

EMERGING RECRUITING MARKETS

Emerging Markets Overview

UI 2011 Conference

DISCLAIMER

- **The presentation was delivered by ICG at the Ministry of Science, Innovation and Higher Education 2011 Annual Conference in Copenhagen on 1 December 2011**
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AGENDA

Housekeeping

Trends in International Education

International Student Enrollment in Denmark

Overview of Recruiting Markets

Denmark's Footprint in International Education

Funding and Ability to Pay

Recruitment Opportunities

Discussion

HOUSEKEEPING

- The presentation is geared to run for about 40 minutes
- About 20 minutes are allocated for discussion
- Most of the data presented are sourced from ICG's ISAFM database. ISAFM contains a collection of more than 2 million data points of international education-relevant data and information
- A PDF version of this presentation will be made available to the Ministry or can be downloaded at www.icg.ac on the homepage (December 2011)

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META TRENDS IN INTERNATIONAL EDUCATION

Perspectives

- **Size: About 4 million international students create USD 80-90 billion annual revenue for their respective host countries**
- **Changing of the guard: The USA lost its dominant position, China has been rising for many years**
- **Geography: The rise of Asia (past), the unfolding events in the Middle East (current), and the emergence of South America and Africa (future)**
- **Policy: Policy-makers have “discovered” international education as an important revenue/innovation/migration driver**
- **Science: Sustained increase in international research collaboration – internationalization is not just about students**
- **Competition: Rising at all levels and from all sources**

Accelerating change dynamics are in store

META TRENDS IN INTERNATIONAL STUDENT ENROLLMENT

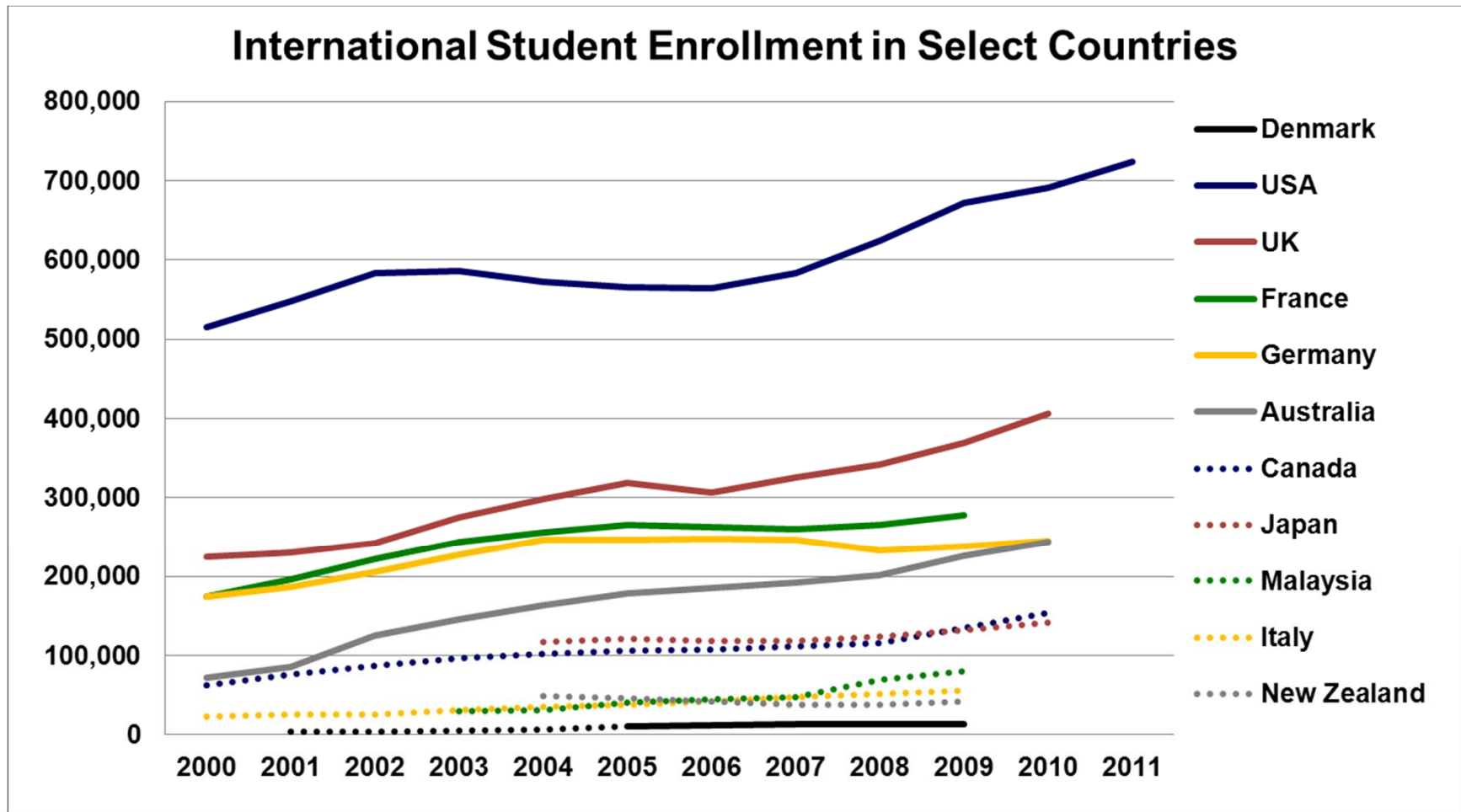
Perspectives

- **The last decade saw a strong expansion of international student enrollments**
 - **Economic development in SE Asia, the Gulf, South America, and Africa**
 - **The rise of destination countries such as China, India, Saudi Arabia and others (out-bound)**
 - **The rise of China, USA (in-bound)**
- **Growth trajectories have been uneven and imbalanced**
 - **The attractiveness of Anglo-Saxon countries**
 - **The fall and re-emergence of the USA**
 - **The rise and crash of Australia**
 - **The rise and impending decline of the UK**
- **Europe is both ahead and behind – a leader in mobility and policy integration but a laggard (largely) in commercialization and competition**

Denmark will have to navigate an unsettled landscape

TRENDS IN INTERNATIONAL STUDENT ENROLLMENT

International Enrollments in Select Top Destination Countries



Denmark's market share: Less than 0.5 percent

Notes: Data for Denmark includes only degree-seeking students until 2005 (dotted black line).

Source: ICG's ISAFM Database.

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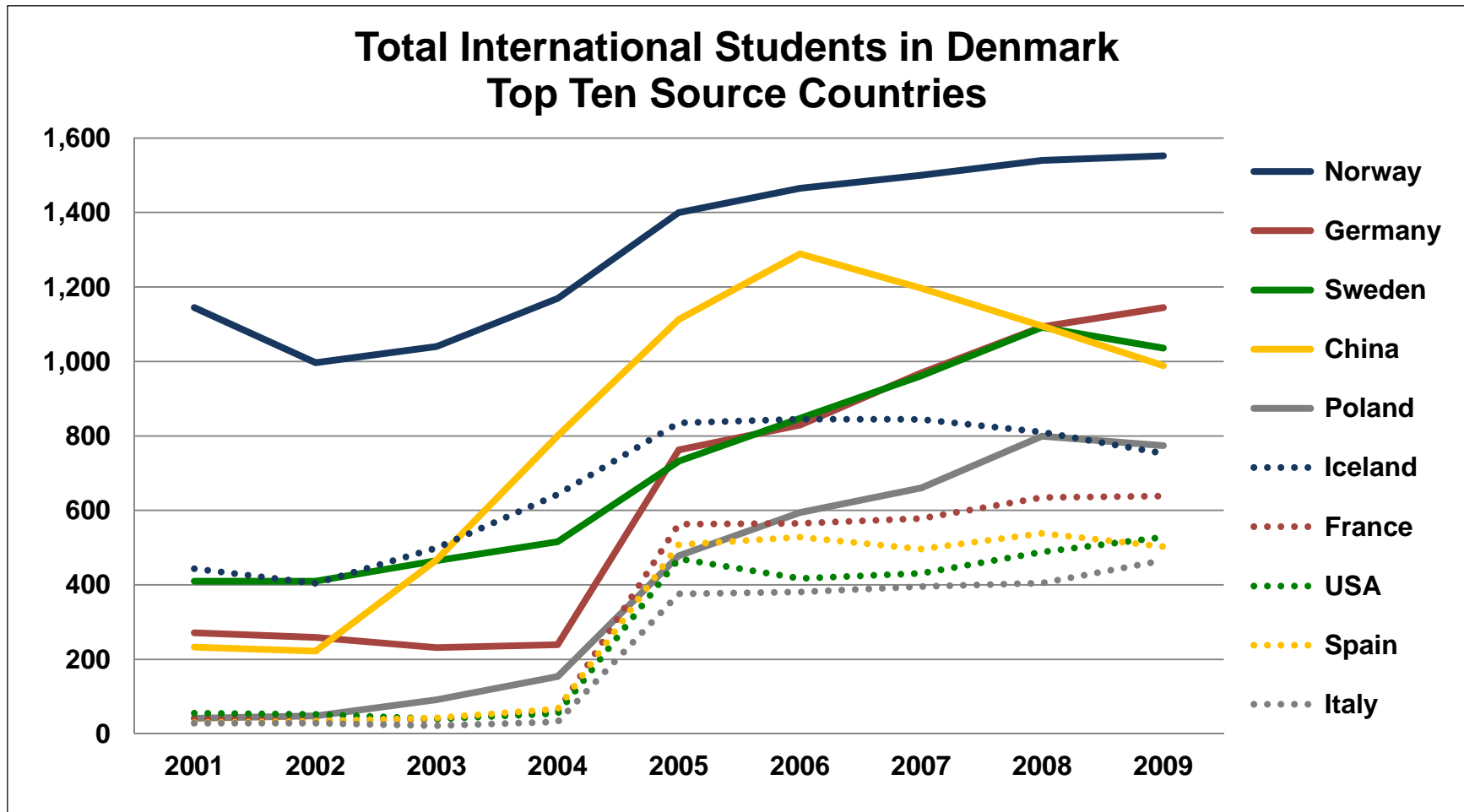
INTERNATIONAL ENROLLMENT IN DENMARK

On Data

- **Data displayed in this section was sourced from UI**
- **There are known data disparities relative to data collected within higher education institutions**

INTERNATIONAL ENROLLMENT IN DENMARK

Total International Students by Top Ten Source Countries



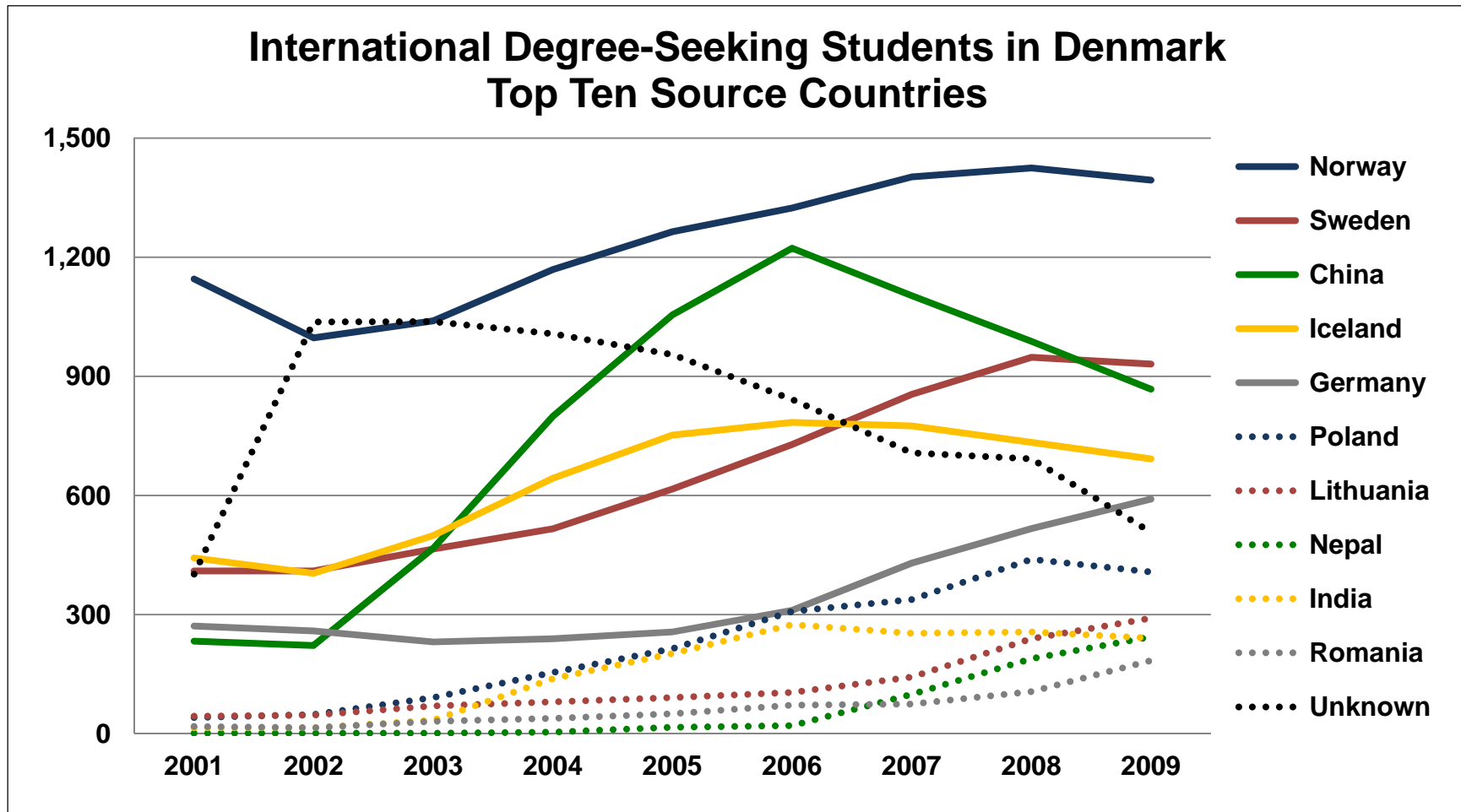
Eight of the Top Ten source countries are European

Notes: Exchange students data is available only as of 2005.

Source: UI.

