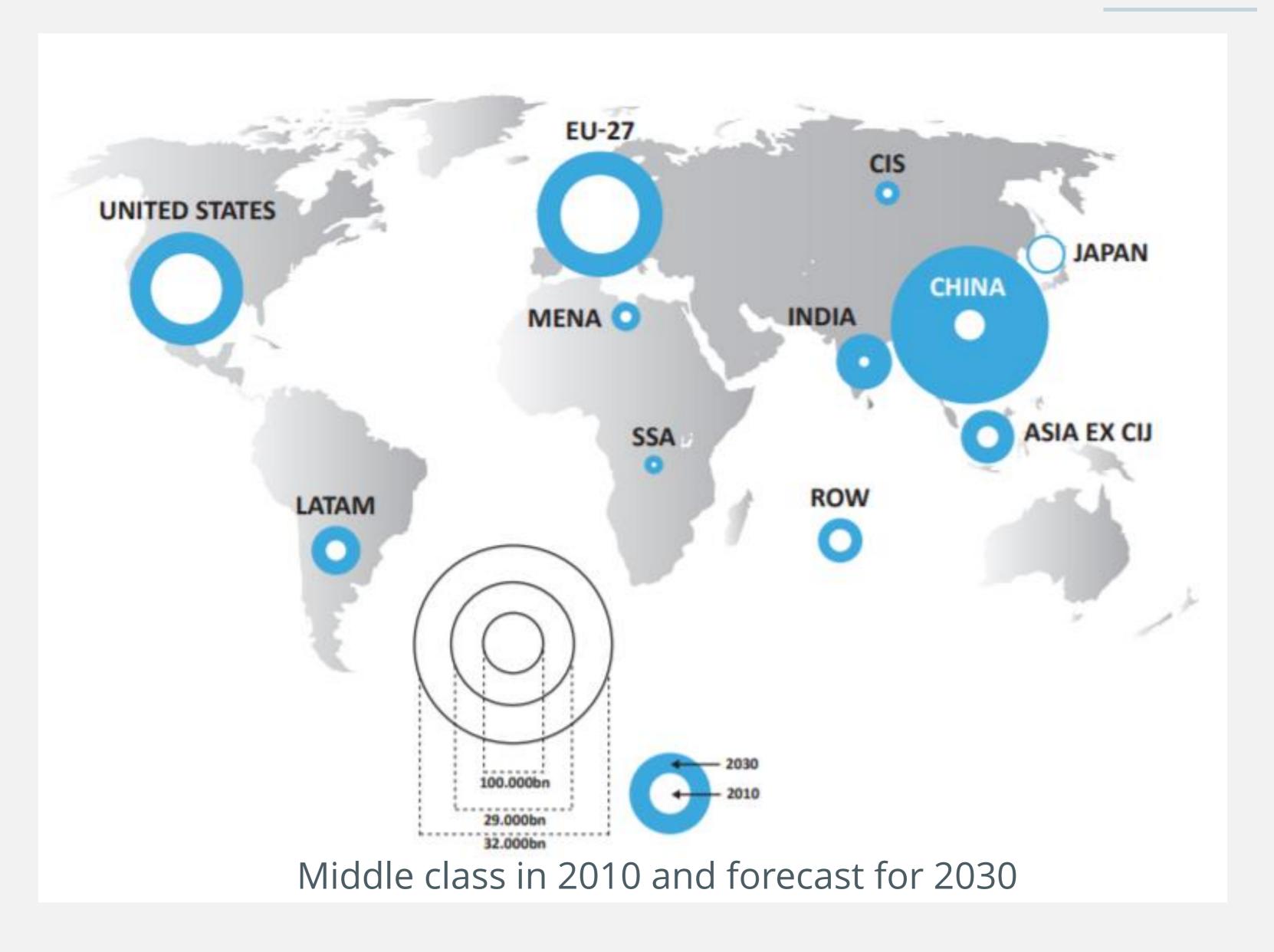
## Stricter immigration policies: more barriers for mobility to high-income destinations







Economic shifts: dependence on emerging markets for economic growth



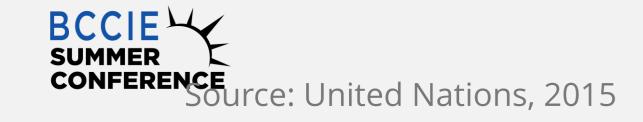




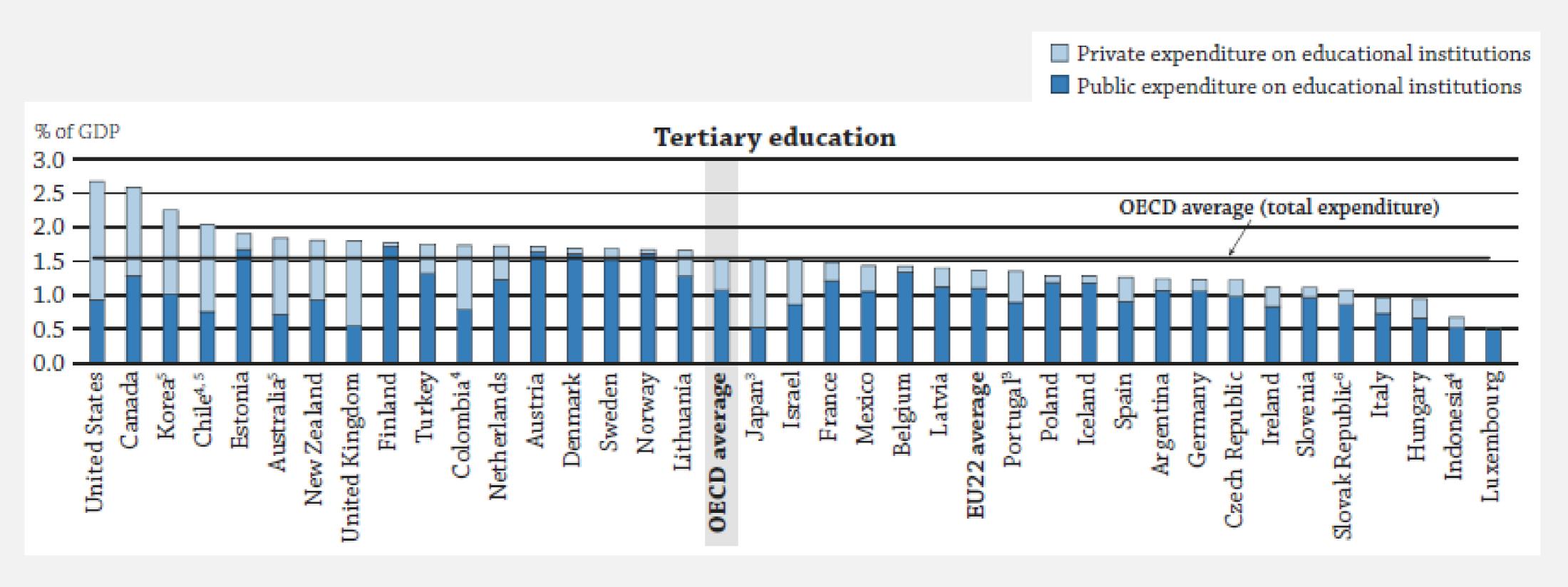
Capacity imbalance: demand in emerging economies vs. supply in developed economies

• Ratio of projected population in 2030 to estimated population in 2015 by the level of gross national income per capita in 2014, 183 countries or areas





### Budget pressures: higher education is facing decline in public funding





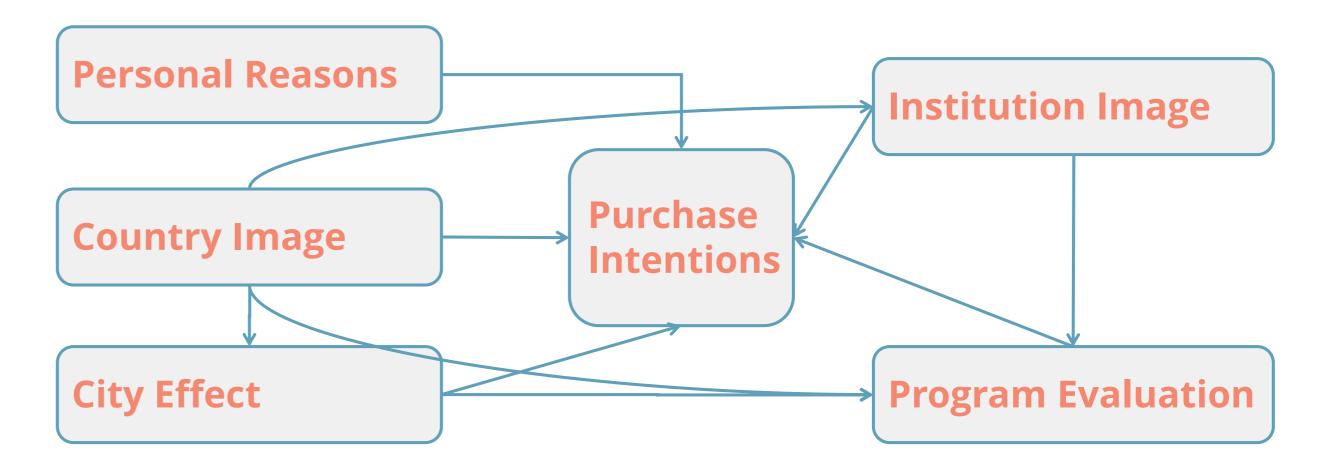


## Adapting global engagement strategies





 International student choice process is complex interplay of various factors

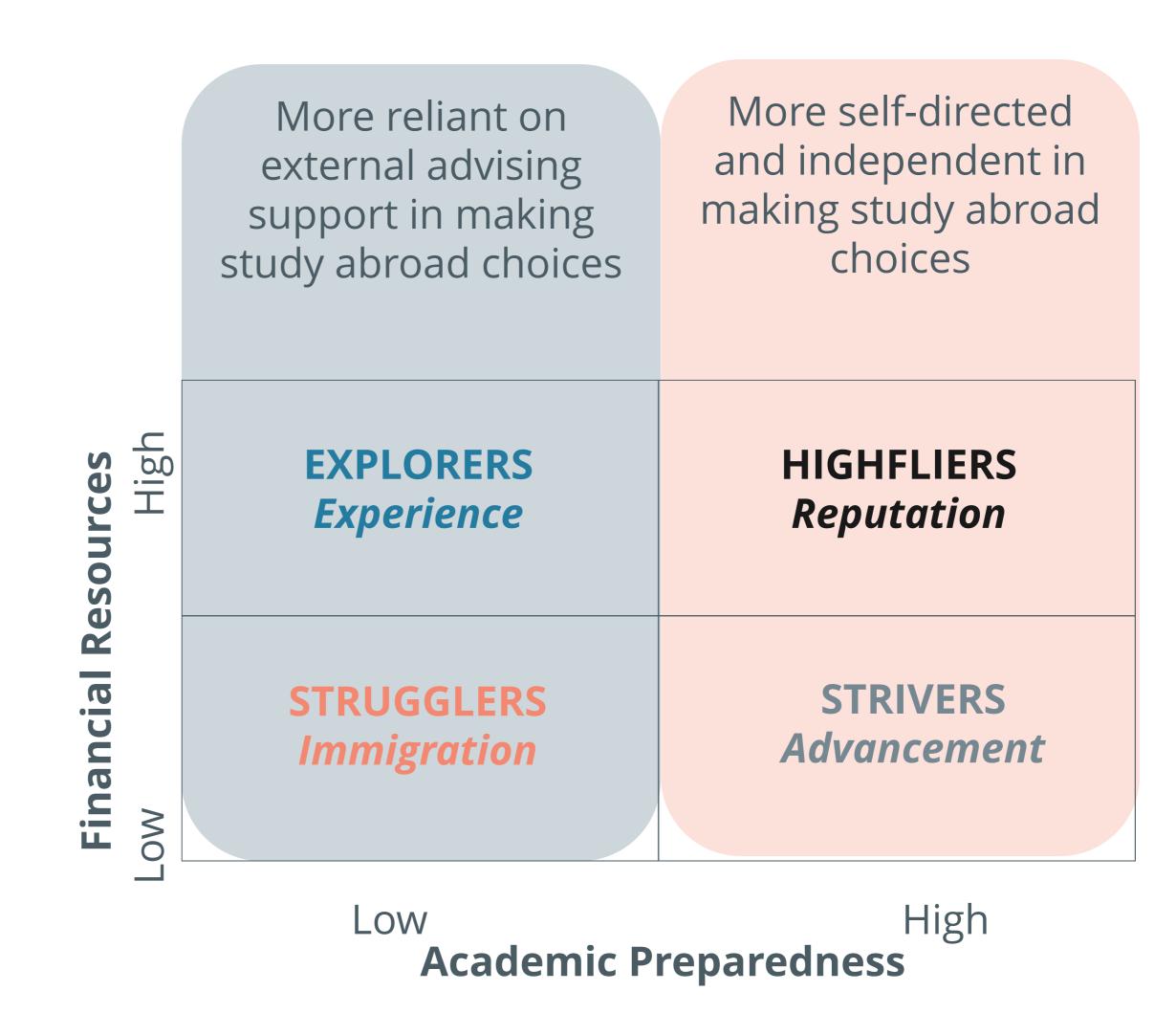


Adapted from: Cubillo, et al. (2006) International students' decision-making process. International Journal of Educational Management





- Study abroad choice processes differ by student needs and motivations
- Effective strategies must align with student segments