INTERNATIONAL ENROLLMENT IN DENMARK

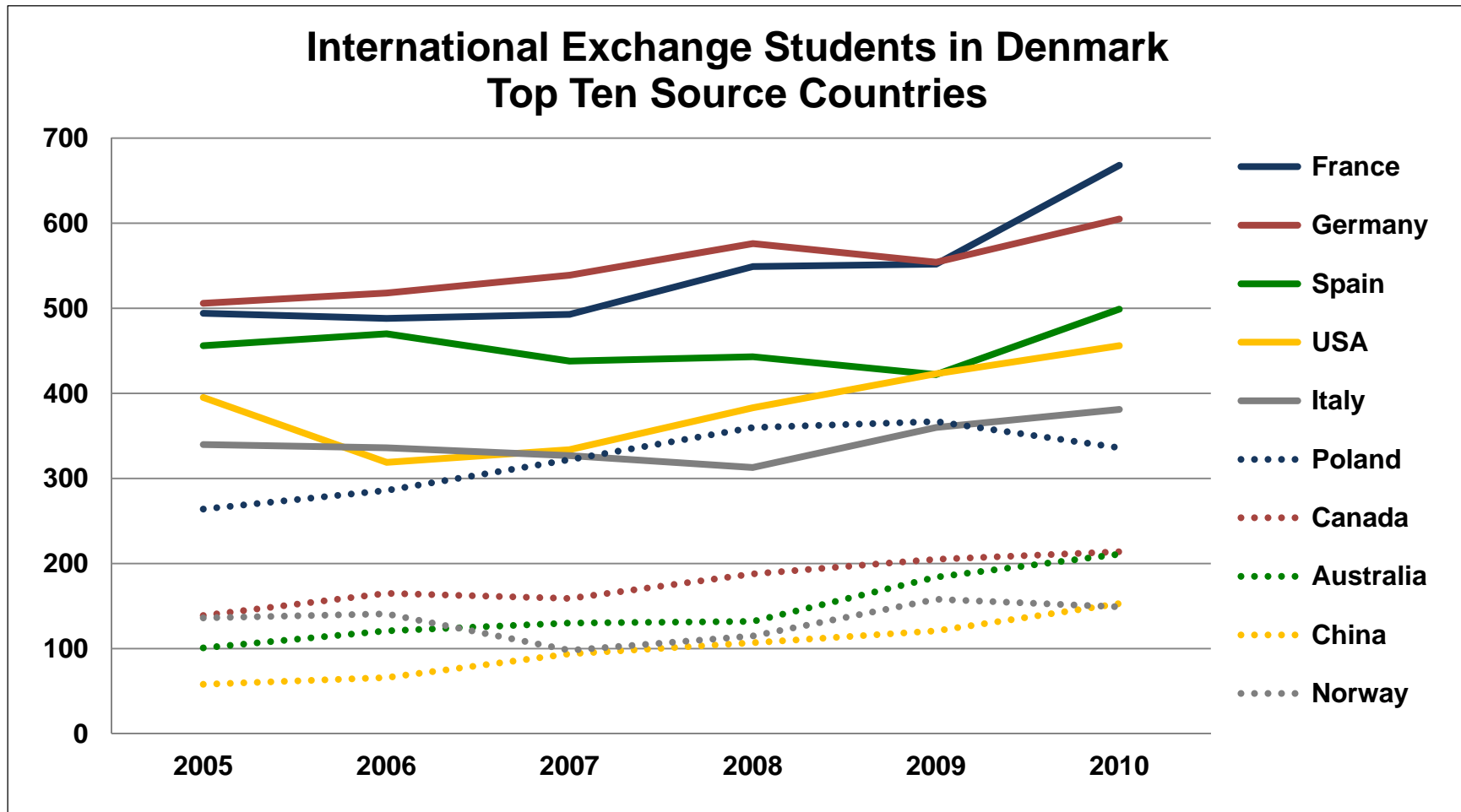
International Degree-Seeking Students by Source Country



Notable countervailing growth/decline trends evident

INTERNATIONAL ENROLLMENT IN DENMARK

International Exchange Students by Source Country



All Top Ten exchange source countries have grown

Source: UI, 2011.

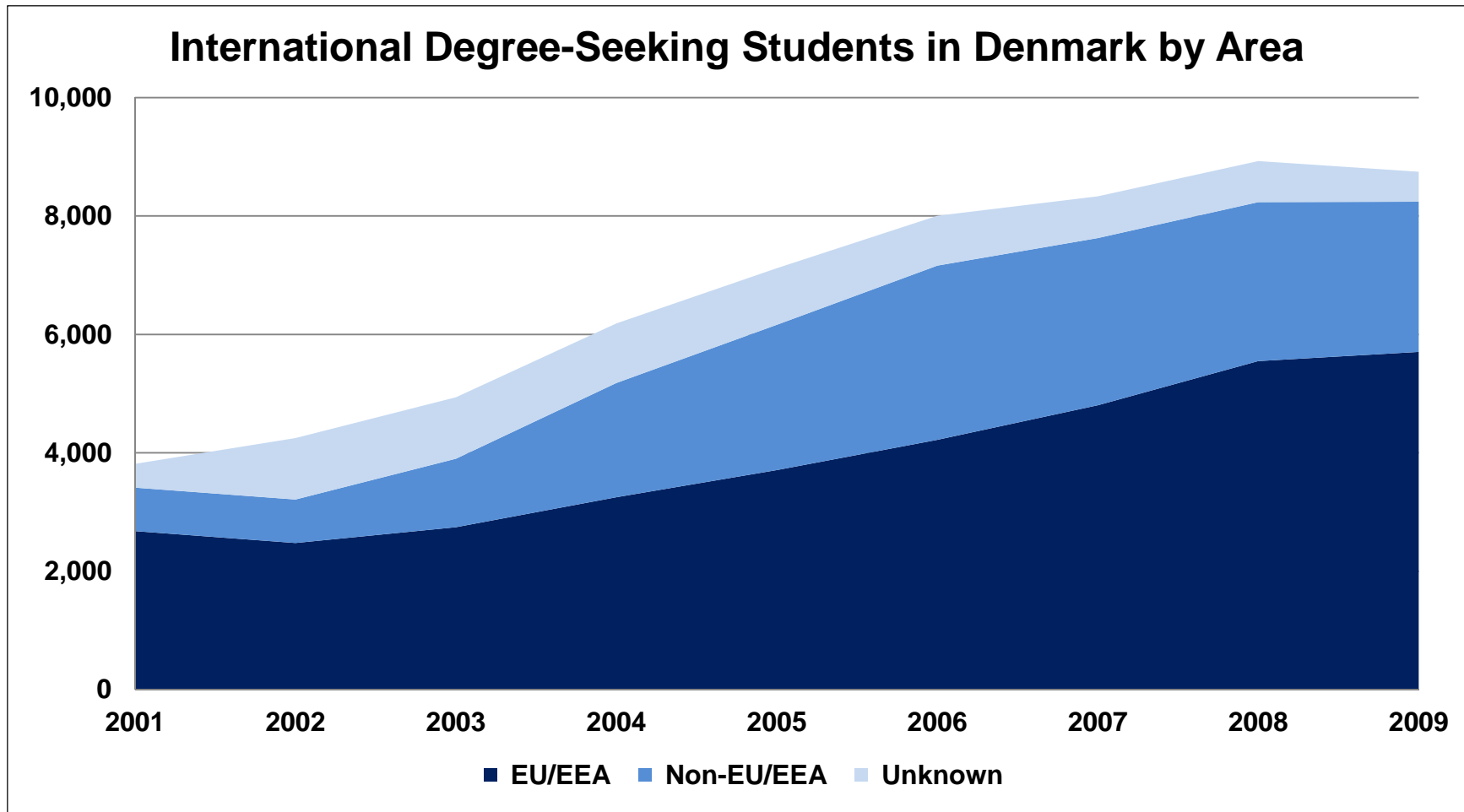
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13

INTERNATIONAL ENROLLMENT IN DENMARK

EU/EEA and Non-EU/EEA Degree-Seeking Students



EU students have been the key driver for degree-seeking students

Source: UI, 2011.

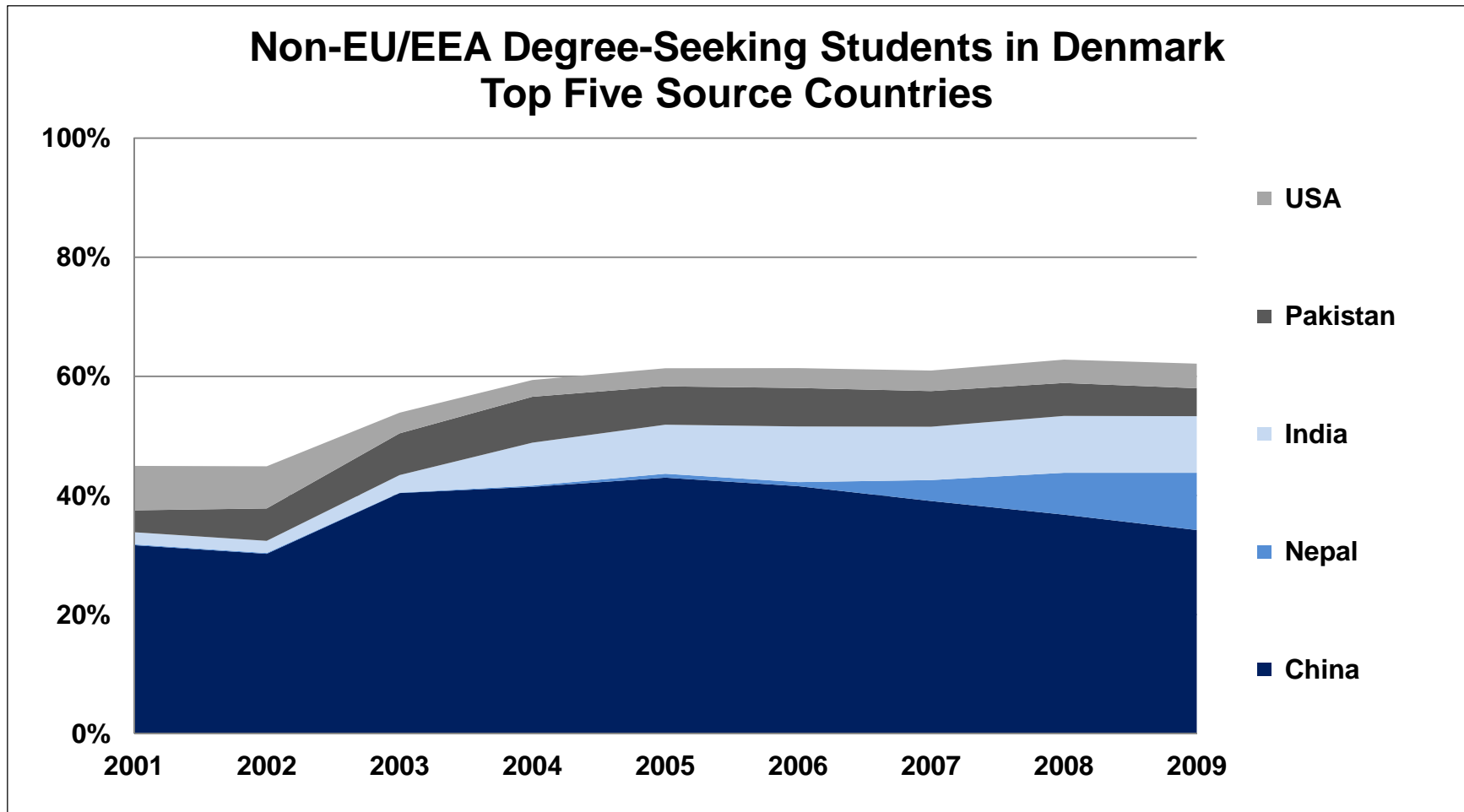
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14

INTERNATIONAL ENROLLMENT IN DENMARK

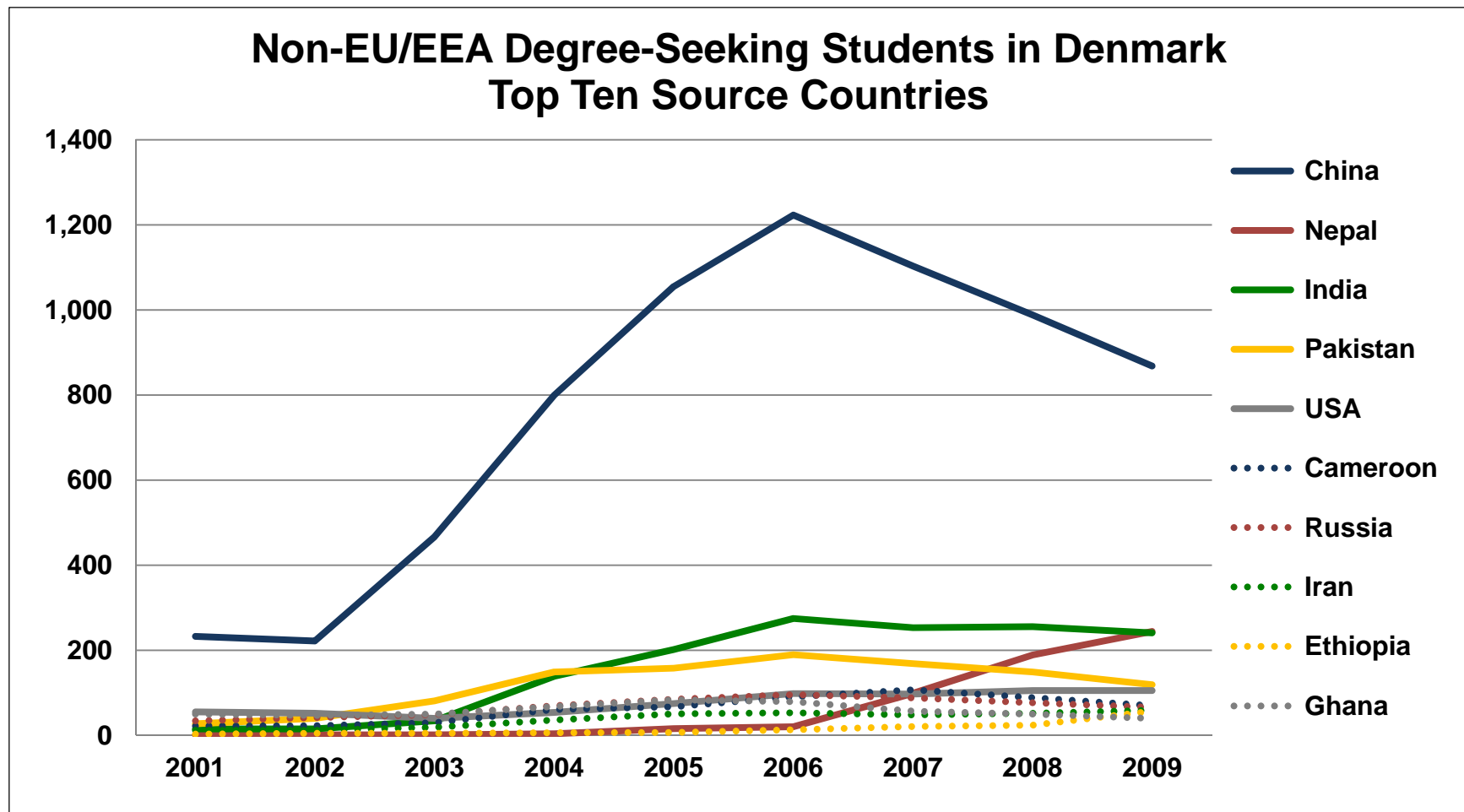
Non-EU/EEA Degree-Seeking Students by Source Country



Source: IU, 2010.

INTERNATIONAL ENROLLMENT IN DENMARK

Non-EU/EEA Degree-Seeking Students by Source Country



The dominant driver: The rise and fall of Chinese enrollments

Source: UI, 2011.

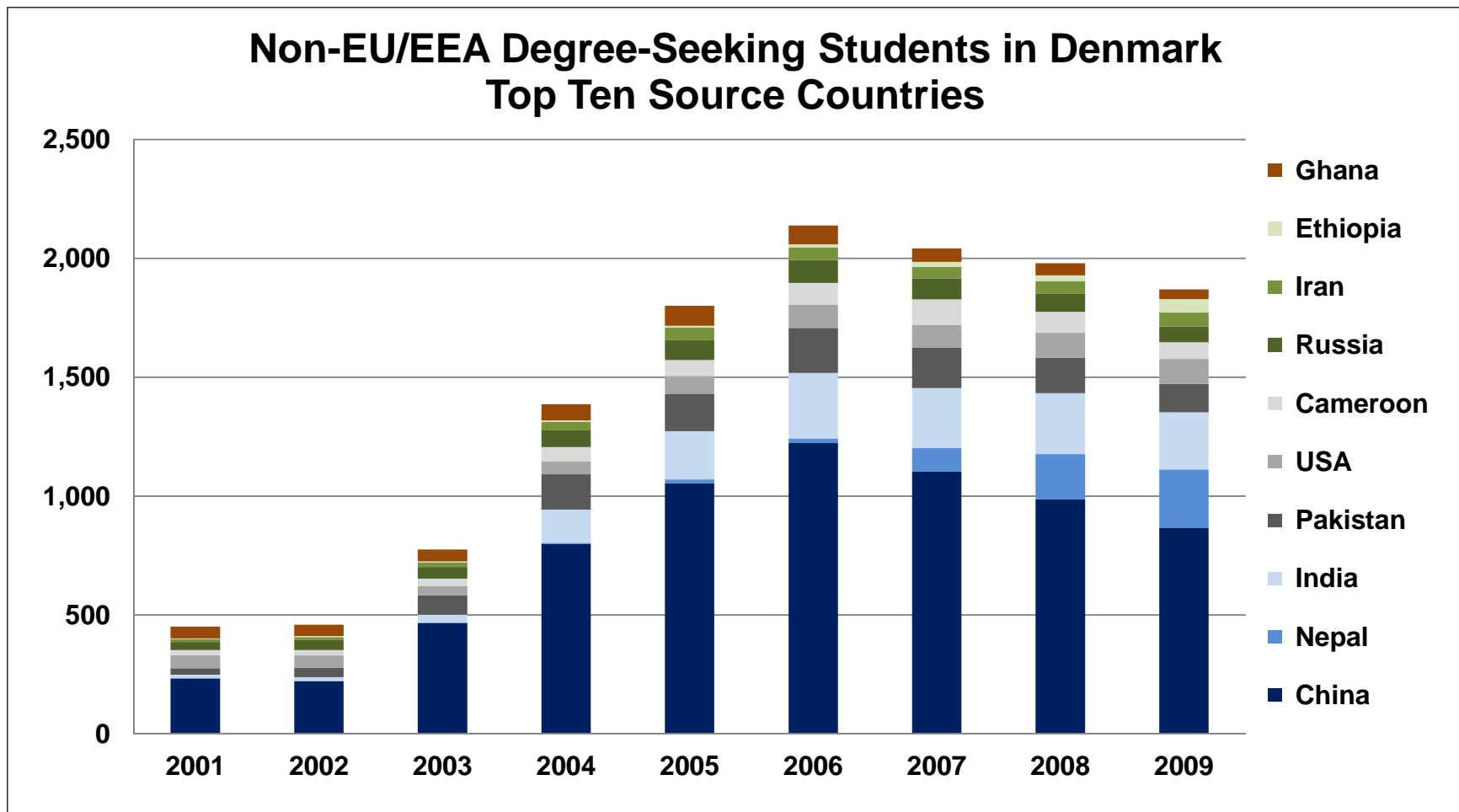
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16

INTERNATIONAL ENROLLMENT IN DENMARK

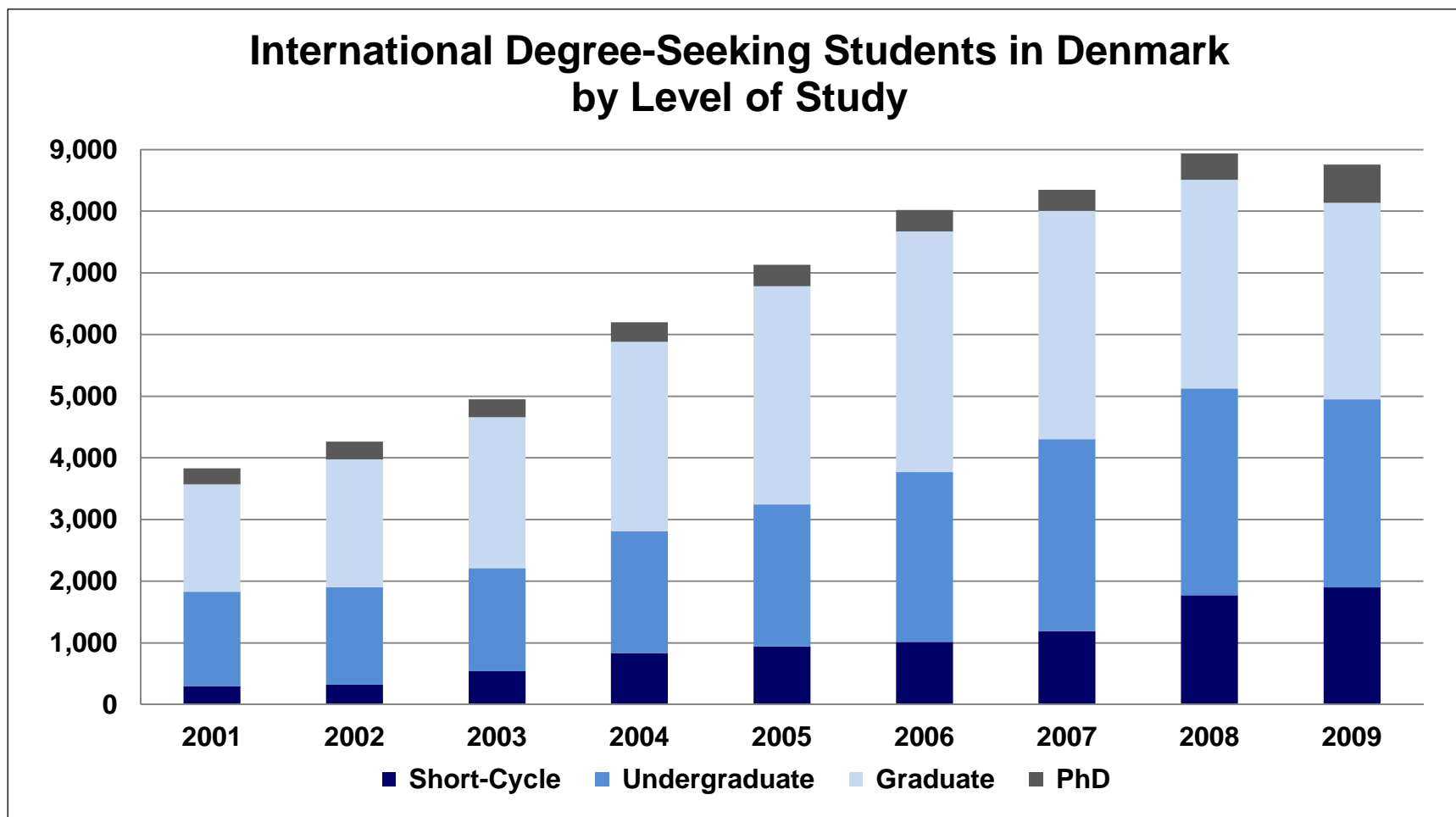
Non-EU/EEA Degree-Seeking Students by Source Country



Source: IU, 2010.

INTERNATIONAL ENROLLMENT IN DENMARK

International Degree-Seeking Students by Level of Study



For consideration: Re-direct emphasis on graduate/PhD recruiting

Source: UI, 2011.

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18

AGENDA

Housekeeping

Trends in International Education

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Overview of Recruiting Markets

Denmark's Footprint in International Education

Funding and Ability to Pay

Recruitment Opportunities

Discussion

OVERVIEW OF RECRUITING MARKETS

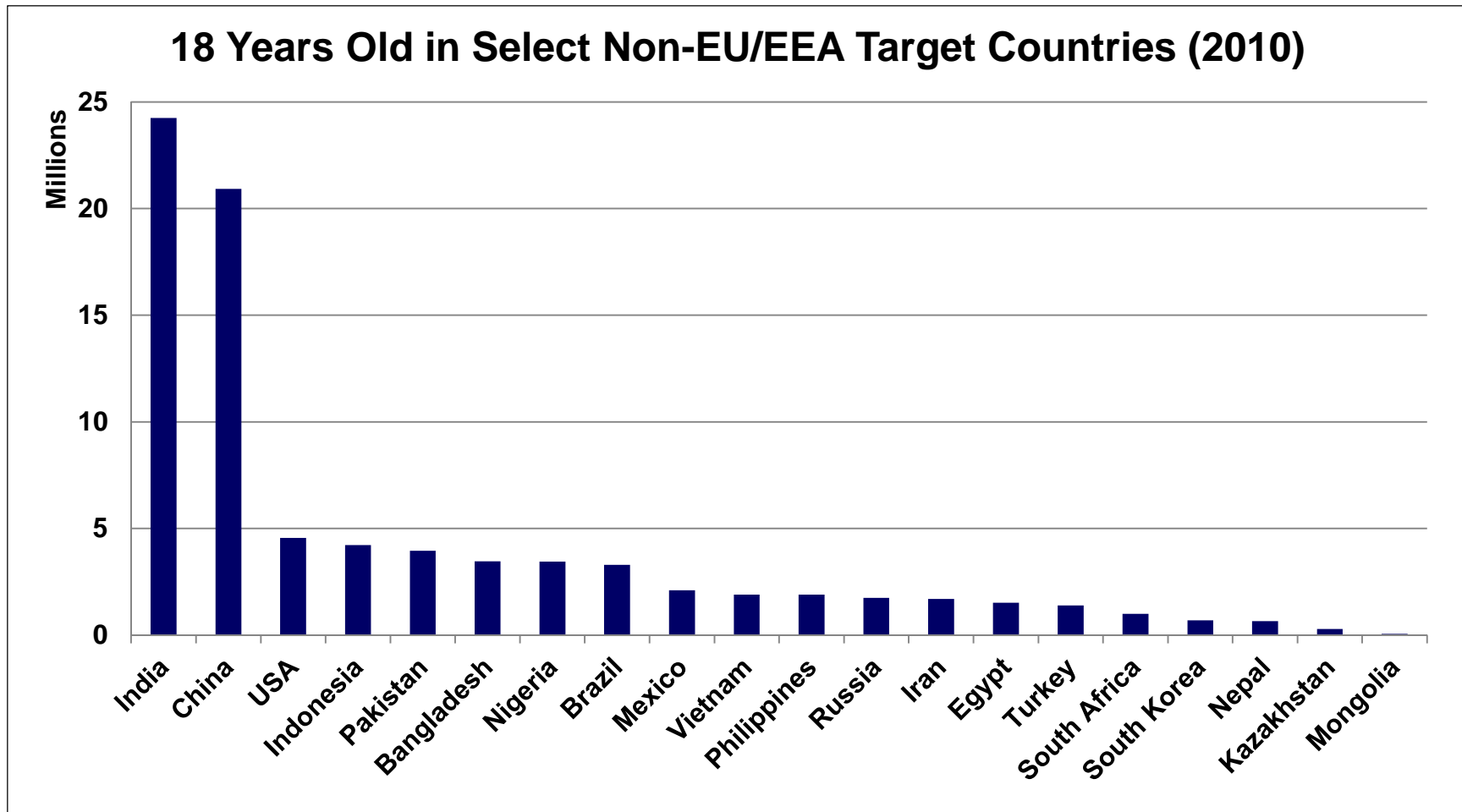
Target Recruiting Markets Selection

Target Recruiting Markets	Rationale
Kazakhstan, Mongolia	Emerging market for international student recruitment
Brazil, China, India, Russia, South Africa	BRICS countries
Bangladesh, Egypt, Indonesia, Iran, Mexico, Nigeria, Pakistan, Philippines, South Korea, Vietnam	“Next Eleven” countries
Australia, Bulgaria, Estonia, Hungary, Latvia, Lithuania, Nepal, Poland, Romania, Turkey	Top Ten fastest growing source countries for international student enrollment in Denmark
USA	Key source countries for study abroad students

Notes: Target market countries were drawn based on UI suggestions and ICG analysis.

OVERVIEW OF RECRUITING MARKETS

18 Years Old Cohort – Non-EU/EEA Target Countries

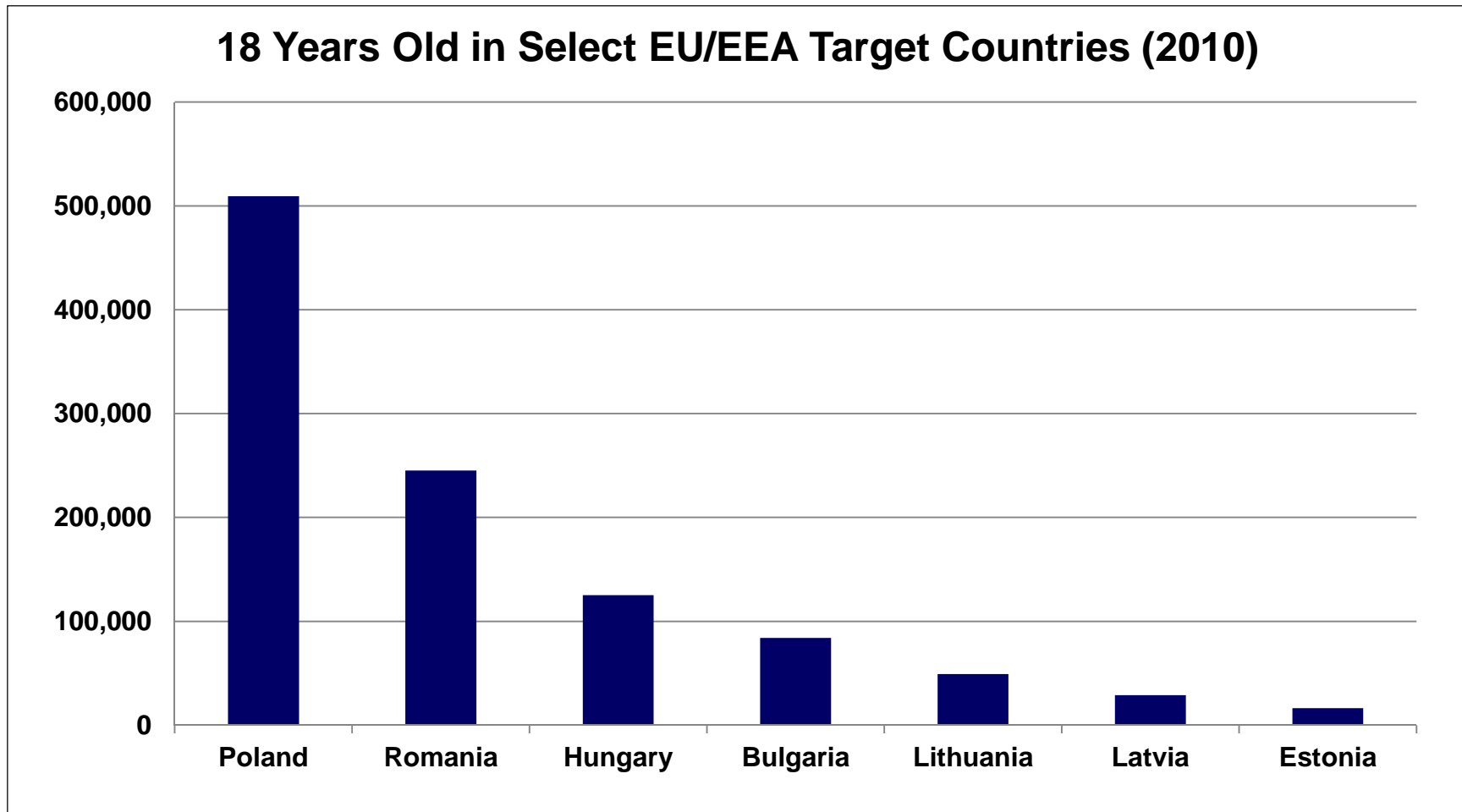


China and India do and will supply very large amounts of students

Source: United Nations Population Division, 2010..