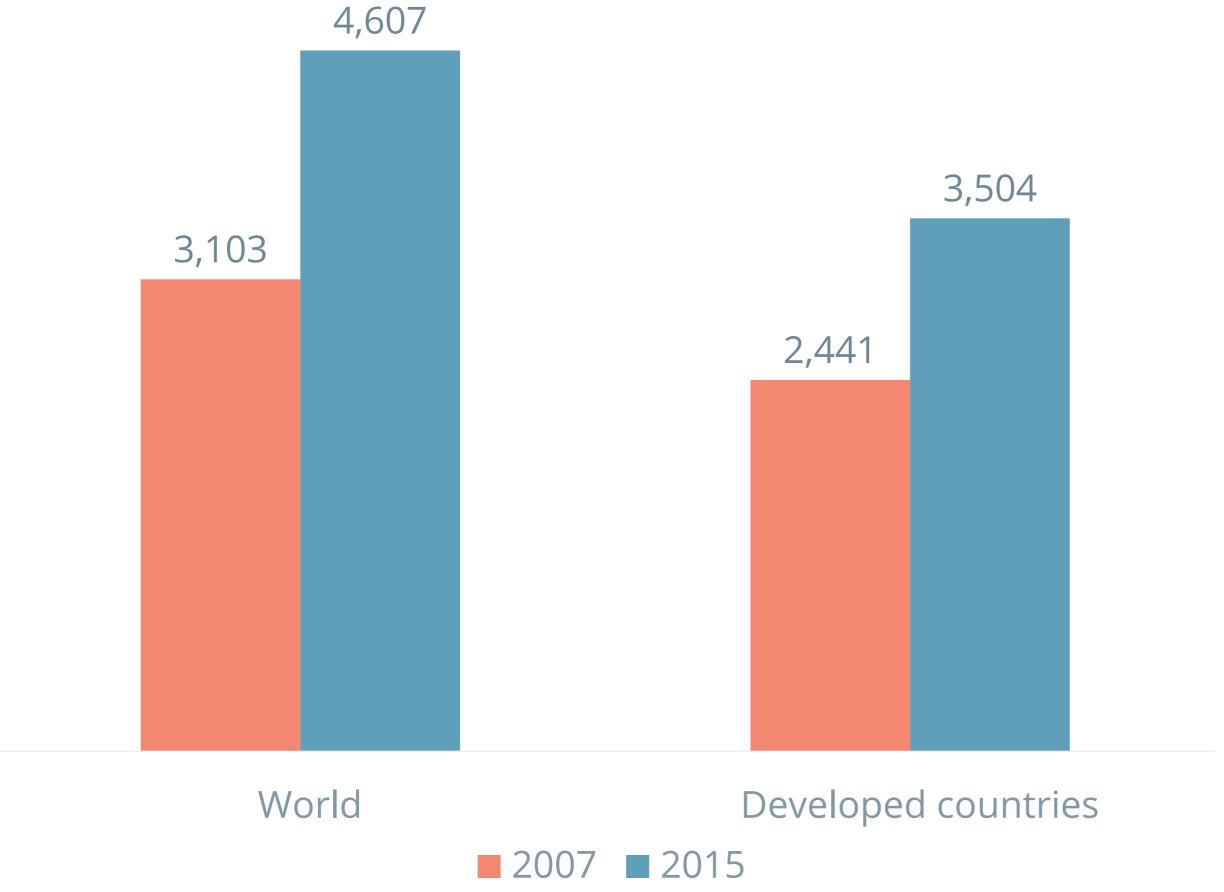


Source: Choudaha, R., Orosz, K. & Chang, L. (2012). Not All International Students are the Same. World Education Services.





### Total internationally mobile students (in thousands)



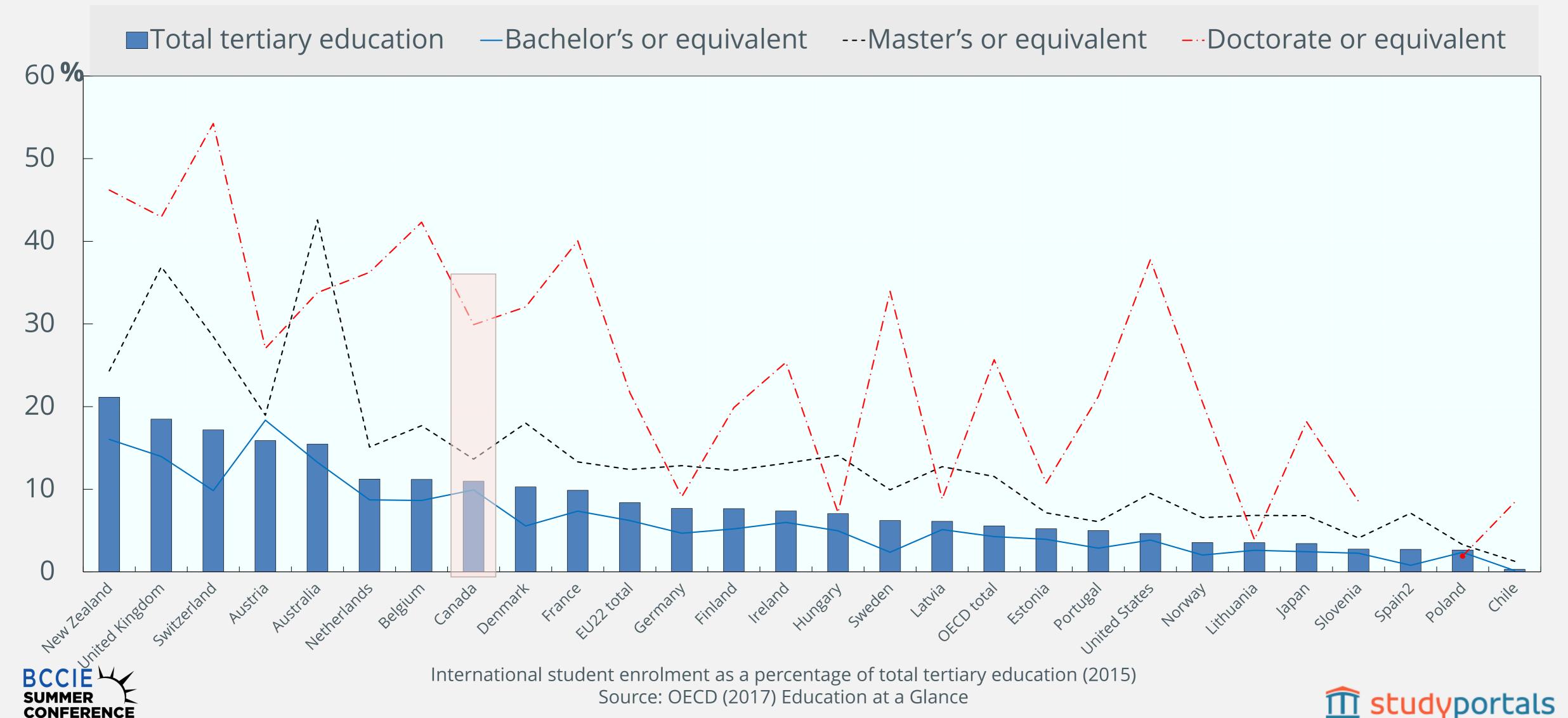
Source: Authors' analysis of data from UNESCO Institute of Statistics

\* Based on Millennium Development Indicators: World and regional groupings

- Almost 50% growth in internationally mobile students between 2007-2015
- Nearly three-quarters of internationally mobile students are studying in "developed" countries\*



#### Enrolment patterns differ by the level of education

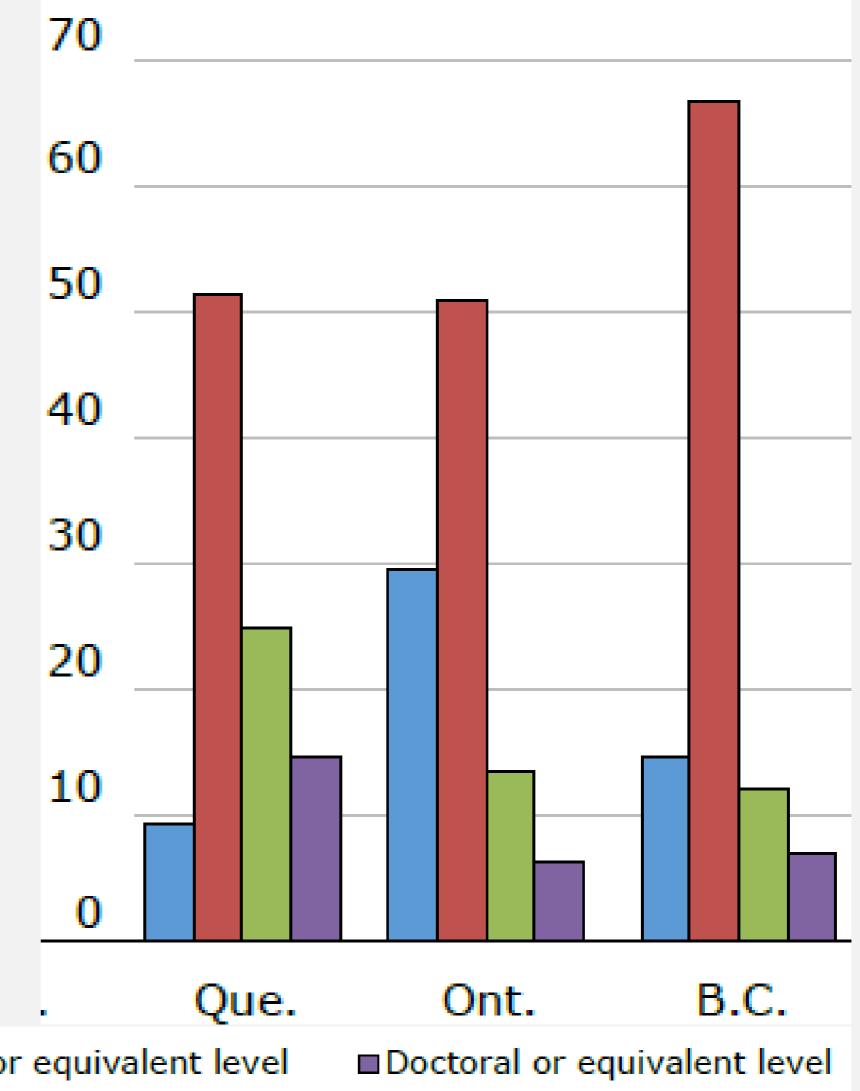


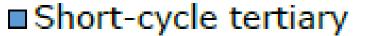
### Enrolment patters differ by the level of education

Ont. short-cycle (college)

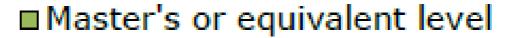
B.C. Bachelor's

Que. Master's and Doctoral





■ Bachelor's or equivalent level







## Transnational education: Mobility of programmes

• TNE is often defined as the 'provision of education for students based in a country other than the one in which the awarding institution is located.'

#### Distance/online learning ...with local support ...with no local support Blended Local delivery partnership Double dual, or multiple degree Franchised programme Joint Degree 'Top-up' programme Validation or 'quality assurance' programme Physical presence Branch campus





Study centre

Flying faculty or 'outreach'

### Rise of "Worldclass University" ambitions

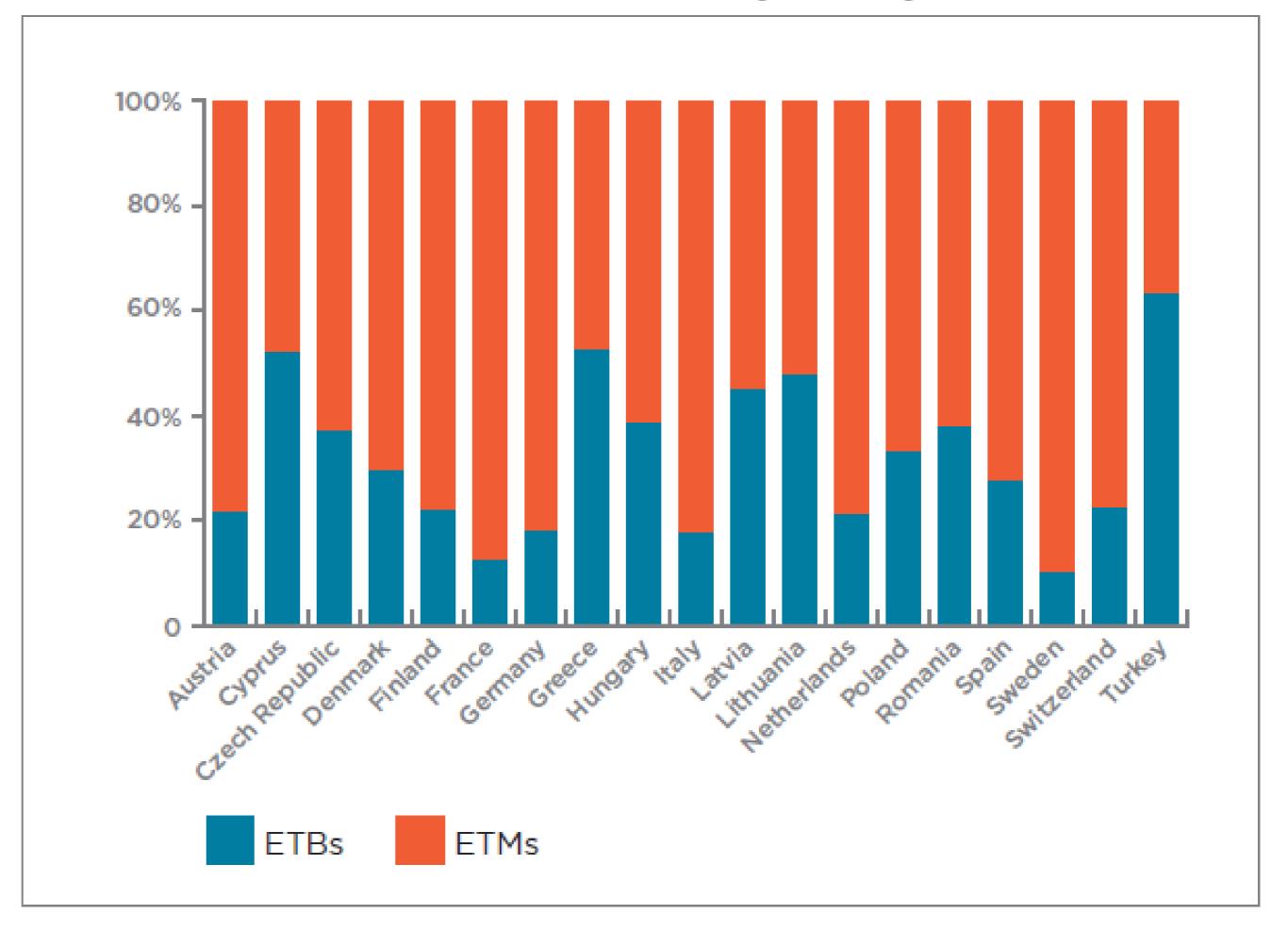
- The importance of increasing incoming international students and 'excellence' as indicated by global rankings has intensified.
- For example, Japan, Russia, Vietnam, France, China and over 30 other countries have pursued excellence initiatives