OVERVIEW OF RECRUITING MARKETS

18 Years Old Cohort – EU/EEA Target Countries

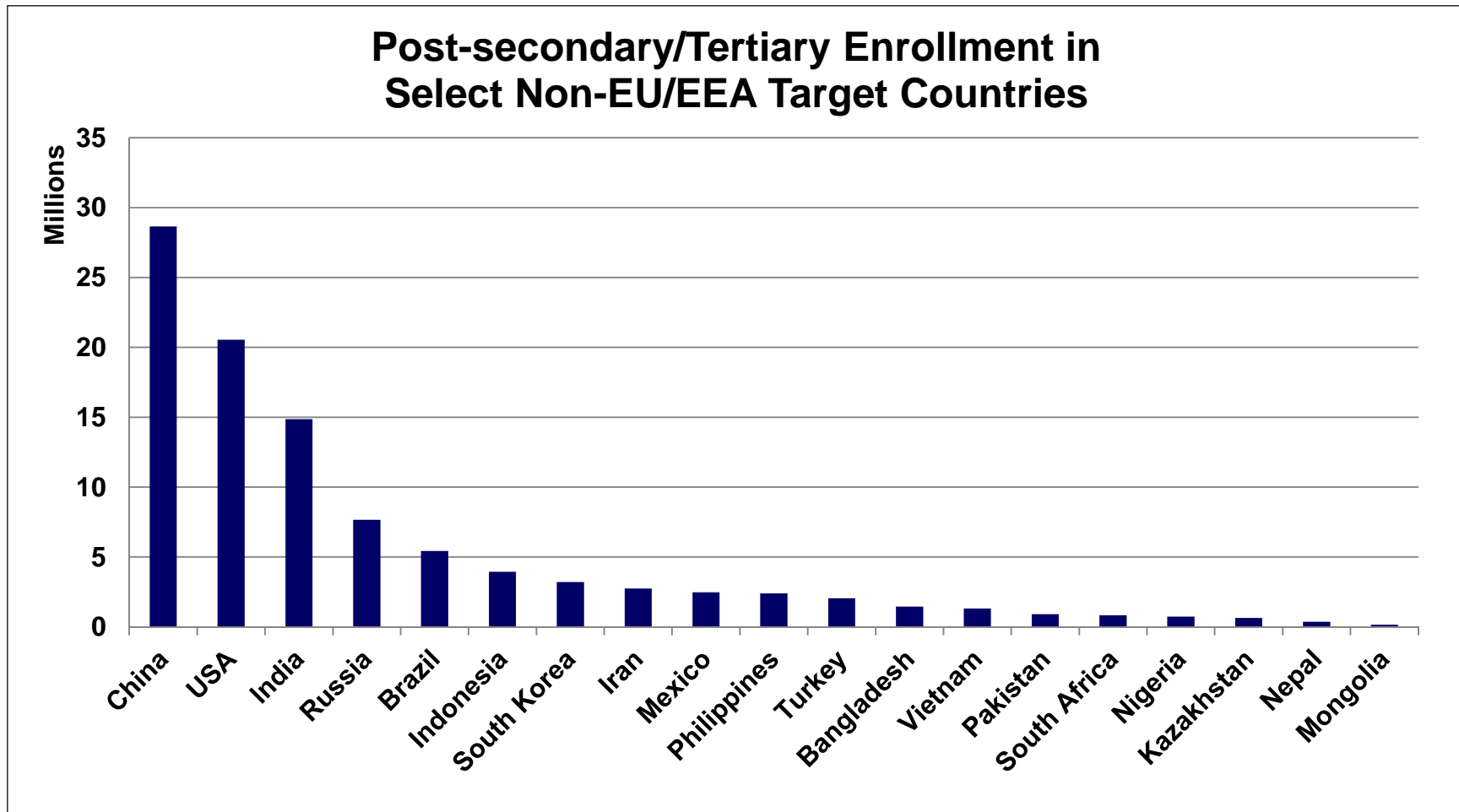


European cohorts are (much) smaller than non-EU cohorts

Source: United Nations Population Division, 2010.

OVERVIEW OF RECRUITING MARKETS

Domestic Post-secondary/Tertiary Enrollment – Non-EU/EEA Target Countries



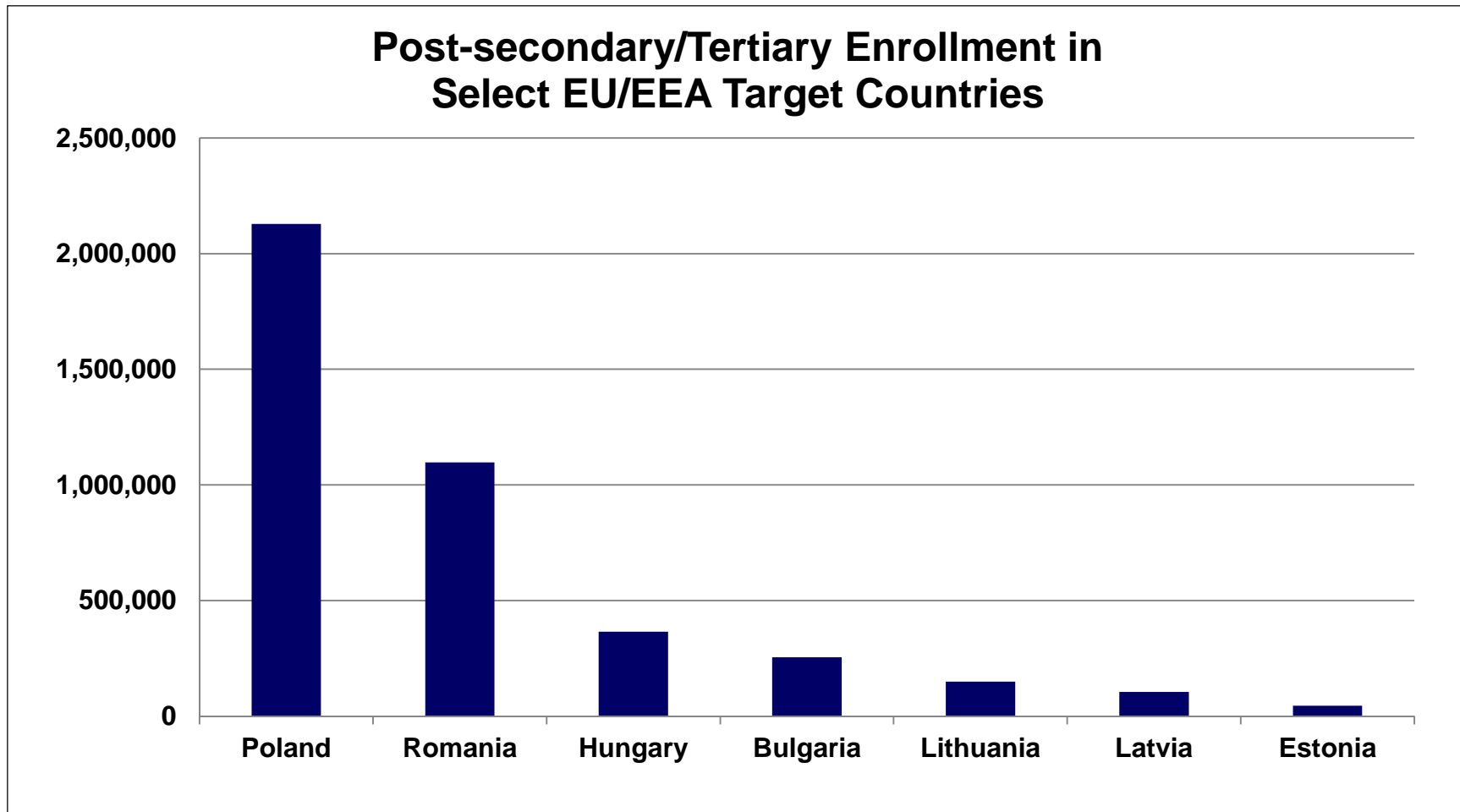
Many leading source countries are increasing domestic enrollments

Notes: The values refer to the latest year for which data is available.

Source: ISAFM Database.

OVERVIEW OF RECRUITING MARKETS

Domestic Post-secondary/Tertiary Enrollment – EU/EEA Target Countries



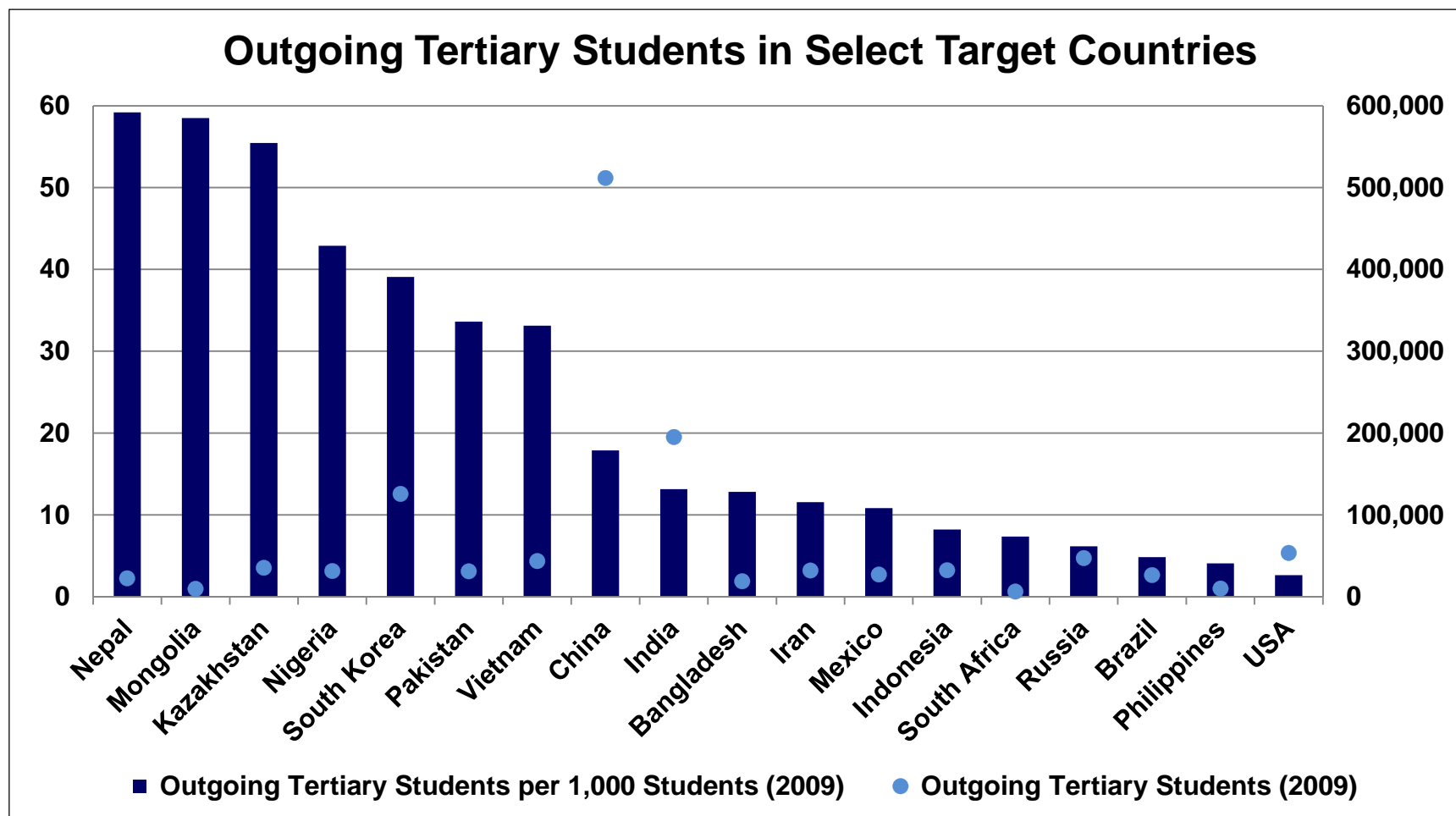
Only Poland and Romania offer larger recruiting pools

Notes: The values refer to the latest year for which data is available.

Source: ISAFM Database.

OVERVIEW OF RECRUITING MARKETS

Outgoing Tertiary Students in Select Target Countries

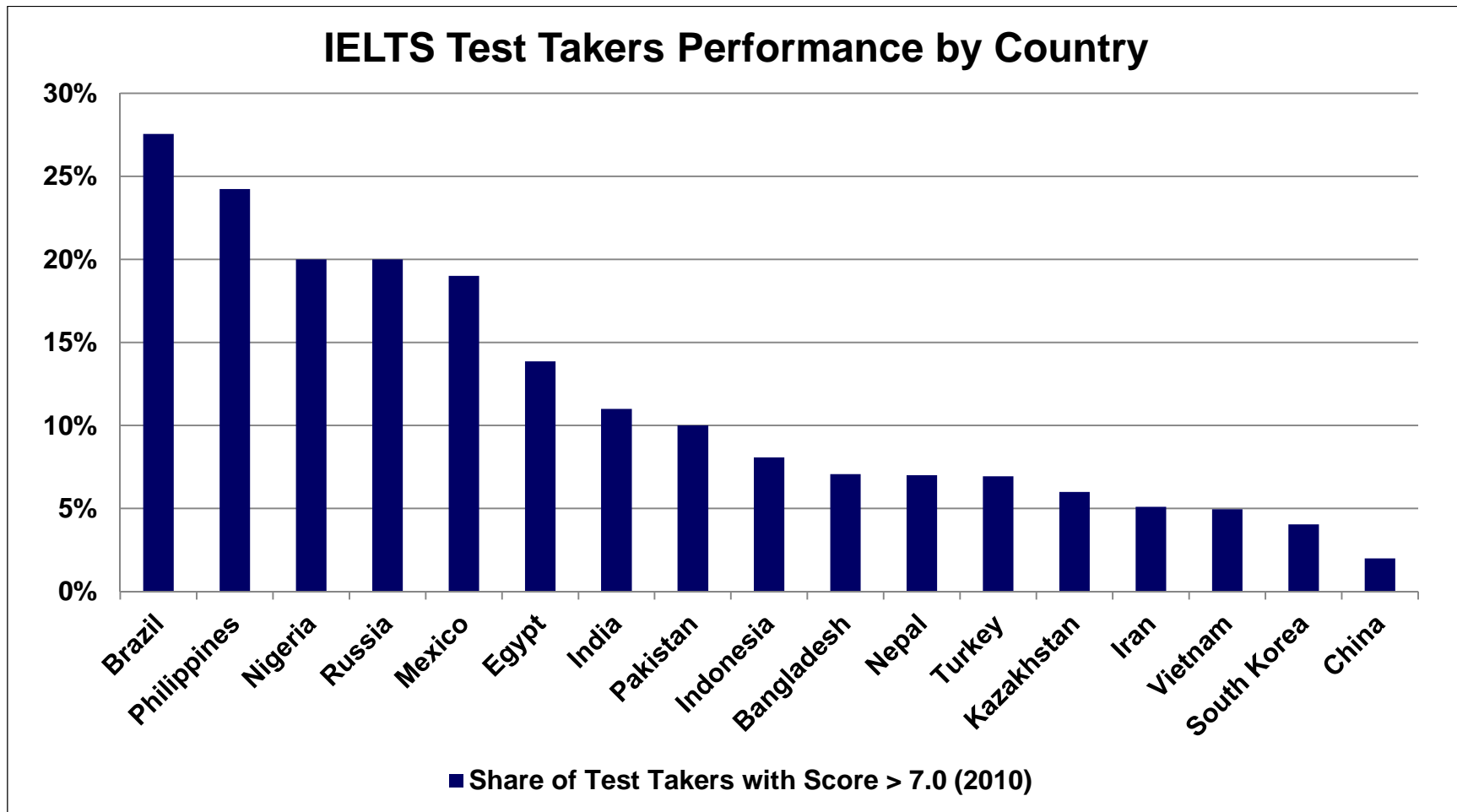


Some countries exhibit a clear preponderance for studying abroad

Source: ISAFM Database and UNESCO.

OVERVIEW OF RECRUITING MARKETS

English Language Performance: IELTS



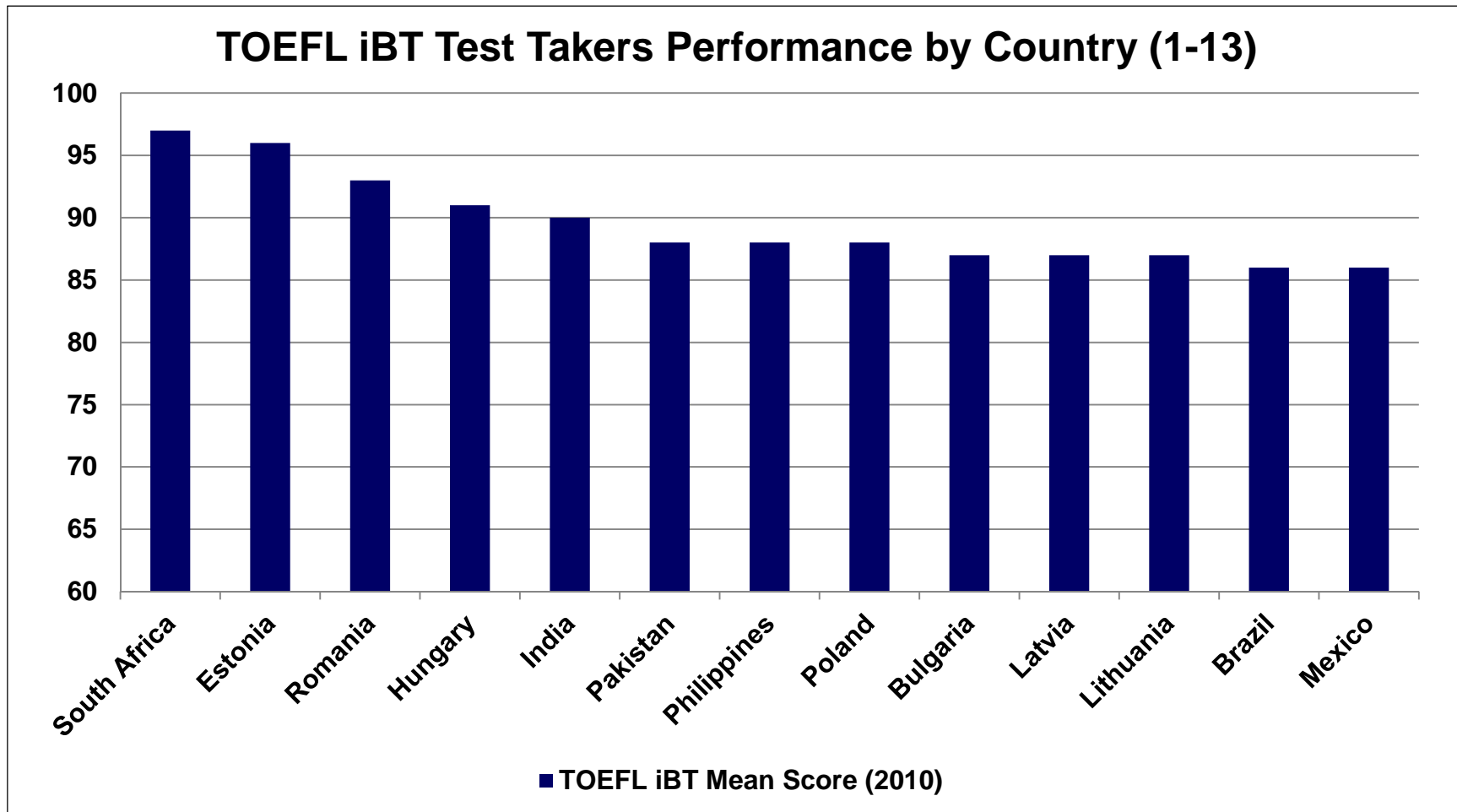
English language competence has become a critical bottleneck

Notes: Data is unavailable for Bulgaria, Estonia, Hungary, Latvia, Lithuania, Mongolia, Poland, Romania and South Africa.

Source: IELTS, 2011.

OVERVIEW OF RECRUITING MARKETS

English Language Performance: TOEFL (I)



iBT scores are more “compact” than IELTS scores, but...

Source: ETS, 2011.

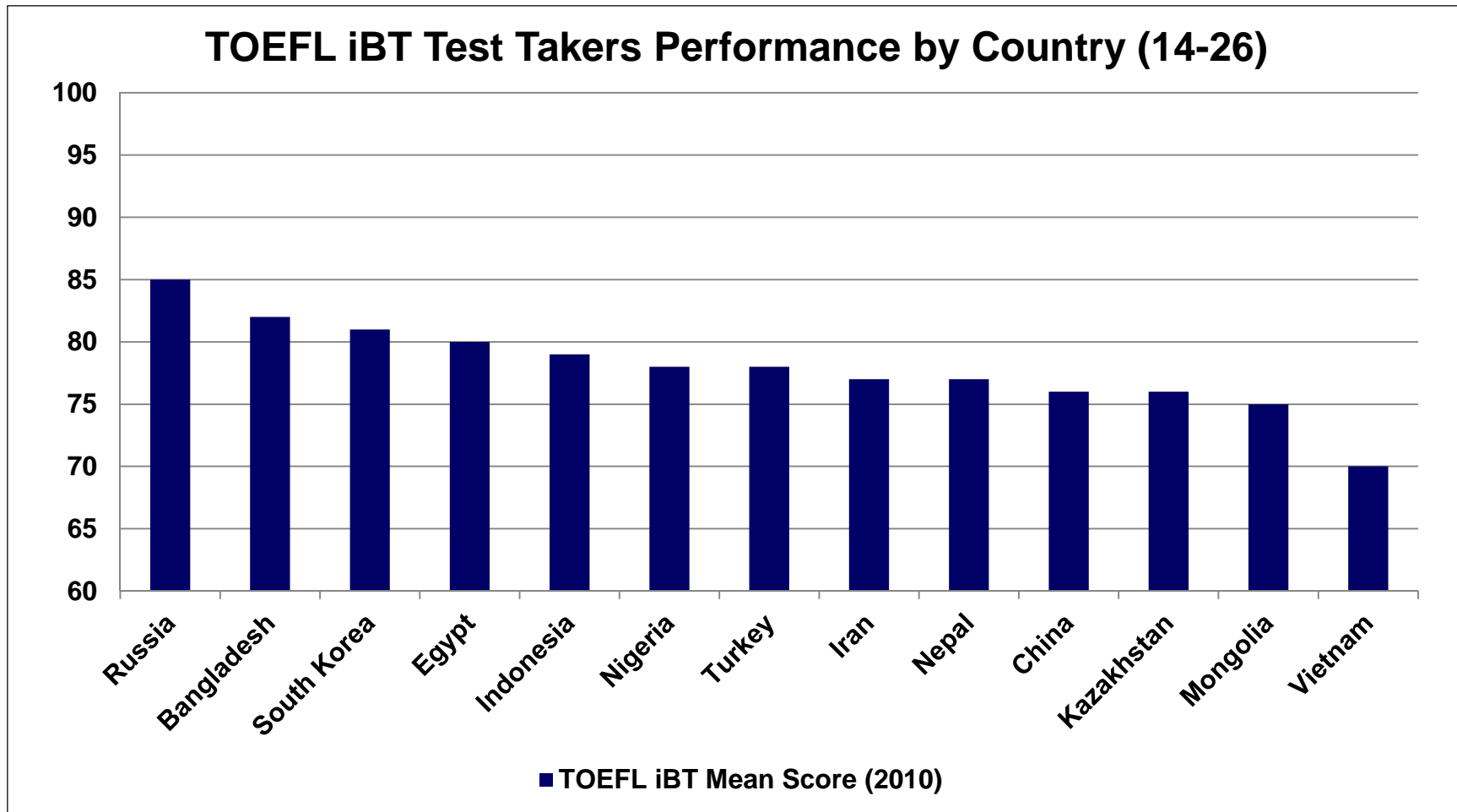
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27

OVERVIEW OF RECRUITING MARKETS

English Language Performance: TOEFL (II)



...are also rather questionable in their validity

Source: ETS, 2011.

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28

AGENDA

Housekeeping

Trends in International Education

International Student Enrollment in Denmark

Overview of Recruiting Markets

Denmark's Footprint in International Education

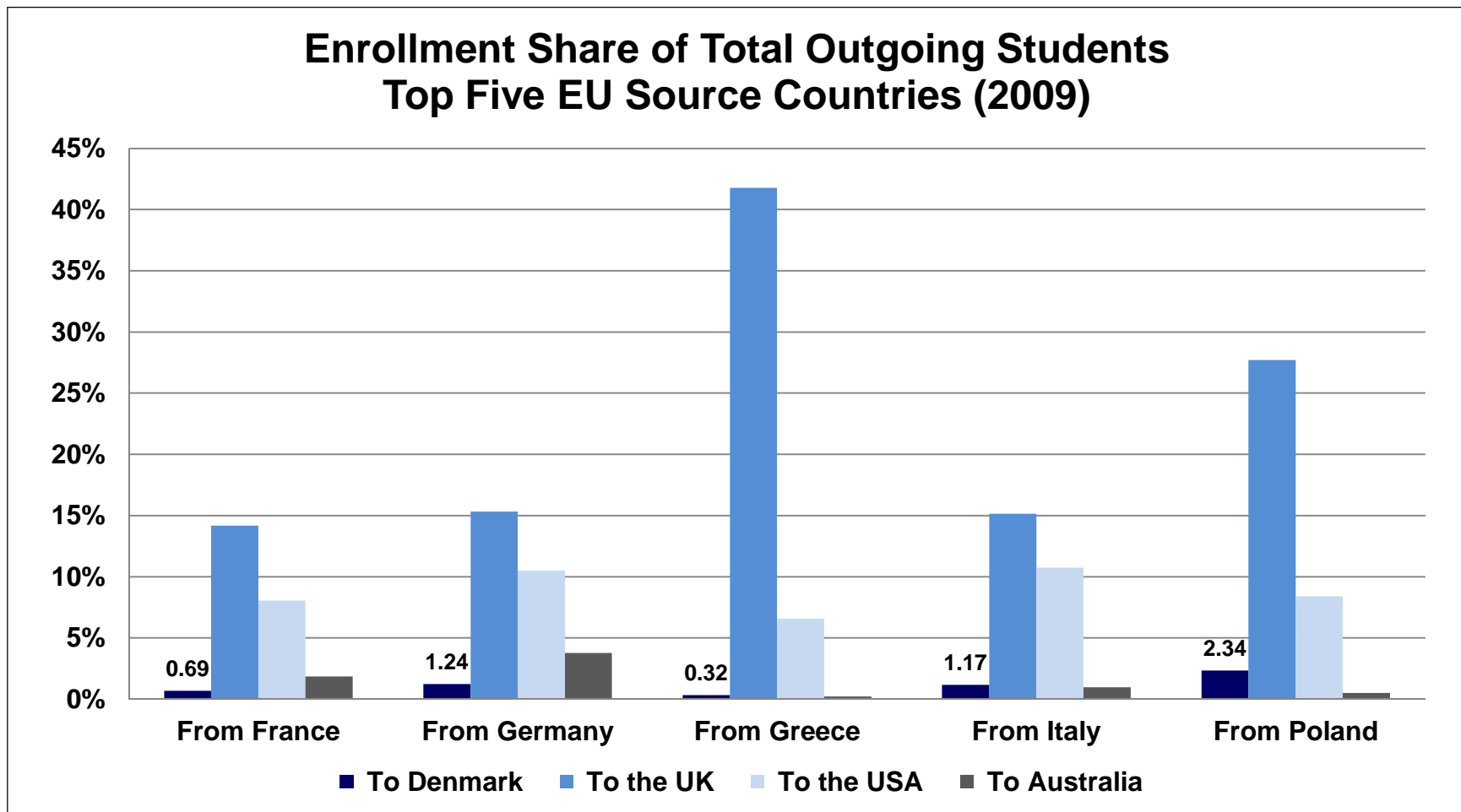
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Recruitment Opportunities

Discussion

DENMARK'S FOOTPRINT IN INTERNATIONAL EDUCATION

Top Five EU Source Countries for Outgoing Students

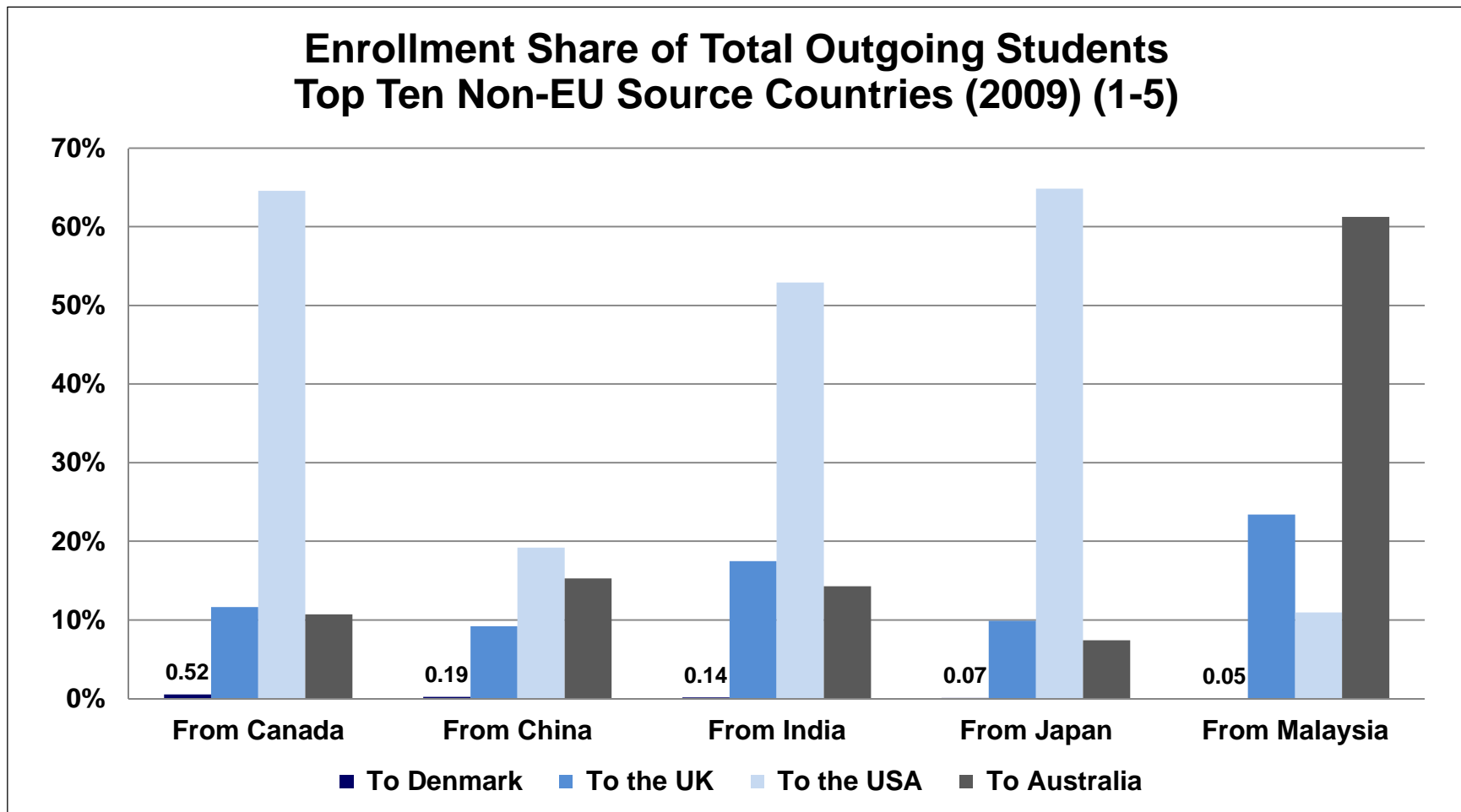


Denmark draws a small out-going students share from other European countries

Sources: DEEWR, HESA, IIE, DEEWR, UI, and UNESCO.