### Rise of Englishtaught Programmes in Europe and Asia

#### Distribution of ETBs and ETMs by country

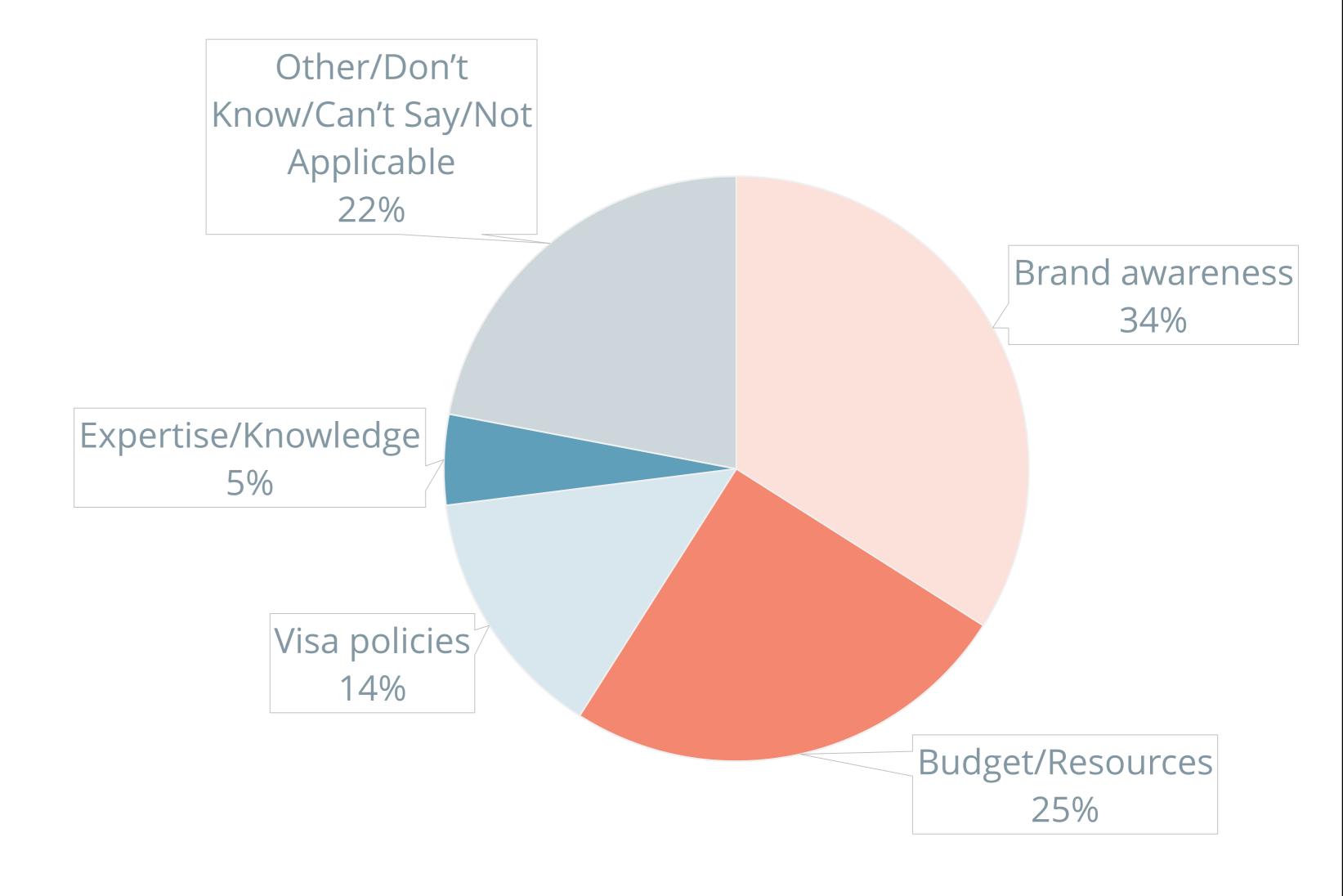


Source: Sandström, Anna-Malin & Neghina, Carmen (2017). English-taught bachelor's programmes: Internationalising European higher education. European Association for International Education (EAIE) and StudyPortals





 "Brand awareness" biggest challenge for institutions recruiting international students









### Conceptual framework of global engagement

Problems/Needs

New

amiliar

Challengers

English-taught programmes in Asia/Europe

**Regional mobility** 

**Innovators** 

Lifelong learning, unbundling and networks

**Programme innovation** 

Defenders Programmes in En

Programmes in Englishspeaking countries

**Student mobility** 

Adapters

Online, blended, and transnational education

**Programme mobility** 

Familiar

New

Solutions/Approaches

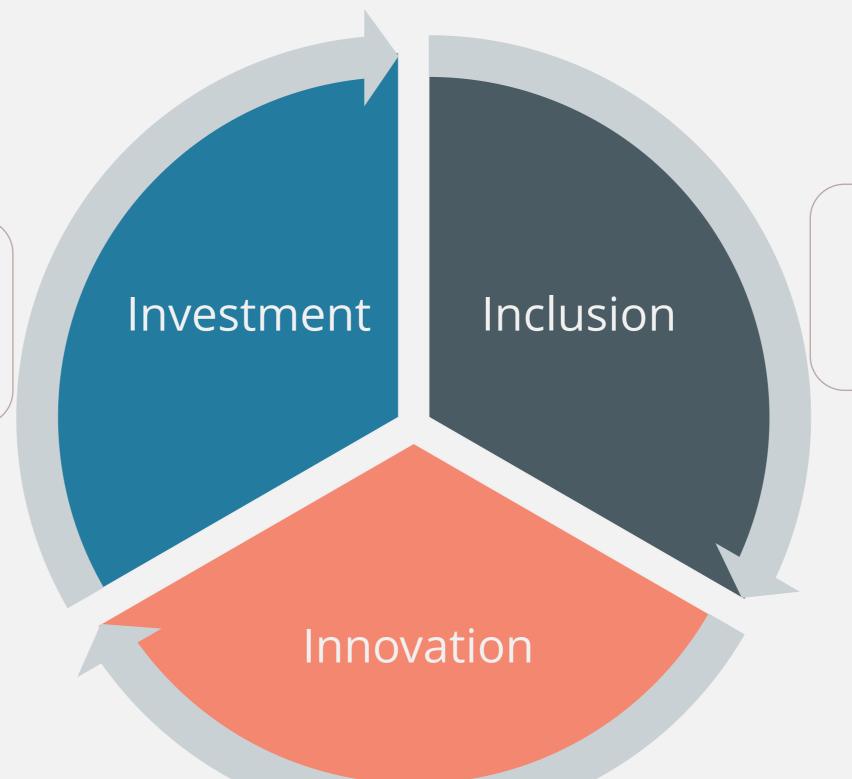




## Things we should be about in International Education: 3Is

• International Education is a life-altering experience, let's make it accessible by adapting global engagement strategies

Are we investing to enable innovation and inclusion?



Are we recognising diverse needs and expectations of student segments?



Are we adopting a mindset and skillset of experimentation?



#### Thanks

- Agree/Disagree?
- Comments/Questions?

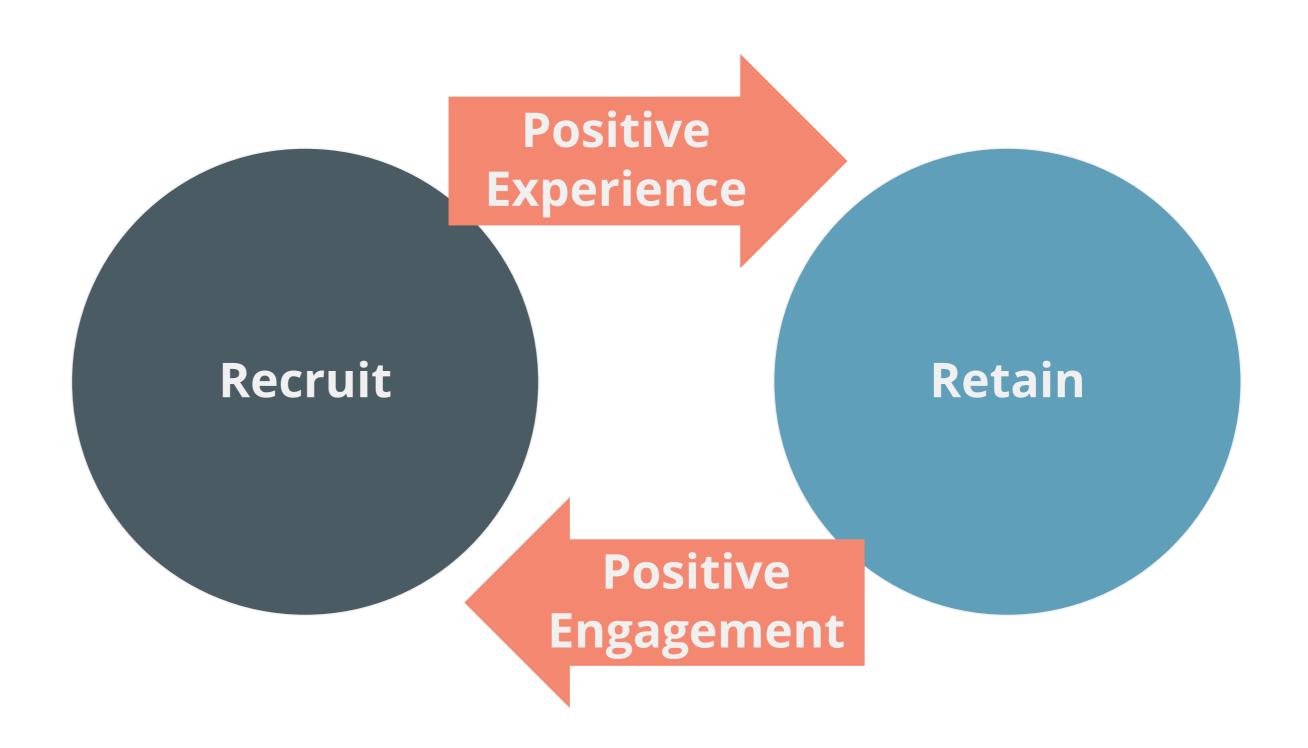
Rahul@Studyportals.com







- "Poor retention is symptomatic of the mismatch between expectations of students prior to enrollment and the actual experience of students once they are on campus.
- "...institutions can control the influence of recruitment practices in setting expectations and ensuring that they align with the experiences on campus."



Bridging the Gap: Recruitment and Retention to Improve International Student Experiences. NAFSA (2014) nafsa.org/retentionresearch





### Concentration by field of studies

- International students account for 5.6% of total enrolment in tertiary programs
  - About one-third in STEM fields of study
  - 28% in business, administration and law





StudyPortals attracts and engages highfliers—open-minded, ambitious, and independent digital natives with financial resources.



The Highflier



I want to keep challenging myself to make sure I stand out among the other students.'

Katsumi Sato







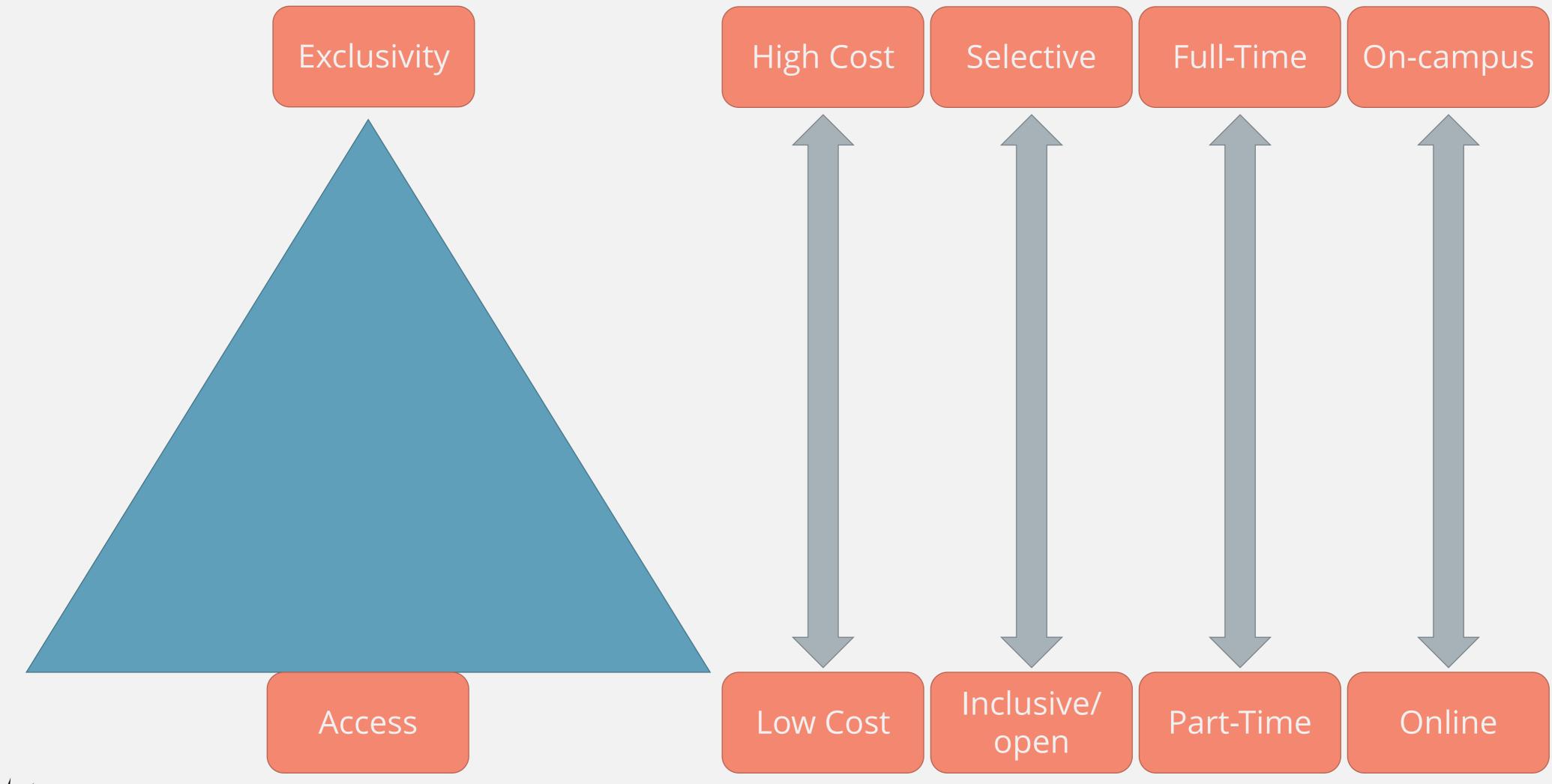
## Concentration by source countries

- Students from Asia form the largest group of international students enrolled in OECD tertiary education programs at all levels (1.56 million in 2015)
  - Of these, 612,000 come from China.
  - Three-quarters of Asian students converge towards only three countries: the United States (44%), Australia (16%) and the United Kingdom (15%).
  - The second major region of origin of international students is Europe, with 782,000 European students crossing borders for the purpose of studying. European students prefer to circulate within Europe: 82% of them enrol in tertiary studies in another European country.



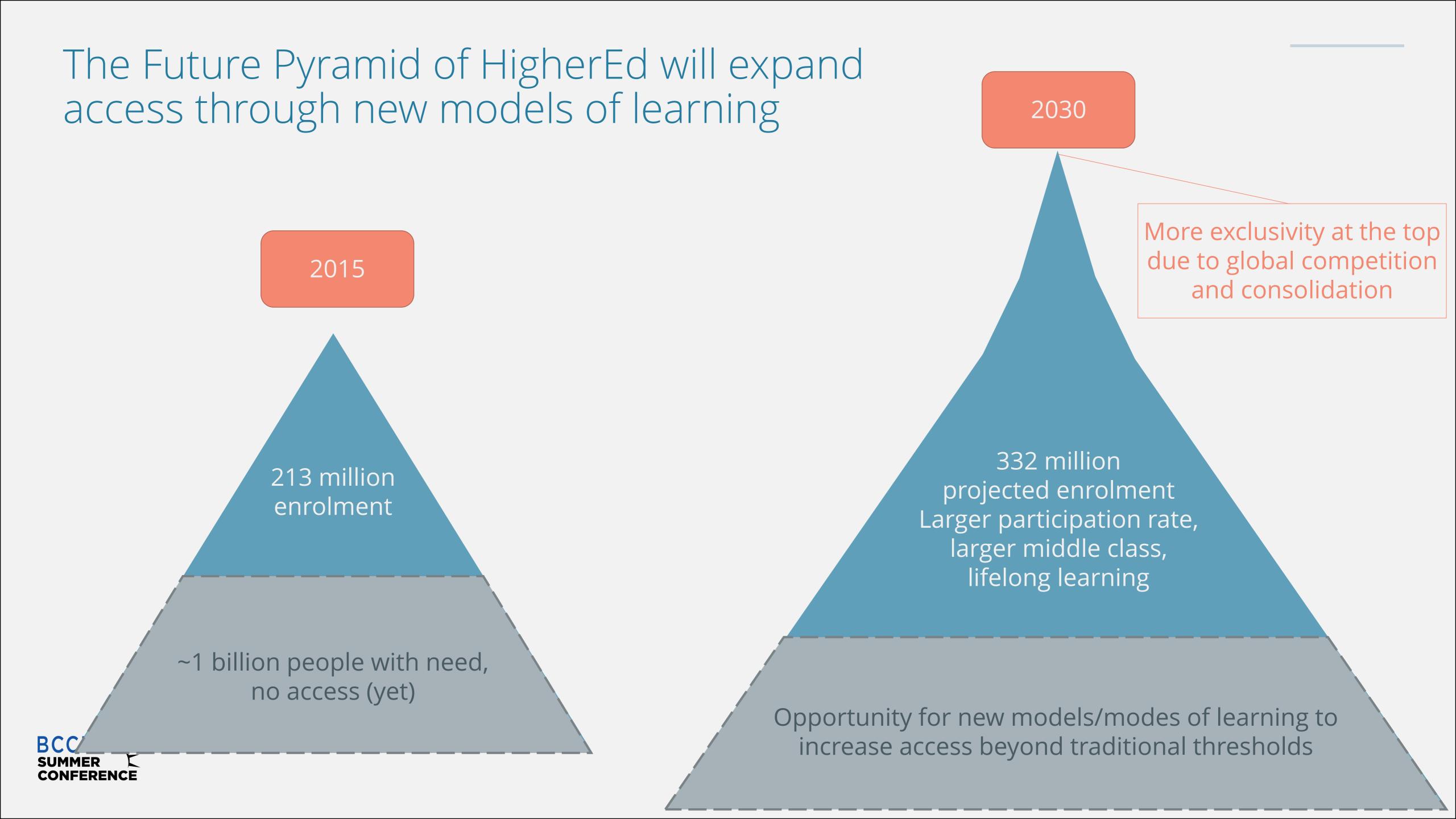


## The Pyramid of HigherEd: A diverse market with distinct segments due to multi-dimensional barriers to access









### Growth in tertiary enrolment

- 207 million students enroled in higher education in 2014
- Between 2000 and 2014
  - higher education enrolment more than doubled, rising from 100 million to 207 million
  - global gross enrolment ratio increased from 19% to 34%
  - 30% of all global higher education enrolments in private institutions





### Summary

- Globally, higher education enrolment have been witnessing a growth trajectory. However, bulk of the growth was driven by middle-income countries. High-income countries experienced decline/stagnancy in enrolment in the last few years.
- Internationally mobile students have been consistently growing but still forms a smaller proportion of total enrolment in tertiary programs. Majority of the internationally mobile students were enroled in "developed" countries. In general, international students were more likely to originate from Asia and enroll in master's and doctorate level with career-oriented fields (STEM, business, administration and law).
- Proliferation of English-taught programmes in Europe, ambition of world-class universities in emerging countries, and evolution of transnational education models will shift the nature and direction of internationally mobile students.
- External global megatrends will further catalyze the change.





Growth context of tertiary and international enrolment in 15 high-income countries

	2014	2015	% Change
Tertiary Enrolment	43,572,547	43,973,316	1%
Int'l Student Enrolment	2,744,851	2,942,591	7%
Int'l Enrolment as % of Tertiary Enrolment	6%	7%	

Source: Authors' analysis based on data of 15 high-income countries—United States, United Kingdom, Australia, France, Germany, Canada, Japan, Italy, Netherlands, Austria, Belgium, Korea, Switzerland, New Zealand, Spain—in the order of number of international student enrolment. They enrol 63% of all global GDP.





## 4.3 million

1% annual increase in enrolment of non-traditional students (age over 24) between 2015-2030 will translate into 4.3 m. more students in 15 high-income countries

Source: Authors' analysis based on data of 15 high-income countries—United States, United Kingdom, Australia, France, Germany, Canada, Japan, Italy, Netherlands, Austria, Belgium, Korea, Switzerland, New Zealand, Spain—in the order of number of international student enrolment. Total enrolment in BCCIE these 15 countries grew by 1% between 2014 and 2015. They enrol 63% of all globally mobile students and contribute to 55% of global GDP. **M** studyportals

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## 3.6 million

1% annual increase in enrolment of non-traditional students (age over 24) between 2015-2030 will translate into 3.6 m. more students in six emerging countries



Source: Authors' analysis based on data of six BRIICS countries—Brazil, Russia, India, Indonesia, China, South Africa These six countries enrol 10% of all globally mobile students and contribute to 24% of global GDP.



412,00

1% annual increase in international enrolment between 2015-2030 will translate into 412,000 more students in 15 high-income countries

Source: Authors' analysis based on data of 15 high-income countries—United States, United Kingdom, Australia, France, Germany, Canada, Japan, Italy, Netherlands, Austria, Belgium, Korea, Switzerland, New Zealand, Spain—in the order of number of international student enrolment. Intternational BCCI Envolment in these 15 countries grew by 7% between 2014 and 2015. They enrol 63% of all globally mobile students and contribute to 55% of global GDP. **M** studyportals

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# 

1% annual increase in international enrolment between 2015-2030 will translate into 65,000 more students in six emerging countries by 2030

Source: Authors' analysis based on OECD data of five BRIICS countries—Brazil, Russia, India, Indonesia, China, South Africa These six countries enrol 10% of all globally mobile students and contribute to 24% of global GDP.





Data for Growth Projections										
	Total Tertiary Enrolment, All Ages	Total Tertiary Enrolment, Over 24	Population, Over 24	Participation Level, Over 24	Total Int'l Enrolment	Int'l Enrolment as % of Total Tertiary Enrolment	GDP	Income Category of Country		
United States	19,532	8,094	214,213	3.8%	829,412	4.2%	18,036,648,000	High-income, OECD		
United Kingdom	2,330	812	45,943	1.8%	428,724	18.4%	2,858,003,088	High-income, OECD		
Australia	1,903	942	16,173	5.8%	266,048	14.0%	1,230,859,429	High-income, OECD		
France	2,424	448	45,171	1.0%	235,123	9.7%	2,418,945,624	High-income, OECD		
Germany	2,978	1,412	62,316	2.3%	210,542	7.1%	3,363,599,908	High-income, OECD		
Canada	1,564	490	25,595	1.9%	164,274	10.5%	1,552,807,652	High-income, OECD		
Japan	3,845	56	99,231	0.1%	132,685	3.5%	4,383,076,298	High-income, OECD		
Italy	1,826	542	45,639	1.2%	87,544	4.8%	1,821,579,869	High-income, OECD		
Netherlands	843	279	12,028	2.3%	70,692	8.4%	750,318,057	High-income, OECD		
Austria	426	196	6,445	3.0%	65,165	15.3%	376,967,406	High-income, OECD		
Belgium	505	101	8,043	1.3%	55,516	11.0%	455,106,662	High-income, OECD		
Korea	3,268	564	36,815	1.5%	52,451	1.6%	1,377,873,196	High-income, OECD		
Switzerland	294	146	6,144	2.4%	49,536	16.8%	670,789,929	High-income, OECD		
New Zealand	270	114	3,035	3.8%	48,892	18.1%	173,416,552	High-income, OECD		
Spain	1,964	720	35,146	2.0%	48,247	2.5%	1,192,955,481	High-income, OECD		
Brazil	8,285	3,907	124,983	3.1%	19,093	0.2%	1,772,591,280	Upper-middle-income, non-OECD		
Russia	7,435	1,824	104,410	1.7%	213,347	2.9%	1,326,016,016	Upper-middle-income, non-OECD		
India	30,306	2,084	692,396	0.3%	41,993	0.1%	2,116,239,206	Lower-middle-income, non-OECD		
Indonesia	5,108	427	141,871	0.3%	7,235	0.1%	861,933,966	Lower-middle-income, non-OECD		
China (P.R.)	43,367	1,217	967,848	0.1%	108,217	0.2%	11,158,456,654	Upper-middle-income, non-OECD		
South Africa	1,019	443	32,295	1.4%	42,594	4.2%	314,571,181	Upper-middle-income, non-OECD		
Source:	OECD (2015) ('000)	,		Derived (Column C/D)	UNESCO (2014) ('000)	Derived	United Nations (2015) ('000)	World Bank (2017)		
SUMMER CONFERENCE								<b>m</b> studyportals		



### Introduction

A decade ago, the world was unaware of and unprepared for the dramatic impact of the impending global financial recession. Over time, the operating climate for higher education institutions shifted, and budget-cuts became a recurring and dominant theme. At the same time, aspirations of expanding middle-class in emerging markets to gain international experiences, fueled international mobility of students.

Now, we are on the cusp of another major transformation. This time, accelerating pace of external megatrends including technological and societal changes will compel higher education institutions, especially in high-income countries, to further enhance relevance, affordability, and flexibility of their academic offerings. In terms of international enrolment, institutions will be driven to complement traditional student mobility with innovation in programme and delivery to meet quantitative growth and qualitative shift in demand.

Through this report, we synthesize viewpoints of higher education leaders from around the and articulate our vision of future of global higher education through analysis and conceptual frameworks of institutional archetypes of success and their global engagement strategies leading up to 2030. In specific, we are driven by following questions: What are the megatrends shaping the world? How these megatrends are transforming the future of global higher ed? What are the implications for the international student mobility and global engagement strategies?

Primary audience for this report are professionals at higher education institutions in high-income countries facing enrolment growth challenges. We recognize the diversity of higher education institutions across and within countries and hence do not claim to offer predictive and prescriptive findings. The purpose and approach of this report is to encourage higher education institutions to reflect, assess and discover their alternative pathways for their future leading up to 2030.

We welcome your questions/suggestions/experiences at Rahul@studyportals.com

Rahul Choudaha, EVP of Global Engagement, Research and Intelligence in











### Megatrends

External forces transforming the world around us

- Economic shifts: higher reliance on the emerging markets to drive economic growth
- Rise of nationalism: higher barriers to immigration in high-income destinations
- Rapid urbanization: movement towards cities in search of jobs and social mobility
- Capacity imbalance: demand in emerging economies vs. supply in developed economies
- Budget pressures: higher education is facing decline in public funding
- Labor market shifts: increasing automation to affect global workforce
- Skills mismatch: gap between what employers demand vs. what education provides

### **Impact on Global Higher Ed**

Quantitative growth higher ed enrolment

• 332 million by 2030; an increase of 56% or 120 million students from 2015

Qualitative shift in the nature of demand:

- Advancement of lifelong learning
- Adoption of online/blended learning
- Unbundling of credentials
- Orientation for career outcomes
- Specialization/consolidation of institutions

Higher education need to respond by enhancing relevance, affordability, and flexibility of academic offerings to meet quantitative growth and qualitative shift in demand.

### Executive Summary

### **Impact on Int'l Student Mobility**

Quantitative growth int'l student enrolment

• 6.9 million by 2030; an increase of 51% or 2.3 million students from 2015

Qualitative shift in the nature of demand:

- Increase in attractiveness of regional destinations
- Innovation and expansion of transnational models
- Surge of English-taught programmes in new destinations
- Higher ambitions and investments for world-class universities
- Increase in growth of multi-institutional global networks

Higher education need to complement traditional mobility with innovation in programme offerings and delivery mechanisms





### Mismatch in enrolment demand and supply calls for attracting and engaging new population

- Globally, higher education enrolment will grow with variations within and across countries<sup>1</sup>
- Megatrends will compel institutions, especially in high-income countries<sup>2</sup>, to further enhance the relevance, affordability, and flexibility of their academic offerings to meet quantitative growth and qualitative shift in the demand
  - Lower and middle-income countries will have high demand for higher education in traditional college age population with relative to the supply of institutions
  - High-income countries will face enrolment stagnancy unless they expand the pool by reaching non-traditional domestic population (age over 24) or international students through transnational education and recruitment
  - Institutional archetypes of success and global engagement strategies proposed in this report offer alternative pathways for institutions leading up to 2030





## 9.3 million

One percent increase in enrolment of non-traditional students (age over 24) in 15 high-income, OECD countries will translate into 9.3 m. more students by 2030



Source: Authors' analysis based on OECD data of 15 countries—Australia, Belgium, Canada, Chile, France, Germany, Greece, Italy, Japan, Korea, Netherlands, Poland, Spain, United Kingdom, United States



## 26.3 million

One percent increase in enrolment of non-traditional students (age over 24) in BRIICS countries will translate into 26.3 m. more students by 2030



Source: Authors' analysis based on OECD data of five BRIICS countries—Brazil, Russia, India, Indonesia, China, South Africa