DENMARK'S FOOTPRINT IN INTERNATIONAL EDUCATION

Top Ten Non-EU Source Countries for Outgoing Students (II)



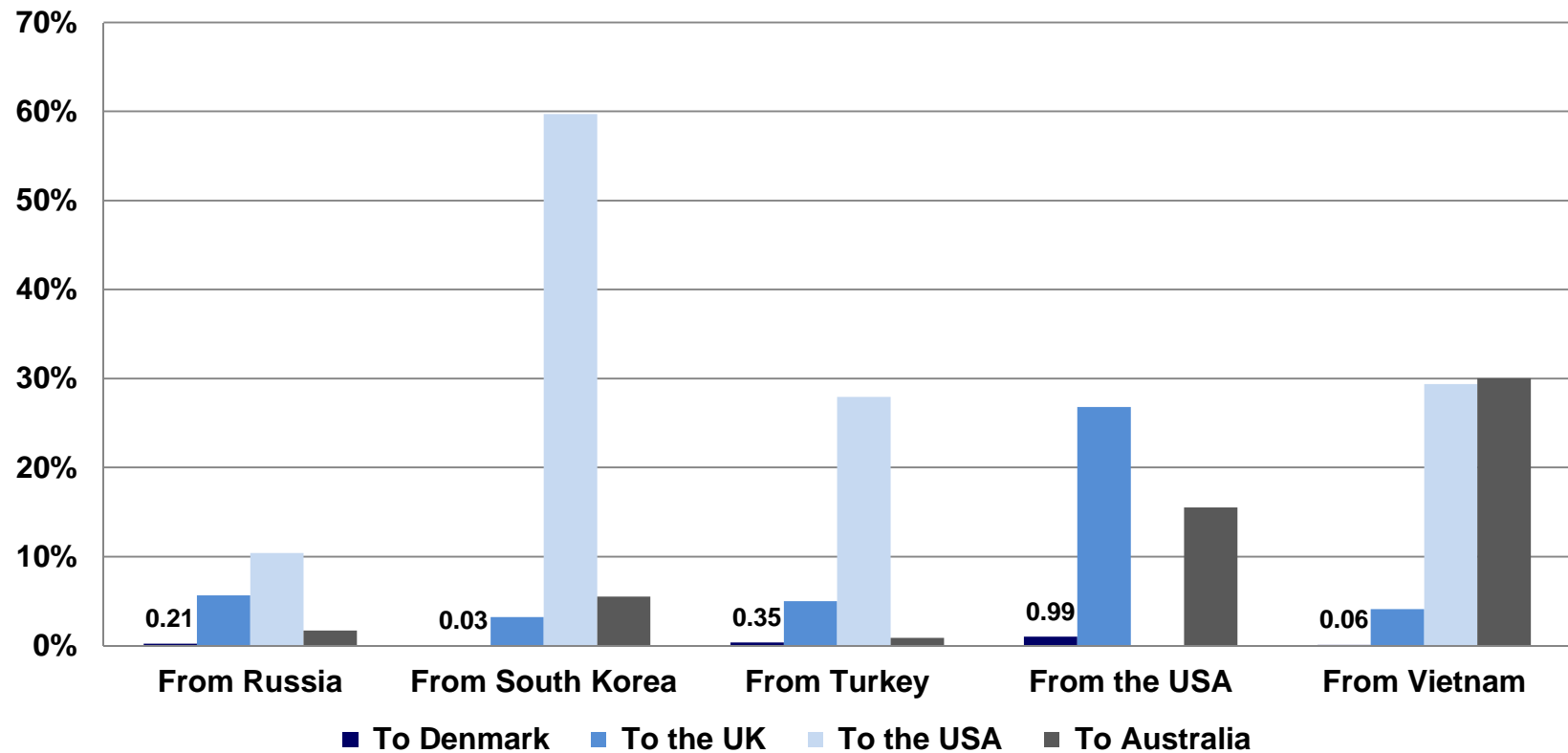
Denmark's footprint in leading sending countries is very small, ...

Notes: Select data points for the UK refer to 2008.
Source: HESA, IIE, DEEWR, UI, and UNESCO.

DENMARK'S FOOTPRINT IN INTERNATIONAL EDUCATION

Top Ten Non-EU Source Countries for Outgoing Students (II)

**Enrollment Share of Total Outgoing Students
Top Ten Non-EU Source Countries (2009) (6-10)**

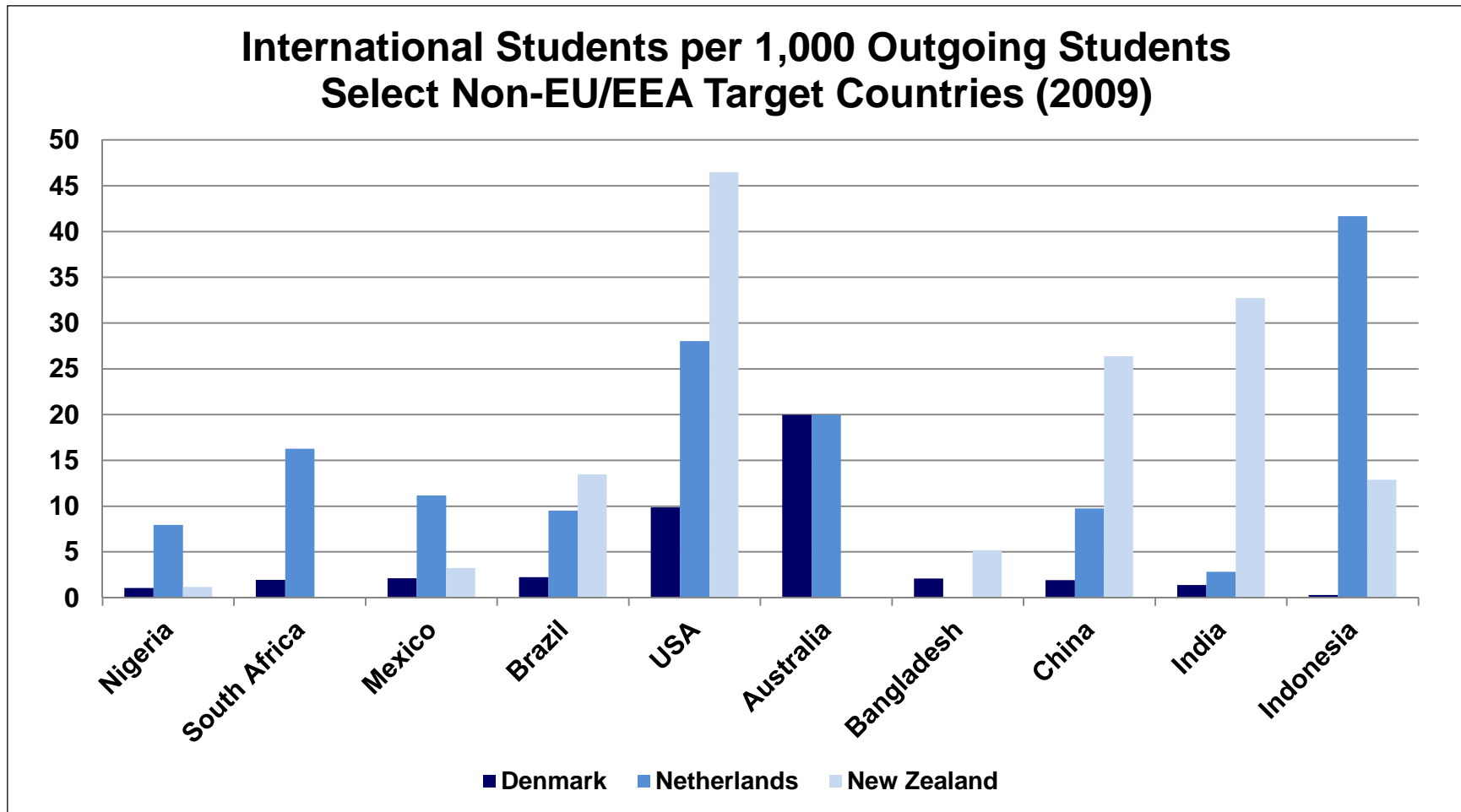


... but Denmark's best position is in the US

Notes: Select data points for the UK refer to 2008.
Source: HESA, IIE, DEEWR, UI, and UNESCO.

DENMARK'S FOOTPRINT IN INTERNATIONAL EDUCATION

International Enrollment for Select Non-EU/EEA Target Countries (I)



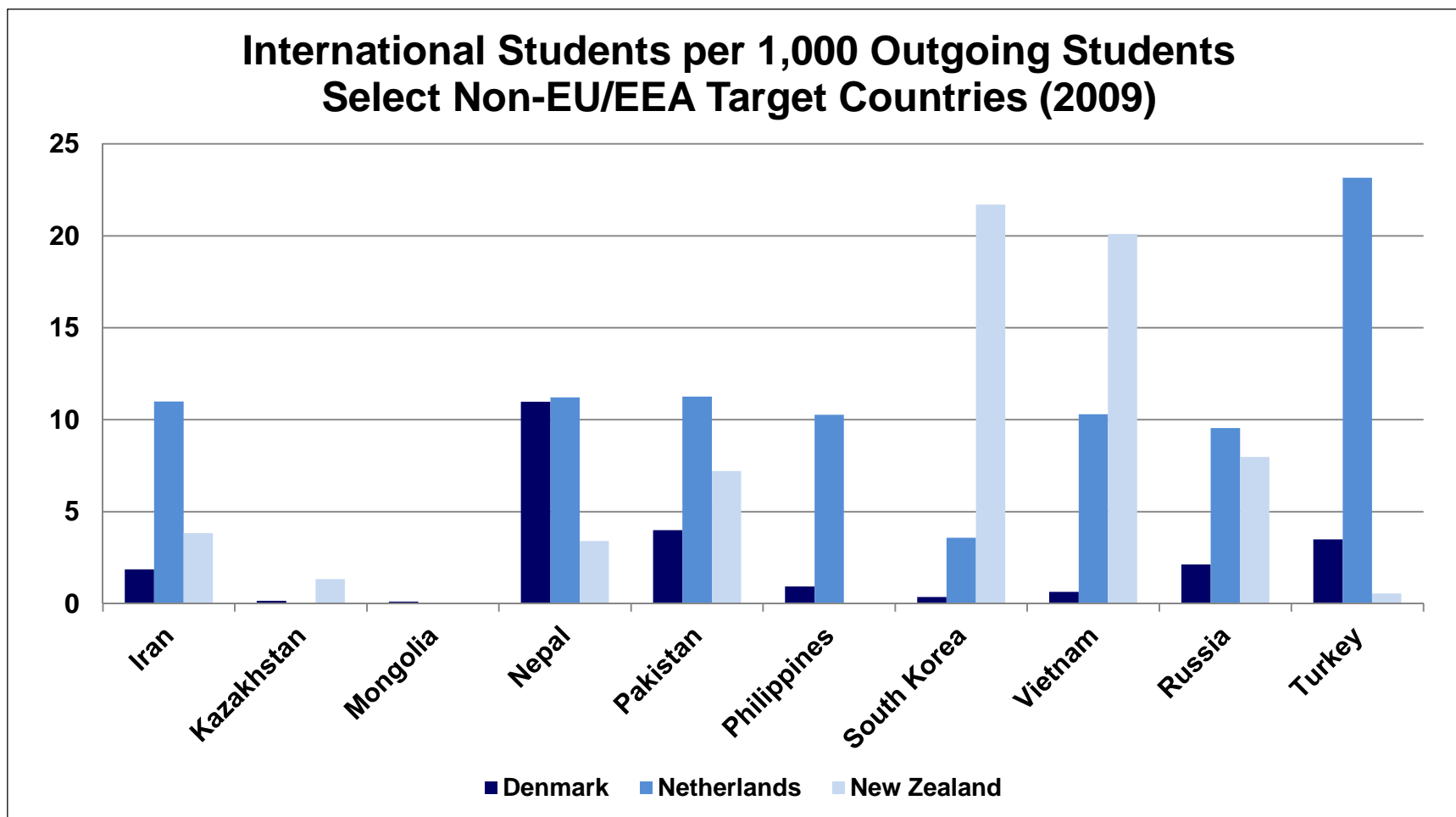
The Netherlands and New Zealand have created deeper footprints

Notes: Data is not available for all countries in the sample.

Source: Nuffic, NZ Ministry of Education, UI, and UNESCO.

DENMARK'S FOOTPRINT IN INTERNATIONAL EDUCATION

International Enrollment for Select Non-EU/EEA Target Countries (II)

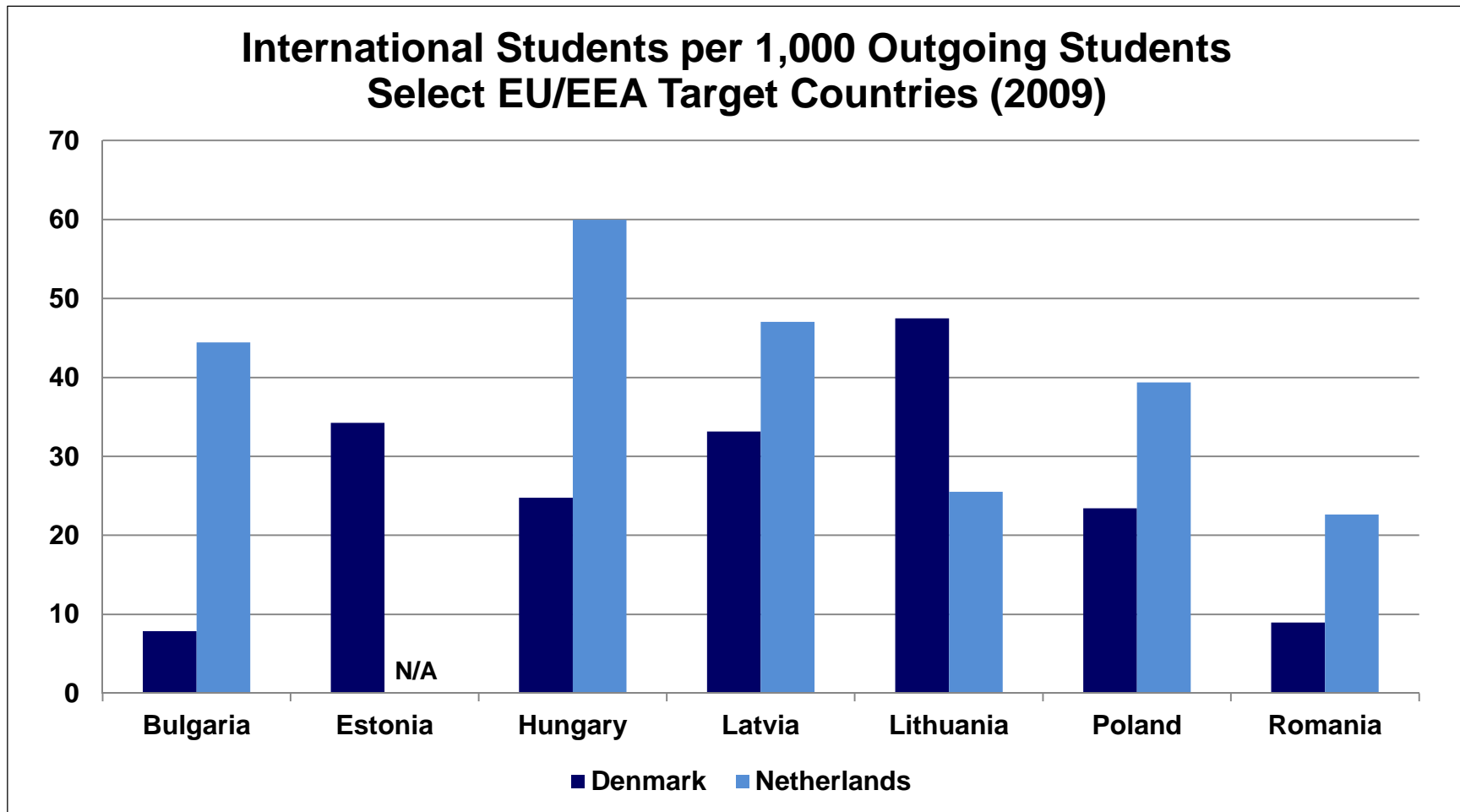


Again, the Netherlands and New Zealand have created deeper footprints

Notes: Data is not available for all countries in the sample.
Source: Nuffic, NZ Ministry of Education, UI, and UNESCO.