### Institutional archetypes of success

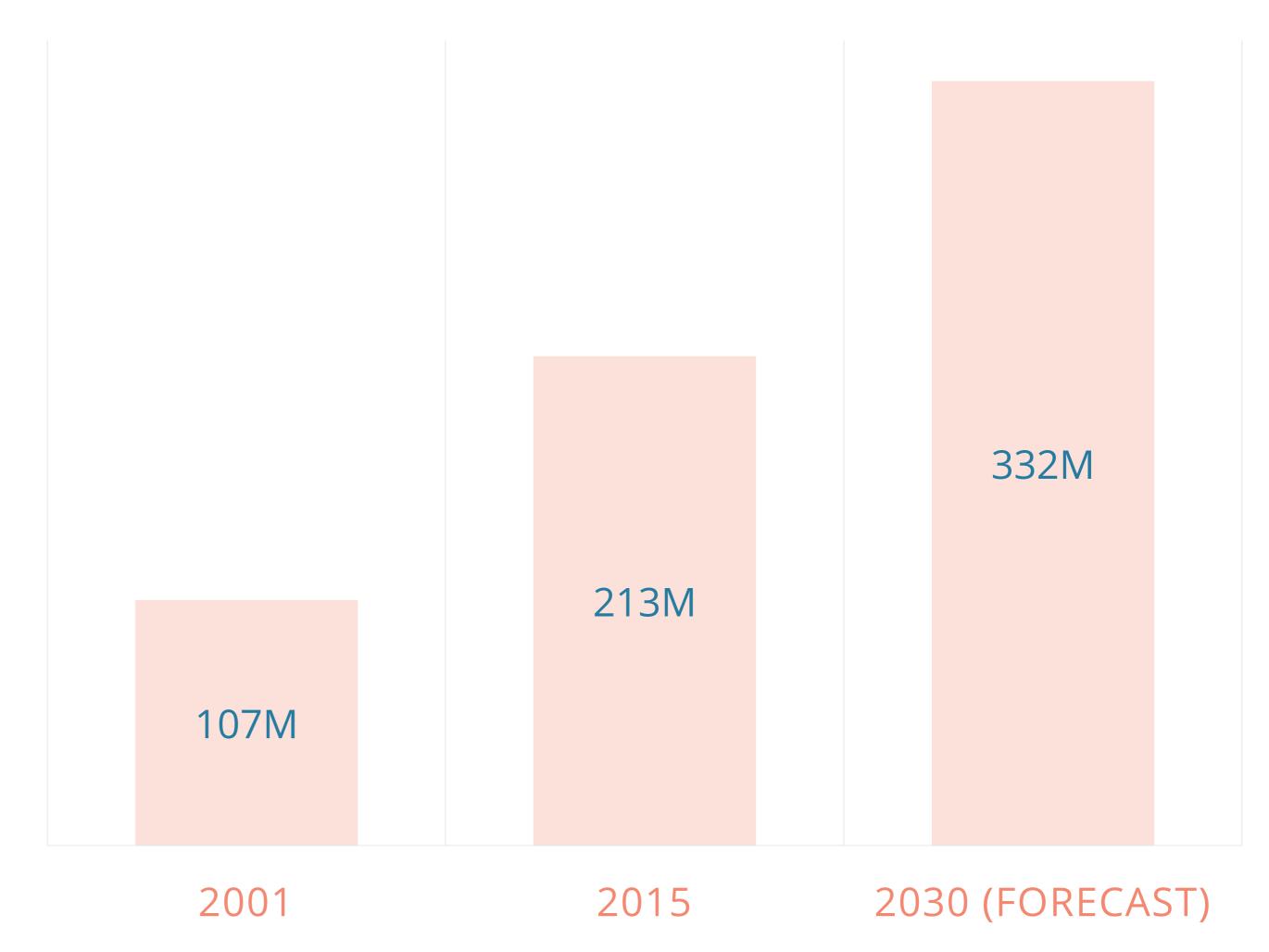
- 1. Niche Research Institute: Knowledge and curriculum generator, focus on being 'the world's best' in a particular discipline, ideally tied to industry hubs
- 2. Elite, Comprehensive University: Interdisciplinary knowledge generator, shrinking opportunities for these institutions in the world, increasingly they have to specialise and become a set of (1)
- 'Club HigherEd': Curriculum consumer focus on student experience (mentoring, facilities)
- **4. Scalable Digital University**: Curriculum consumer focus on flexibility, learning platforms, (automated) support, improving access
- **5. Professional Learning Institute**: Curriculum consumer, focus on career advancement value, strong ties with industry

University networks as well as interregional/- national universities expected to grow





Nearly 120
 million
 estimated
 increase in
 tertiary
 enrollment by
 2030



Source: StudyPortals analysis based on linear forecasting (95% confidence) of UNESCO data of tertiary enrolment





### Lifelong learning gains traction

- The 2030 Agenda for Sustainable Development is an inter-governmental commitment and "a plan of action for people, planet and prosperity".
- UNESCO's Sustainable Development Goal 4 (SDG4):
   Quality Education- "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all"
- "What is also new to SDG4 is the focus on the relevance of learning outcomes both for the world of work, as well as for citizenship in a global and interconnected world."

Source: Unpacking Sustainable Development Goal 4: Education 2030, <u>UNESCO</u>





## 163 million

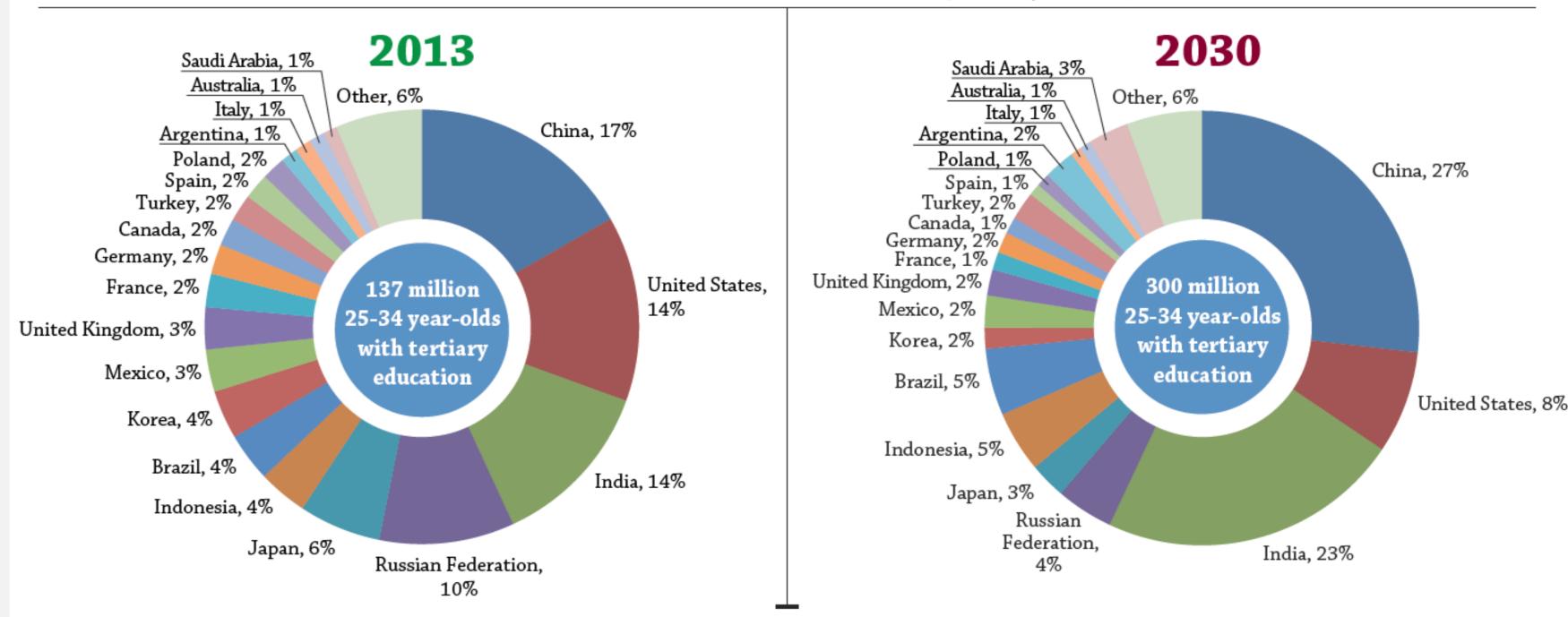
Additional 25-34 year-olds with tertiary degree in 2030 as compared to 2013





# Growth in tertiary degree attainment to be driven by non-OECD countries

Figure 2. Share of 25-34 year-olds with a tertiary degree across OECD and G20 countries (2013, 2030)



**Note:** Figures in these graphs are estimates based on available data. The population estimations are based on the OECD annual population projections (<a href="http://stats.oecd.org/">http://stats.oecd.org/</a>).

Sources: OECD database, UNESCO and national statistics websites for Argentina, China, India, Indonesia, Saudi Arabia and South Africa.





### 

of the global STEM graduates will be in BRIICS countries as compared to 8% in the US and 4% in Europe by 2030











- Anant Agarwal
- Founder and CEO, edX

Modular online education will break down boundaries and change the delivery of education - whether students learn online before going to campus, online while on campus, continue their education online after a campus education, or learn fully online - student mobility patterns will change, and innovative higher education institutions will see a new global reach. This unbundled approach enabled by modular credentials and credit exchanges will also foster lifelong learning habits, keeping our workforce nimble and eager to learn new skills on the job.

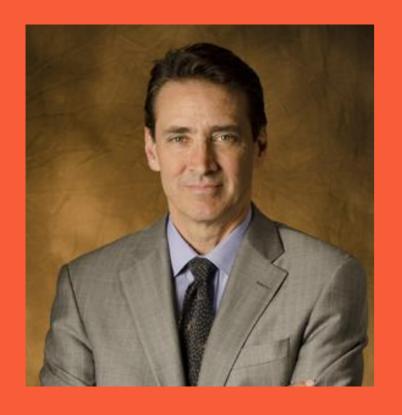






- Bill Barke
- Chairman, StudyPortals North America Advisory Board
- Former Chairman of Pearson Higher Education North America

The widening mismatch between what employers demand and what institutions supply is one of the key megatrends to watch. The mismatch is already disrupting traditional models of higher education in career settings. The traditional mode of preparing students for business careers—the MBA—is declining in favor of a more data driven menu of certificate programs, particularly in business analytics and data science. The decline in public funding will accelerate public/private partnerships in the online program management space which will also have significant opportunities for enrolling global student populations. **M** studyportals







- Bradley Farnsworth
- Vice President, Center for Internationalization and Global Engagement, American Council on Education

Rising incomes in developing countries and a greater concentration of people and jobs in urban areas will drive demand for higher education. Rising incomes will stimulate more demand for conventional international mobility, but they will also create promising opportunities for international partnerships that deliver quality instruction locally or regionally. We should anticipate the emergence of new modes of delivery, and in some cases entirely new types of institutions.









- David Finegold
- President, Chatham University

After many decades of continuous growth of degrees at the expense of intermediate, middlelevel skills, we may see some reversal, as technical and skilled manual work - i.e. electricians, plumbers, chefs – will be among the hardest to automate, while many degree-level occupations – e.g. law, accounting, routine computer programming, journalism, and data processing – are already being disrupted. Higher education institutions will need to prepare their students to be entrepreneurial and resilient, with the ability to continue to learn and reinvent themselves and their careers multiple times in their lives. **m** studyportals







- Elizabeth J. Stroble
- President, Webster University

The convergence of external megatrends will require imaginative leadership and new kinds of partnerships for global higher education to thrive. For example, the combined effects of economic shifts, the rise of nationalism, capacity imbalance, and budget pressures contribute simultaneously to a heightened need for global higher education solutions that bring education to nations' and students' needs and increased barriers to enacting such solutions on the part of institutions and nations. Technologysupported solutions hold promise for optimizing the connections between expertise at higher education institutions and students in emerging economies.





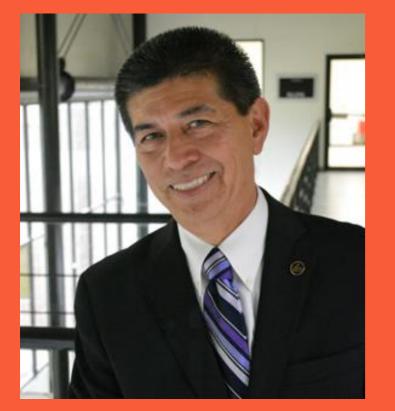




- Eva Egron-Polak
- Former Secretary
   General, Senior Fellow of
   International Association
   of Universities

It is important to note the unknowns in terms of skills needed. For example, what new positions and jobs are we educating for? Skills are not the sole outcome of university education. One would argue that knowledge and critical thinking are even more important. Higher education institutions must ensure this balance. The youth dividend of Africa will present new opportunities and challenges for future of higher education.





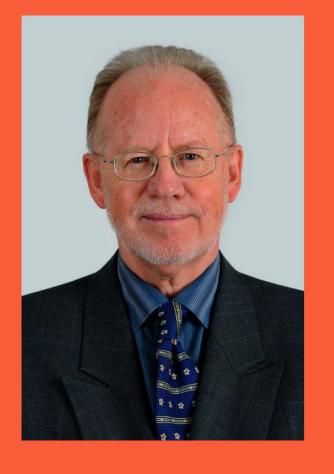




- Fernando León García
- President, CETYS
   University System,
   Mexico

Economic shifts and capacity imbalances are among the trends most likely to impact developing economies. These will require an improvement in the quality of and participation rates in higher education across developing countries, whether it is through their own efforts, cross border partnerships, TNE or new models for capacity building. Rather than a single predominant institutional model, one is likely to observe a diversity of models, where at one end of the spectrum there will be institutions with entirely new models responding to new needs and new markets, while at the other end we will see institutions that will only make slight changes to remain current and relevant to their existing models.









- Gordon Slaven
- Managing Director, Slaven Consultancy Services Ltd
- Former Head of higher education and education services, British Council

Work-ready graduates, with appropriate skills for changing global economic environment, will always be in high demand. Given the capacity and geographic imbalance between the demand for this kind of education, and the capacity to deliver it, as well as continued student mobility, it is likely that will be an increase in remote delivery of education from the global top 1% universities, through technologies, a variety of local partnerships, and through branch campuses. We are also likely to see greater numbers of 'global brands' incorporating consortia of individual institutions.









- Huntington D. Lambert
- Dean of the Division of Continuing Education and University Extension, Harvard University

For higher education institutions which want to survive and thrive, responding to the intersection of these megatrends means repackaging courses into 60-year curriculums to help learners always be ready for their next social, civic or professional challenge. It is critical that institutions think globally and have our offering available anywhere anytime at many price points based on human support level included. For all that can do this and measure every element of their supply chain and outcomes for continuous improvement, financial and societal success are waiting.





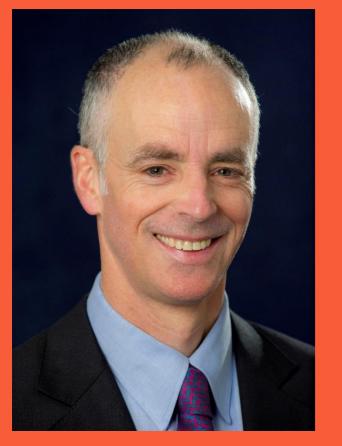




- Ken Gill
- CEO, NCUK- The University Consortium

Increased automation will drive the mismatch of employment skills as the rapid changes in the workplace will not be matched with the speed at which the higher education sector can adapt. Emergence of world-class Asian universities would further undermine the "old west" and a greater flow of students to the Far East, China in particular. Capacity imbalance would argue for increasing use of technology and blended learning, creating more TNE joint ventures, and combining institutions with specialized focus.









- Steven Kyffin
- Pro Vice-Chancellor (Business & Enterprise), University of Northumbria at Newcastle

The continued rise of the mega-cities and urbanisation, especially in the emerging world will drive the need for different forms of enabling 'education' for all. The Campus of the future will become a creative HUB, where partners come together. So, not all Universities have to be expert in all things. Universities become nodes within networks of excellence, where the network hosts the total expertise, which becomes available across the Globe according to local need and context.







- in
- Trevor Holmes,
- VP External & Strategic Affairs, Dublin City University

It is possible to conceive of a higher education supply chain with a broad variety of mission focused institutions which closely align to a lifelong learning student profile with the HEI choosing to engage with students at particular points in their life curve or creating interdisciplinary programmes in selected areas to support particular cohorts of students across their learning lifetime. Institutions will have to share resources and utilise emerging technologies like MOOCs in a more creative fashion, utising globally but assessing locally. This will require a greater creativity in curriculum and programme development.









- Wendy Purcell
- Professor, Harvard University
- Emeritus President & VC, Plymouth University, UK

Higher education would become more differentiated, more distinctive in its offer (learning tools, program offer, skills updating etc.) so that student choice is informed by clarity about the offer and return on investment that in some case is lifelong while in others is simply a project-long or perhaps job-long return. While studying overseas will remain a prized experience, growing excellence of in-country higher education among those countries that today account for high levels of mobility will result in more growth for master's, doctorate, short courses and online degrees than undergraduate degrees. **M** studyportals  How is your institution preparing for the potential impact of megatrends?

- Conduct program portfolio reviews for cost and revenue
- Improve student employability outcomes
- Identify new sources of revenue
- Offer new lower-cost and shorter duration programs
- Expand online offerings for global markets
- Develop new curriculum, delivery models and partnerships
- Deliver lifelong learning and job-focused credentials
- Adapt current forms of learning to unbundling of credentials
- Explore transnational education partnerships
- Recruit international students





Globally, higher education enrolment will grow despite wide variations within and across countries. In this report, we have identified a number of external forces or megatrends which are interacting in a complex manner to transform the world around us. These megatrends will transform higher education sector, especially in high-income countries, and international student mobility patterns. The fast pace of change coupled with a high degree of uncertainty makes it highly critical for institutions to be proactive and strategic. Megatrends will compel institutions, especially in high-income countries, to further enhance the relevance, affordability, and flexibility of their academic offerings to meet quantitative growth and qualitative shift in the demand.

<u>Viewpoints of higher education leaders</u> from around the world along with our analysis suggests that the future of higher education institution will look significantly different. Through our conceptual framework of institutional archetypes of success and their global engagement strategies we offer an opportunity for institutional leaders to reflect, assess and discover how they would ensure future growth and sustainability of their institutions. For example, the continued shift in the demographic, technological, and economic contexts will encourage institutions to experiment and innovate with new models of blended, online or lifelong learning. Likewise, institutions need to complement traditional student mobility with innovation in programme offerings and delivery mechanisms for the shifting context of international student mobility.

While we recognize that not all institutions will neatly fit into our conceptual frameworks, we offer alternative pathways for institutions as they design their future leading up to 2030.

We welcome your questions/suggestions/experiences at Rahul@studyportals.com

Rahul Choudaha, EVP of Global Engagement, Research and Intelligence









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### About Authors



Rahul Choudaha is Executive Vice President of Global Engagement, Research and Intelligence at StudyPortals.

Operating out of San Francisco Bay Area, Choudaha advances StudyPortals' strategic engagement with higher education institutions, professional associations and government bodies on the foundations of research and intelligence. He has presented over 100 sessions at professional conferences and has been frequently quoted in global media on international higher education trends with a focus on student mobility and enrollment strategies. Choudaha holds a doctorate in higher education administration from University of Denver.





**Edwin van Rest** is the CEO and co-founder of StudyPortals. He is a grateful benefactor of international education and is driven by the mission of making education choice transparent, globally. As a co-founder, he has led StudyPortals to an organization of nearly 200 professionals around the world, serving 30m student users annually and with 3,050+ participating universities. He is an elected member of the General Council of EAIE: European Association for International Education. Edwin earned Industrial Engineering and Management Science from Eindhoven University of Technology. As part of his master's degree he spent one year at Osaka University in Japan.





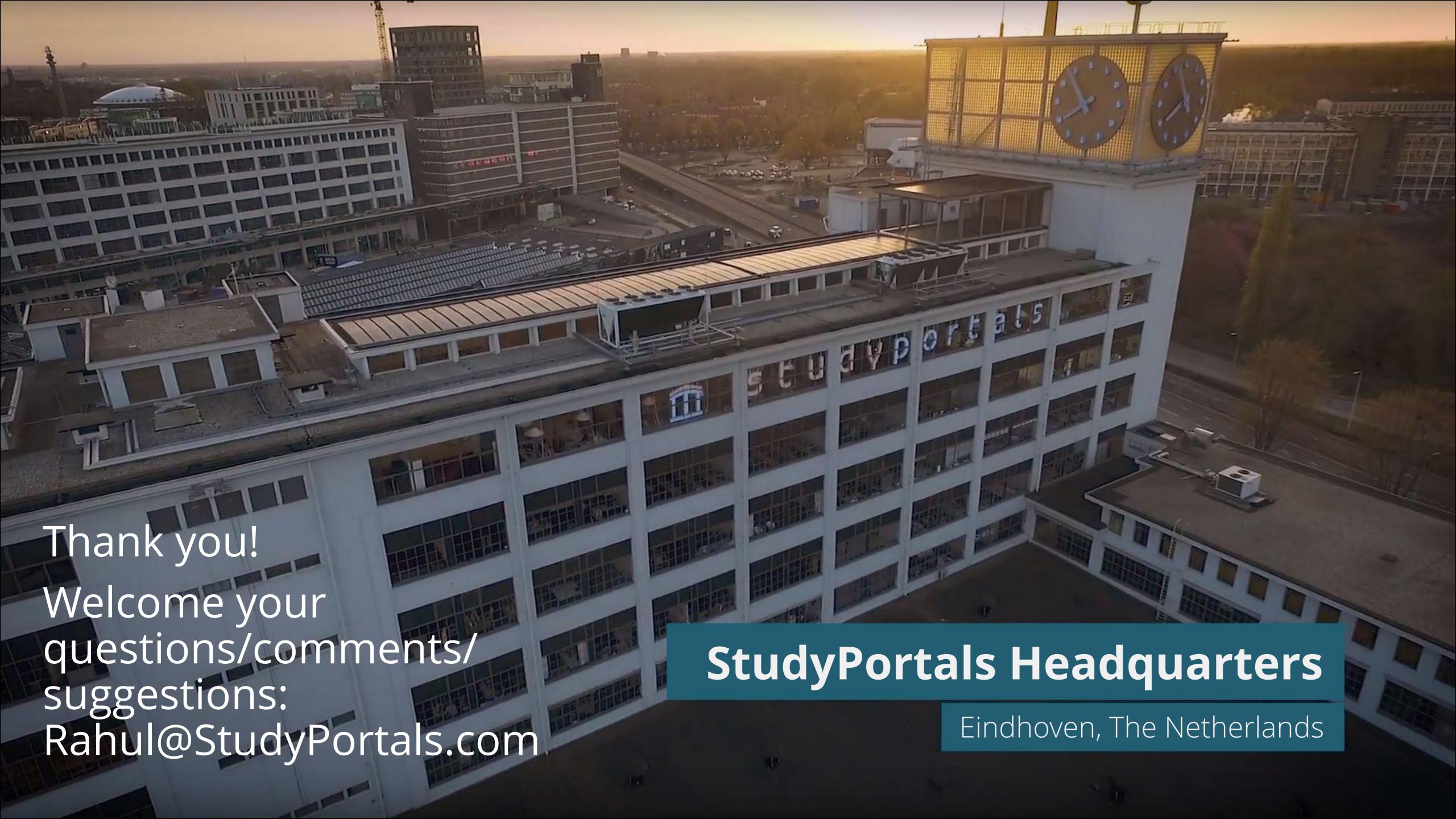
### Additional Resources

- Bert van der Zwaan (2017). <u>Higher Education in 2040</u>
- Centre for Educational Research and Innovation (CERI) <u>University Futures</u>, OECD
- CGS and ETS (2017). <u>Graduate Education 2030</u>: Imagining the Future
- Diana Laurillard and Eileen Kennedy (2017). The potential of MOOCs for learning at scale in the Global South
- Max Roser. Our World in Data.
- MacCormack, A. et al. (2013). Spurring innovation through competitions. MIT Sloan.
- Megatrends by <u>British Council</u>
- Megatrends by <u>E&Y</u>
- Megatrends by <u>Euromonitor</u>
- Megatrends by <u>PwC</u>

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- Megatrends by <u>Sydney Business Insights</u>
- Oxford Martin Programme. <u>Publications</u>
- Robert Zemsky, Susan Shaman (2017) The Market Imperative: Segmentation and Change in Higher Education





### m studyportals

## Purpose

Education without boundaries enriches lives and connects our world

### Mission

Empowering the world to choose education

2

## Goal (BHAG)

To make higher education choice transparent, globally

All internationally-oriented higher education degree options globally findable and comparable in one place

3





## Working Slides

- This is collection of relevant and interesting data
- Please remove all slides from here onwards before sharing final version.



 Context of International Student Mobility • The top five OECD destination countries host almost 70% of mobile students in the OECD area, whereas the top five sending countries (worldwide) account for just under 40% of total migration towards the OECD area.



## More megatrends

- Increase in concerns of security at different levels (personal/community/national/global)
- Reliance on algorithms without involving human judgement
- Impact of automation on middle skilled graduates and professionals
- Increase in global competition for talent
- Rise in populism and the revenge of the left behind
- Impact of information technology every aspect of higher education enterprise
- Rapid aging of the population in the richest countries
- Shift in values and behaviors of the college going generation
- Increasing rates of change, integration of digital and connective technologies in all that we do studyportals



# Broadening of the middle and bottom of the pyramid of highered

### Prestige

Focuses on experience

Increasing competition and high cost model will prompt some institutions to consolidate, partner and specialise

### **Aspiration**

Focuses on career

Increasing expectation for career outcomes and opportunity to engage with middle-class from emerging markets

#### Access

Focus on access

Increasing demand in countries with access and affordability will offer new opportunities for online learning





Achievement

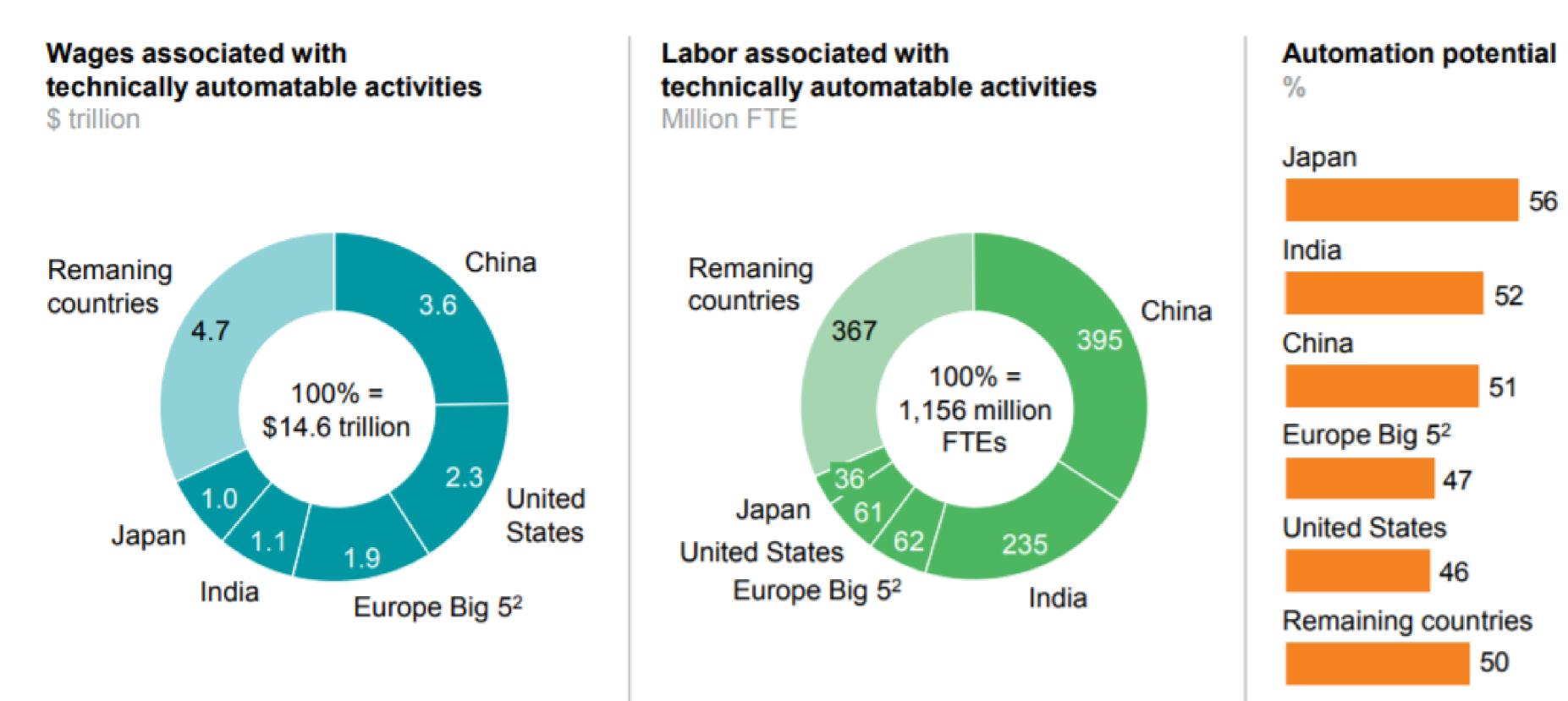
Career

Immigration



### Technical automation potential is concentrated in countries with the largest populations and/or high wages

Potential impact due to automation, adapting currently demonstrated technology (46 countries)



- 1 Pakistan, Bangladesh, Vietnam, and Iran are largest countries by population not included.
- 2 France, Germany, Italy, Spain, and the United Kingdom.