DENMARK'S FOOTPRINT IN INTERNATIONAL EDUCATION

International Enrollment for Select EU/EEA Target Countries



Denmark holds a strong position in the Baltic states

Source: Nuffic, UI, and UNESCO.

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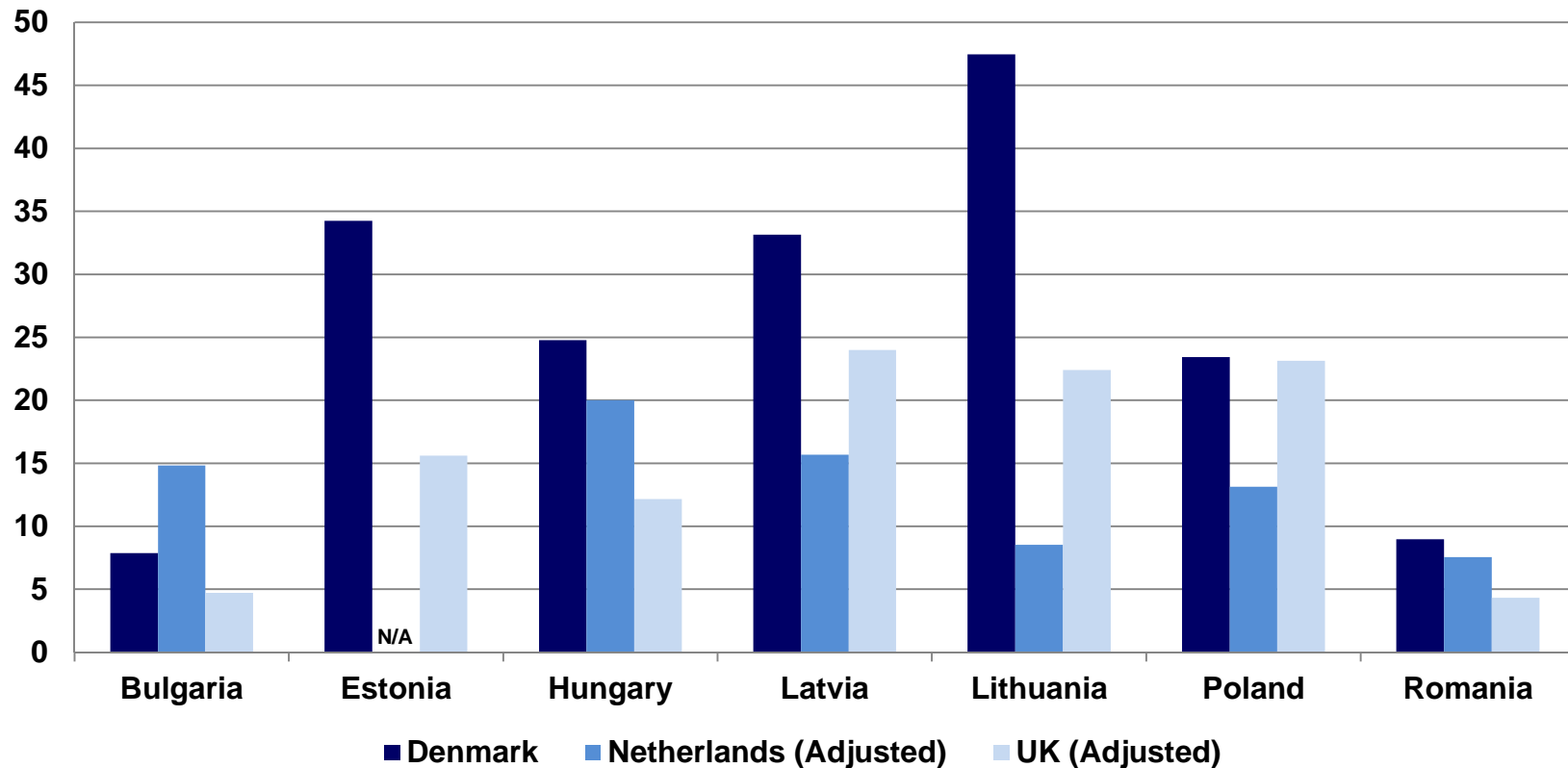
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35

DENMARK'S FOOTPRINT IN INTERNATIONAL EDUCATION

Population-Adjusted International Student Enrollment (I)

**Population-Adjusted International Students per 1,000
Outgoing Students - Select EU/EEA Target Countries (2009)**



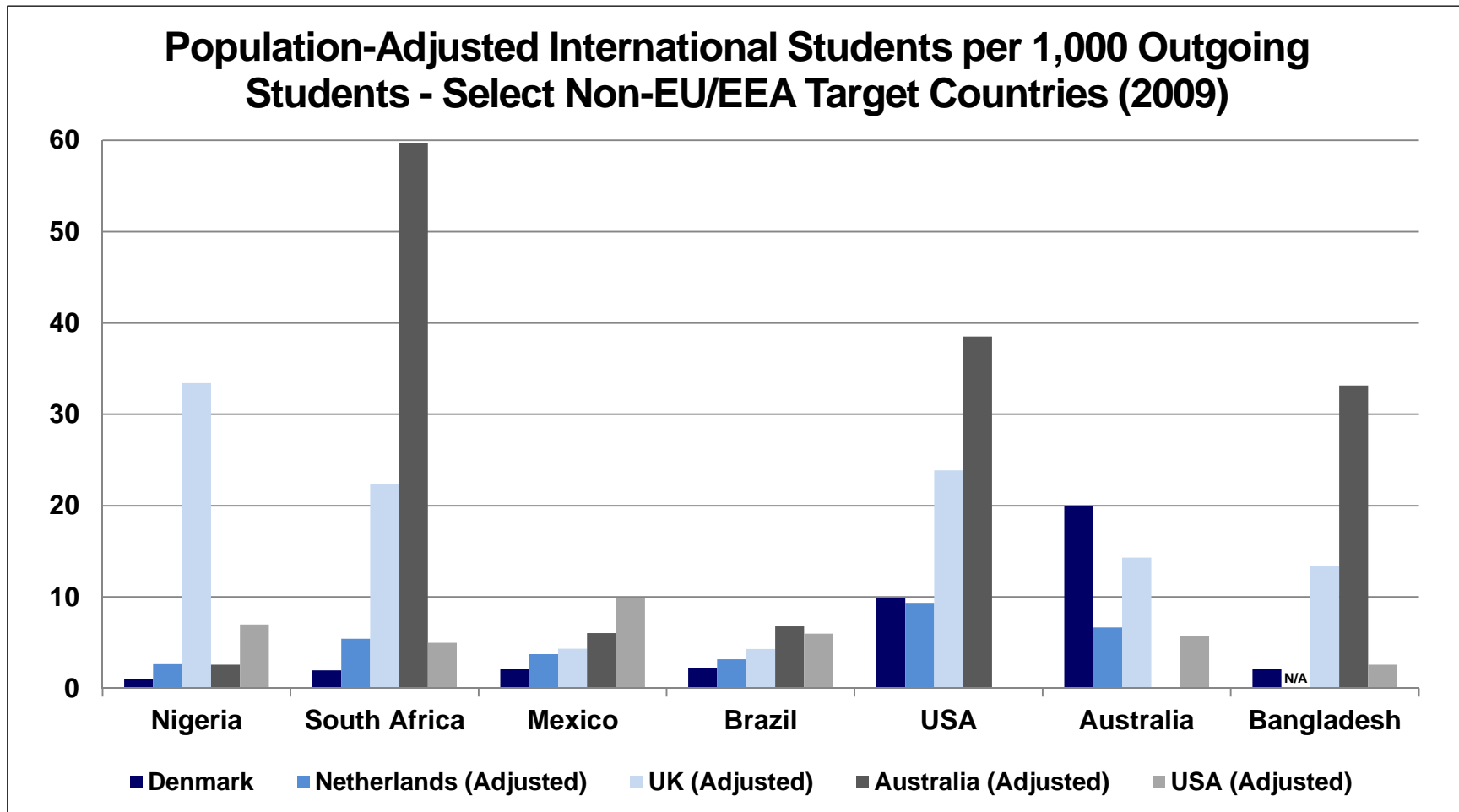
From a population-adjusted view, Denmark does well in select EU countries

Note: UK data refers to 2008.

Source: Nuffic, HESA, UI, and UNESCO..

DENMARK'S FOOTPRINT IN INTERNATIONAL EDUCATION

Population-Adjusted International Student Enrollment (II)



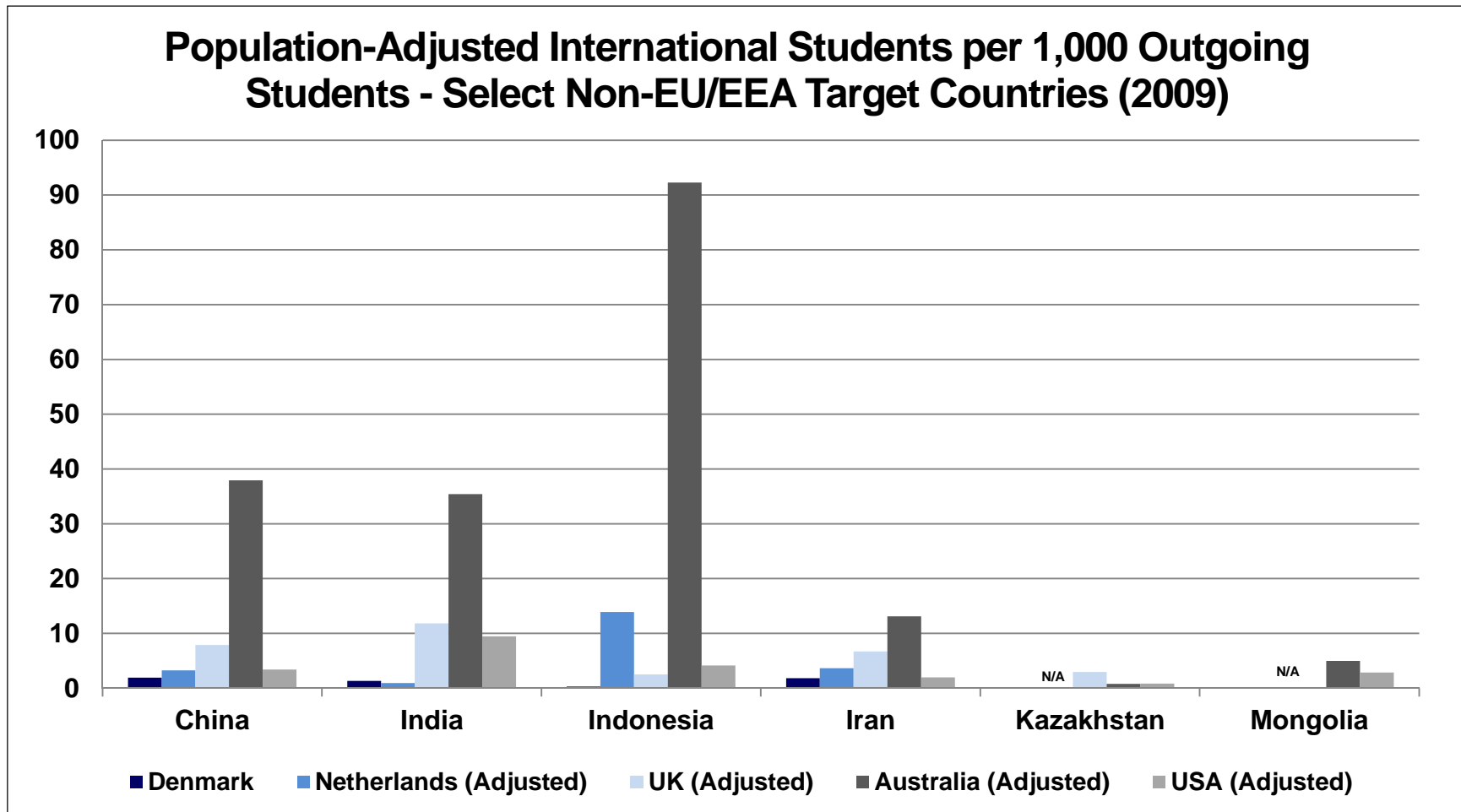
Denmark's footprint is only leading in Australia

Notes: Data is not available for all countries in the sample; UK data refers to 2008.

Source: DEEWR, HESA, IIE, Nuffic, UI, and UNESCO.

DENMARK'S FOOTPRINT IN INTERNATIONAL EDUCATION

Population-Adjusted International Student Enrollment (III)



Denmark's relative footprint in emerging markets is very small

Notes: Data is not available for all countries in the sample; UK data refers to 2008.

Source: IU, Nuffic, HESA, DEEWR, IIE and UNESCO.