NOTE: Numbers may not sum due to rounding.

SOURCE: Oxford Economic Forecasts; Emsi database; US Bureau of Labor Statistics; McKinsey Global Institute analysis





56

52

51

47

46

50

## Questions for advisory board

- Of the seven megatrend (megatrend are external shifts, not specific to highered) shaping our world leading up to 2030, what are one or two key megatrends which are likely to be most impactful? Why?
  - Is there any other significant megatrend to consider?
- What could be the impact of megatrends on the future of higher education institutions? (models of institutions, program offerings, delivery mechanisms, student profiles etc.)
- As a result of megatrends and its impact on institutions, how could international student mobility patterns change? In other words, how could demand and supply of international higher education may change? (countries of origin, cross-border education, program types etc.)







"I need a list of specific unknown problems that we'll encounter."

Discovering the possibilities



## Demographics will have key impact on HE of the future

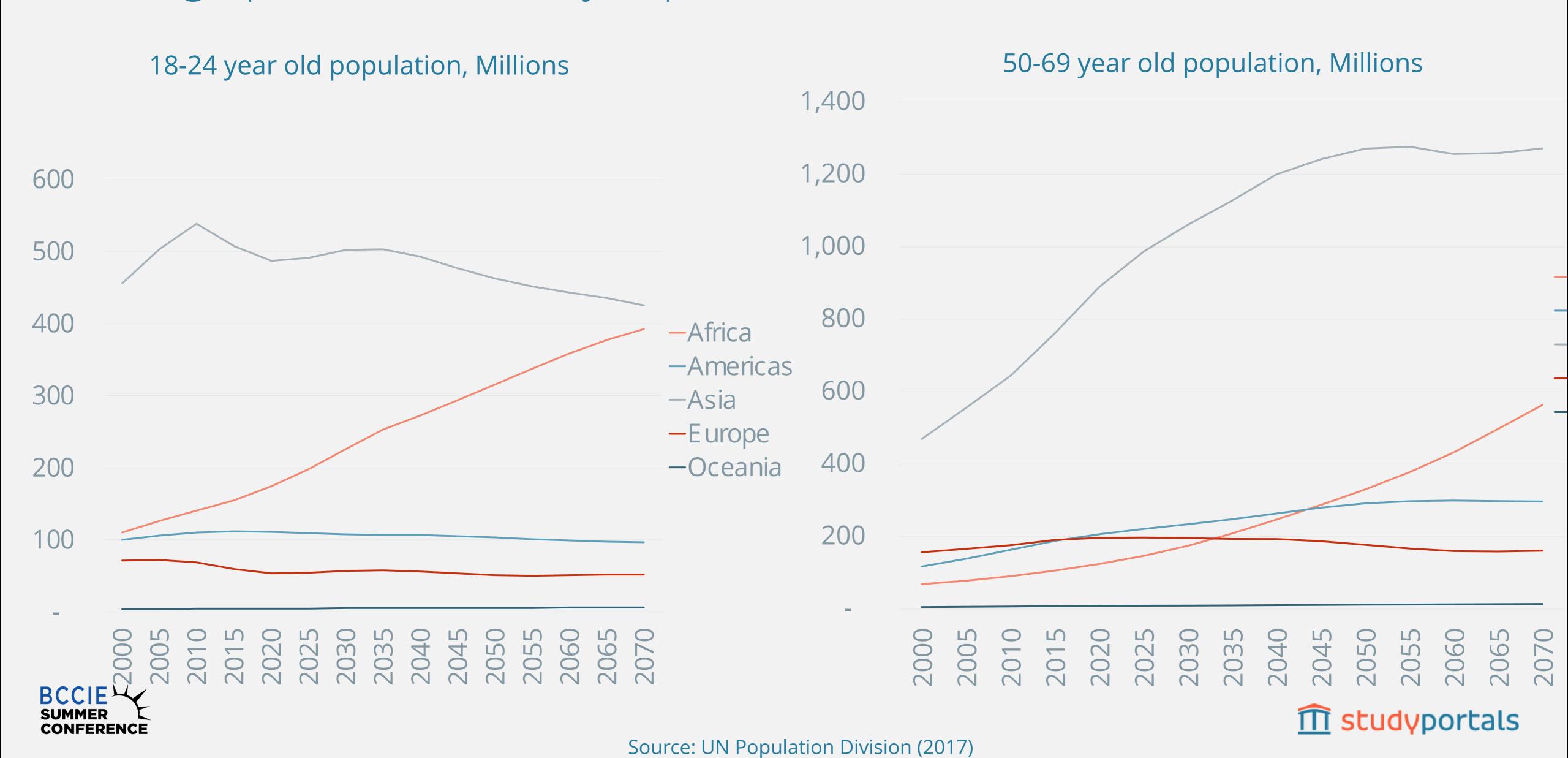


TABLE 1. POPULATION OF THE WORLD AND REGIONS, 2017, 2030, 2050 AND 2100, ACCORDING TO THE MEDIUM-VARIANT PROJECTION

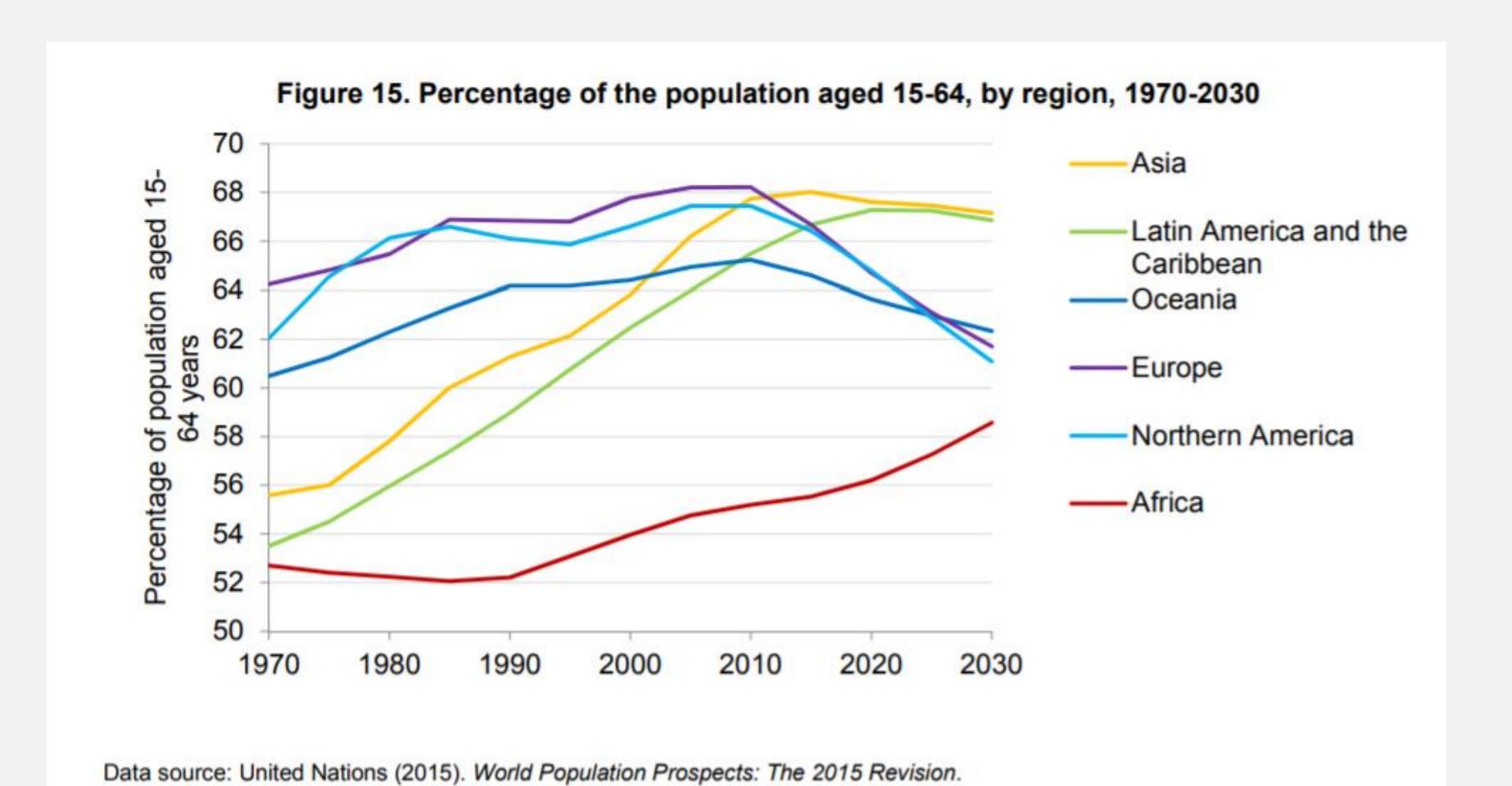
Region	Population (millions)			
	2017	2030	2050	2100
World	7 550	8 551	9 772	11 184
Africa	1 256	1 704	2 528	4 468
Asia	4 504	4 947	5 257	4 780
Europe	742	739	716	653
Latin America and the Caribbean	646	718	780	712
Northern America	361	395	435	499
Oceania	41	48	57	72

Source: United Nations, Department of Economic and Social Affairs, Population Division (2017).

World Population Prospects: The 2017 Revision. New York: United Nations.



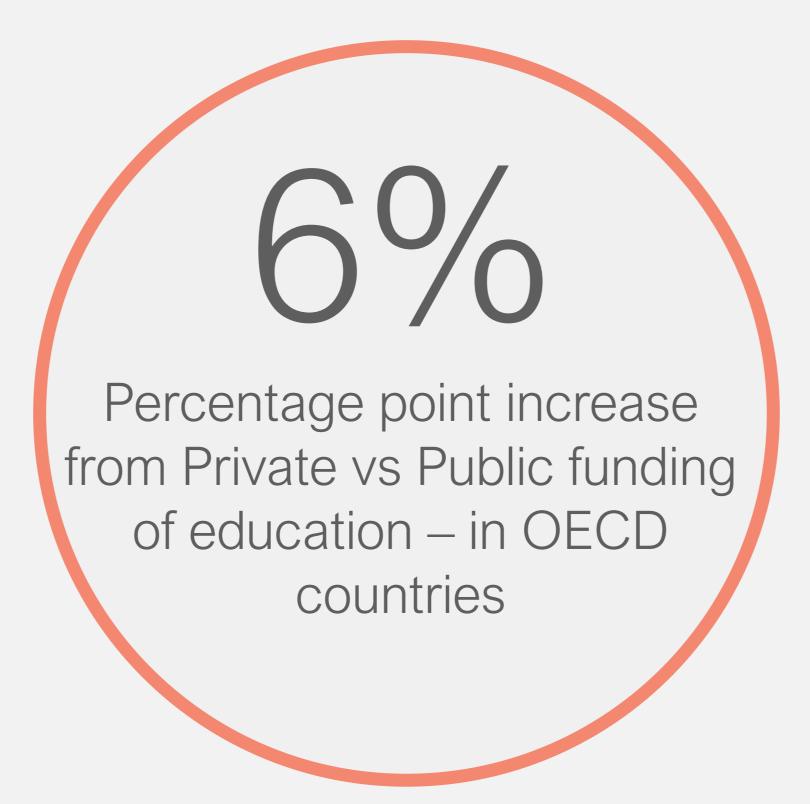






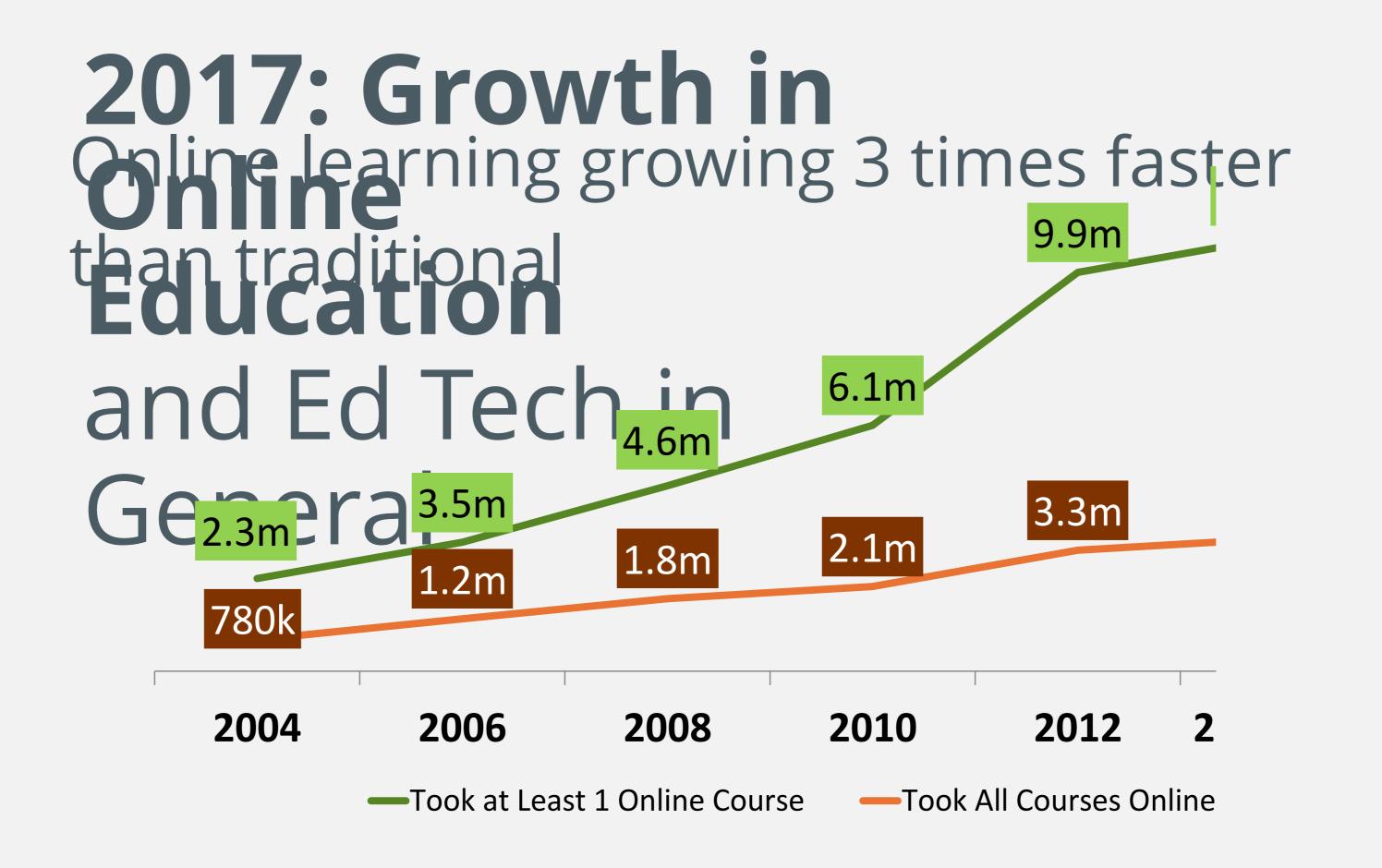


## Education becoming more dependent on private funding







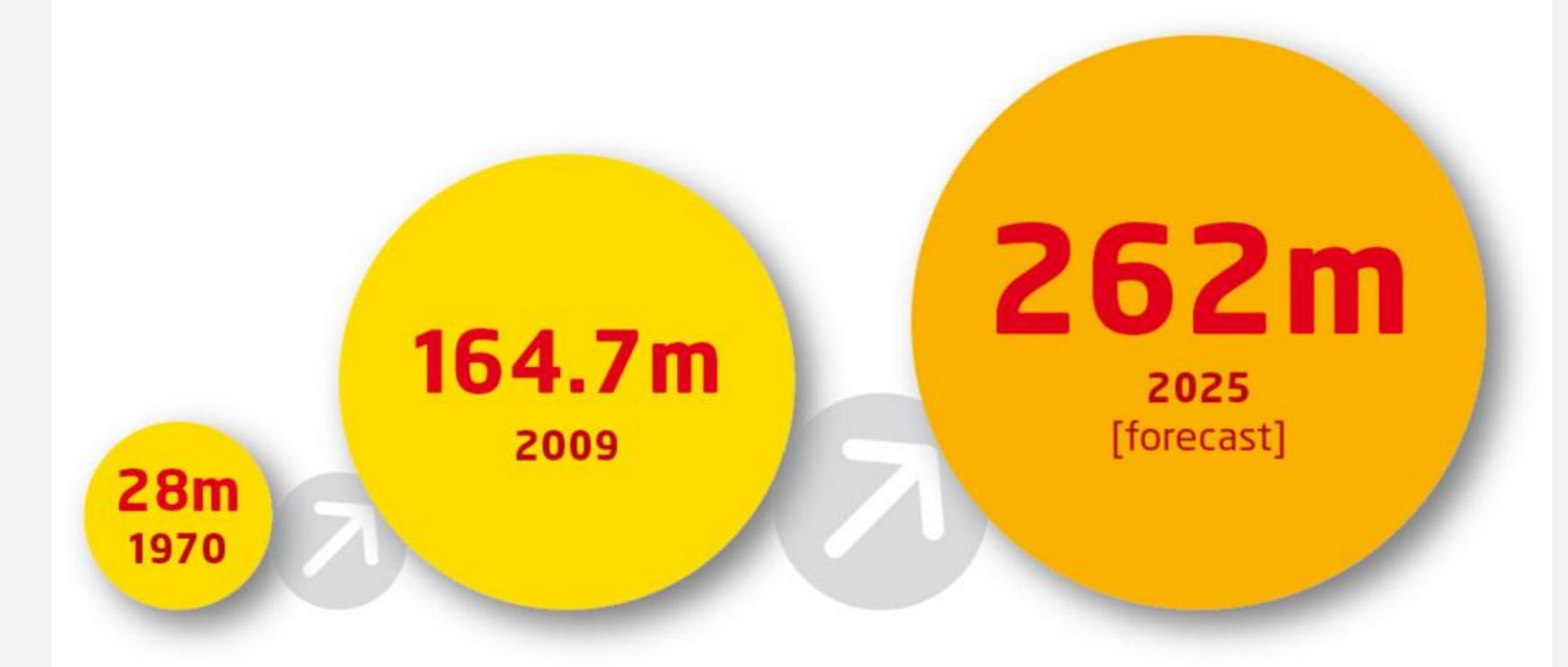






## STUDENTS IN HIGHER EDUCATION

- LARGER THAN THE POPULATION OF RUSSIA OR NIGERIA







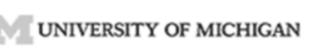
## Innovation

- "A recent and growing sector of higher education composed of companies or organizations that offer higher education experiences operating apart from traditional colleges and universities" (CHEA)
- "If you apply and are accepted into the on-campus or online program that is associated with your MicroMasters program, the MicroMasters credential will count toward the degree."































## 

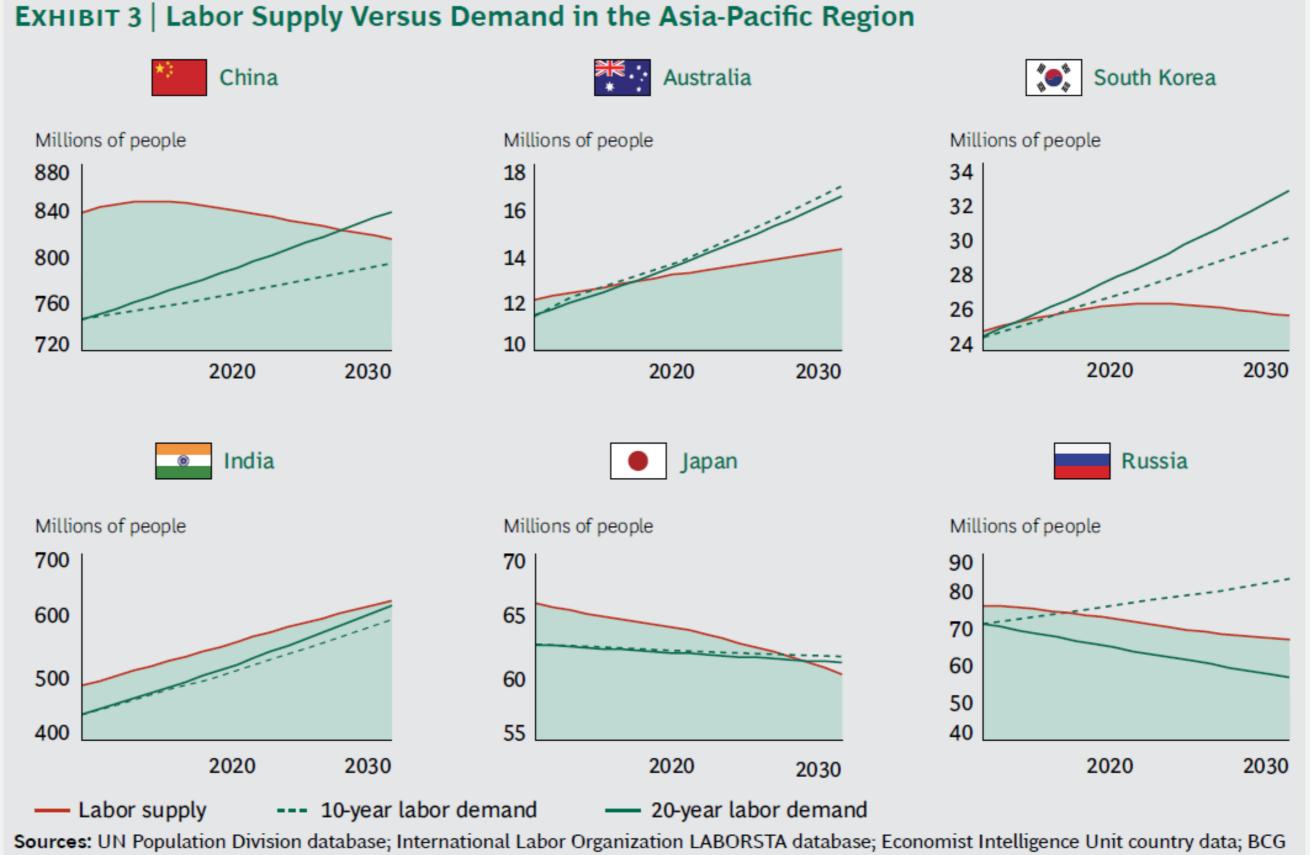
Additional cities with 1 million+ population by 2030. In 2016, 512 vs. 662 in 2030.





## Skills mismatch

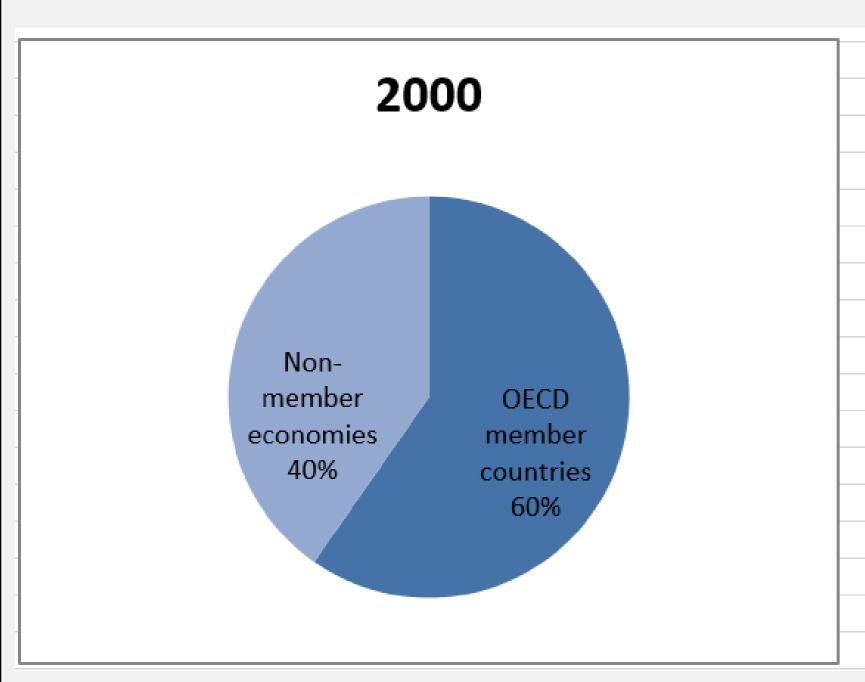
 \$10 trillion ... value of GDP squandered, because either these nations cannot fill the jobs available or they cannot create enough jobs for the workers they have.

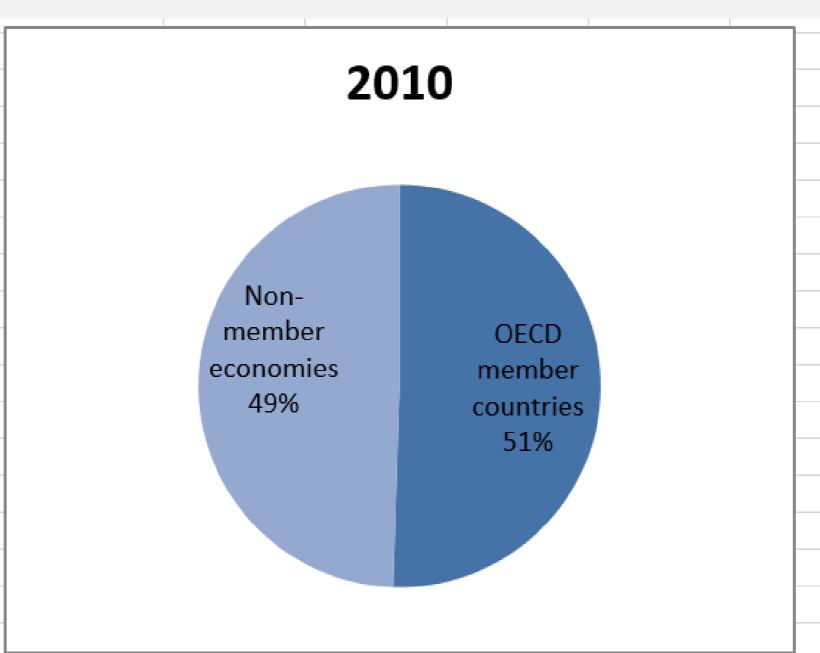


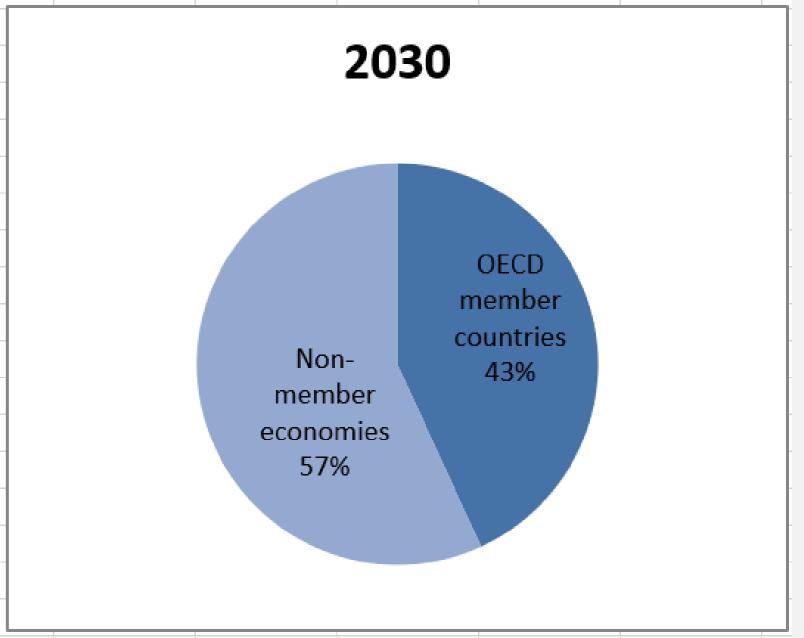
analysis.















## 3.3 million

In 2015, 3.3 m. international students; 4.5 m. foreign students





## 103M ADULTS COULD BENEFIT FROM EDUCATION-TO-EMPLOYMENT ON-RAMPS

#### **INCOME LEVEL**



Sources: U.S. Census Bureau 2016; U.S. Bureau of Labor Statistics 2017; Tyton Partners analysis







- Six megatrends for the future of business <a href="https://www.linkedin.com/pulse/six-megatrends-future-business-sandra-peter">https://www.linkedin.com/pulse/six-megatrends-future-business-sandra-peter</a>
- <a href="http://www.keepeek.com/Digital-Asset-">http://www.keepeek.com/Digital-Asset-</a>
  <a href="Management/oecd/employment/better-use-of-skills-in-the-workplace\_9789264281394-en#.WgEGLmhSyMo#page19">http://www.keepeek.com/Digital-Asset-</a>
  <a href="mailto:morale-need-employment/better-use-of-skills-in-the-workplace\_9789264281394-en#.WgEGLmhSyMo#page19">http://www.keepeek.com/Digital-Asset-</a>
  <a href="mailto:morale-need-employment/better-use-of-skills-in-the-workplace\_9789264281394-en#.WgEGLmhSyMo#page19">http://www.keepeek.com/Digital-Asset-</a>
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- Euromonitor
- Megatrends by <u>Frost</u>