AGENDA

Housekeeping

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Denmark's Footprint in International Education

Funding and Ability to Pay

Recruitment Opportunities

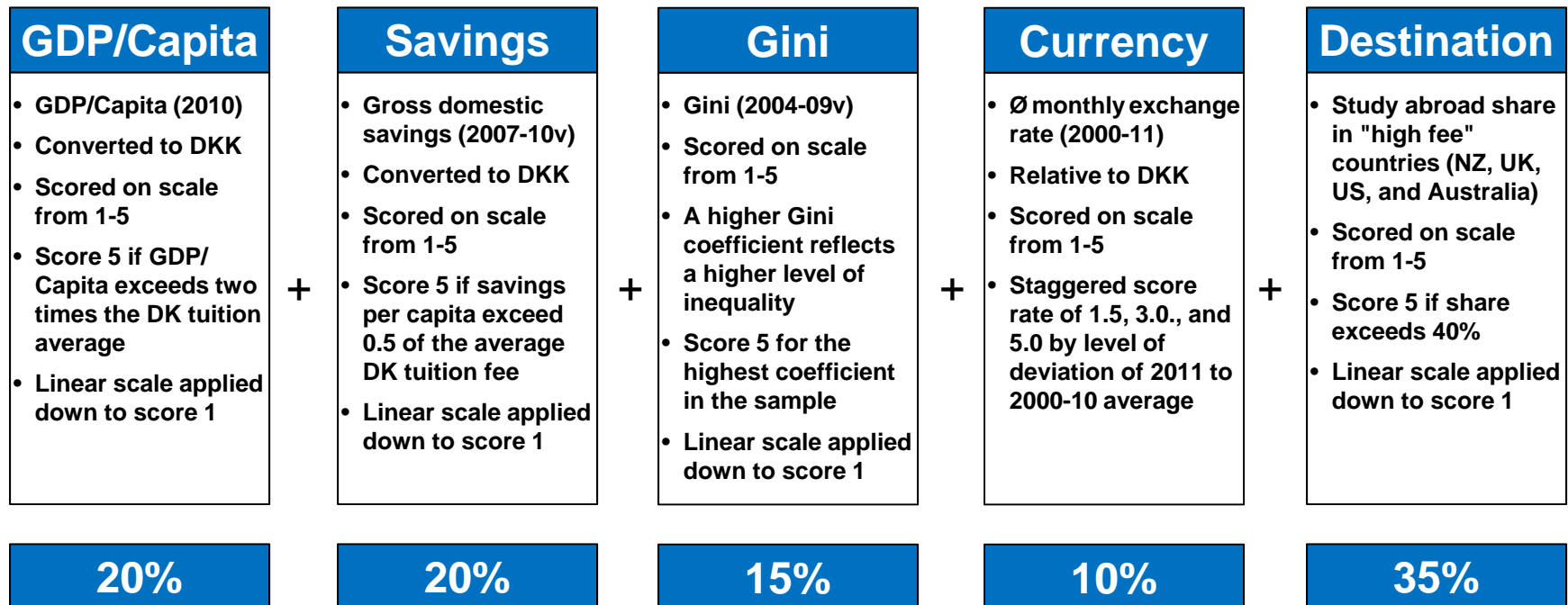
Discussion

FUNDING AND THE ABILITY TO PAY

Overview

- **Recruiting a fee-paying student is fundamentally driven by the student's ability to generate the purchasing power necessary to cover arising costs**
- **Purchasing power can be generated from a student him- or herself (including family resources), or through third party funding (which can include any kind of source)**
- **Costs are not confined to tuition fees, but also include cost of living, travel, etc. The proper measure is thus "total cost of study/degree acquisition"**
- **Calculating the latter can be done with a fair amount of precision, but constitutes a fairly elaborate process**
- **The following discussion largely reflects on a basic modeling of "ability to pay" (student-centric view). Complete and meaningful data on scholarships is much harder to generate**

ABILITY TO PAY Overview



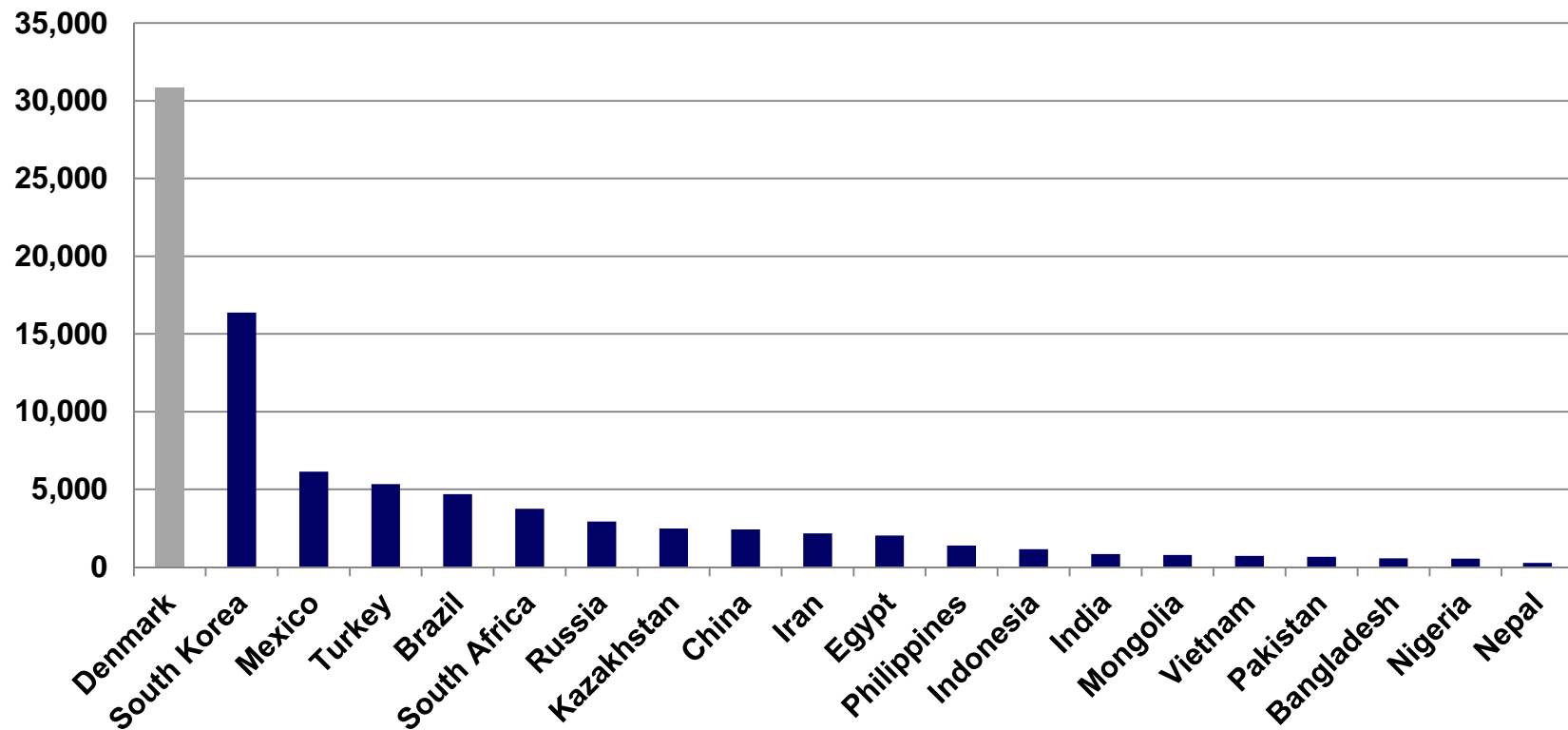
Individual country (student) “ability to pay” for Danish education score

Notes: Data was derived from the ICG ISAFM data set. Variables, scoring methodology, and weighting of variables are based on ICG Sources: CIA Factbook, DEEWR, HESA, IIE, IMF, Oanda, MOE (NZ), UNESCO (UIS), World Bank.

FUNDING AND ABILITY TO PAY

GDP per Capita

2010 GDP per Capita in Select Non-EU/EEA Target Countries and Denmark (constant 2000 USD)



Most large sending countries lag Denmark very notably

Source: World Bank.

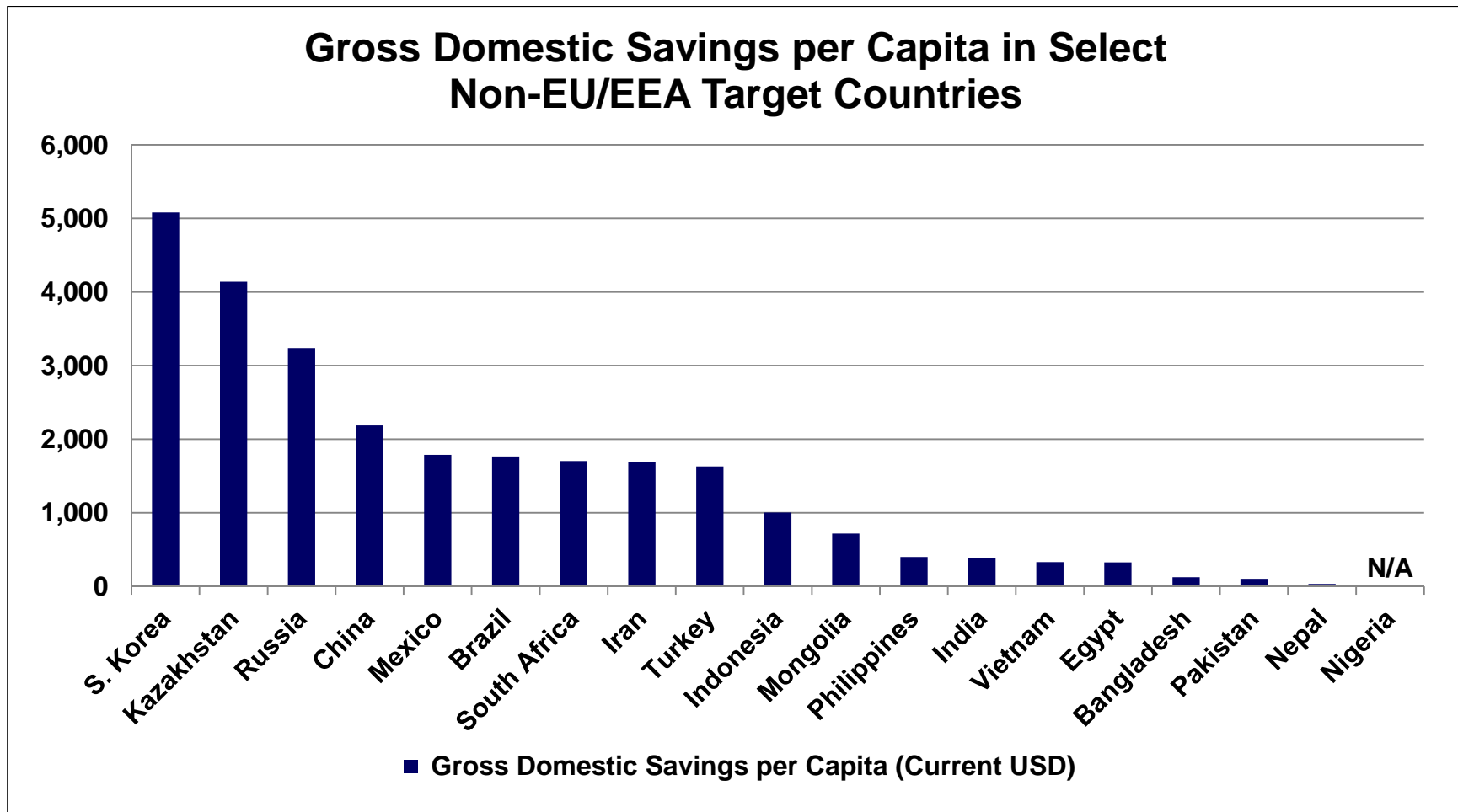
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42

FUNDING AND ABILITY TO PAY

Gross Domestic Savings per Capita



Savings rates in some countries are very high

FUNDING AND ABILITY TO PAY

Modeling of Target Countries' Ability to Pay Score (I)

	Ability to Pay Score	Ability to Pay Score Components				
		GDP per Capita Index	Savings Index	Gini Coefficient Index	Currency Index	Outbound Mobility Index
Australia	4.3	5.0	5.0	1.6	3	5.0
USA	3.9	5.0	3.6	3.0	0	5.0
South Korea	3.3	3.1	3.5	1.7	0	5.0
Brazil	3.1	1.5	1.9	3.9	1.5	5.0
South Africa	3.1	1.0	1.8	5.0	0	5.0
Mexico	2.9	1.2	1.9	3.7	0	5.0
China	2.9	1.0	2.1	2.7	1.5	5.0
Philippines	2.7	1.0	1.2	3.1	0	5.0
Nepal	2.6	1.0	1.0	3.2	0	5.0
Indonesia	2.6	1.0	1.5	2.2	0	5.0
Vietnam	2.5	1.0	1.2	2.3	0	5.0
India	2.5	1.0	1.2	2.2	0	5.0
Poland	2.5	1.7	2.1	1.9	0	4.2
Latvia	2.5	1.4	2.1	2.1	0	4.2
Bangladesh	2.4	1.0	1.1	1.8	0	5.0
Turkey	2.4	1.4	1.8	2.5	0	4.0
Pakistan	2.4	1.0	1.1	1.6	0	5.0
Nigeria	2.4	1.0	0.0	2.9	0	5.0
Lithuania	2.4	1.5	1.8	2.3	1.5	3.4
Estonia	2.3	2.0	2.9	2.1	1.5	2.4
Egypt	2.1	1.0	1.2	1.7	0	4.2
Iran	1.9	1.0	1.9	3.0	0	2.4
Hungary	1.9	1.8	2.8	1.0	0	2.2
Russia	1.7	1.4	2.6	2.7	0	1.4
Bulgaria	1.4	1.0	1.6	3.0	0	1.3
Kazakhstan	1.4	1.2	3.0	1.2	0	1.0
Mongolia	1.3	1.0	1.4	2.2	0	1.4
Romania	1.2	1.0	1.9	1.6	0	1.0

Notes: Top Five scores in each category are marked orange.

Source: ICG's calculations based on the ISAFM Database.

FUNDING AND ABILITY TO PAY

Modeling of Target Countries' Ability to Pay Score (II)

	Ability to Pay Score	Ability to Pay Score Components				
		GDP per Capita Index	Savings Index	Gini Coefficient Index	Currency Index	Outbound Mobility Index
Australia	4.3	5.0	5.0	1.6	3	5.0
USA	3.9	5.0	3.6	3.0	0	5.0
South Korea	3.3	3.1	3.5	1.7	0	5.0
Brazil	3.1	1.5	1.9	3.9	1.5	5.0
South Africa	3.1	1.0	1.8	5.0	0	5.0
Mexico	2.9	1.2	1.9	3.7	0	5.0
China	2.9	1.0	2.1	2.7	1.5	5.0

Source: ICG's calculations based on the ISAFM Database.

FUNDING AND ABILITY TO PAY

Modeling of Target Countries' Ability to Pay Score (III)

	Ability to Pay Score	Ability to Pay Score Components				
		GDP per Capita Index	Savings Index	Gini Coefficient Index	Currency Index	Outbound Mobility Index
Philippines	2.7	1.0	1.2	3.1	0	5.0
Nepal	2.6	1.0	1.0	3.2	0	5.0
Indonesia	2.6	1.0	1.5	2.2	0	5.0
Vietnam	2.5	1.0	1.2	2.3	0	5.0
India	2.5	1.0	1.2	2.2	0	5.0
Poland	2.5	1.7	2.1	1.9	0	4.2
Latvia	2.5	1.4	2.1	2.1	0	4.2

Source: ICG's calculations based on the ISAFM Database.

FUNDING AND ABILITY TO PAY

Modeling of Target Countries' Ability to Pay Score (IV)

	Ability to Pay Score	Ability to Pay Score Components				
		GDP per Capita Index	Savings Index	Gini Coefficient Index	Currency Index	Outbound Mobility Index
Bangladesh	2.4	1.0	1.1	1.8	0	5.0
Turkey	2.4	1.4	1.8	2.5	0	4.0
Pakistan	2.4	1.0	1.1	1.6	0	5.0
Nigeria	2.4	1.0	0.0	2.9	0	5.0
Lithuania	2.4	1.5	1.8	2.3	1.5	3.4
Estonia	2.3	2.0	2.9	2.1	1.5	2.4
Egypt	2.1	1.0	1.2	1.7	0	4.2

Source: ICG's calculations based on the ISAFM Database.

FUNDING AND ABILITY TO PAY

Modeling of Target Countries' Ability to Pay Score (V)

	Ability to Pay Score	Ability to Pay Score Components				
		GDP per Capita Index	Savings Index	Gini Coefficient Index	Currency Index	Outbound Mobility Index
Iran	1.9	1.0	1.9	3.0	0	2.4
Hungary	1.9	1.8	2.8	1.0	0	2.2
Russia	1.7	1.4	2.6	2.7	0	1.4
Bulgaria	1.4	1.0	1.6	3.0	0	1.3
Kazakhstan	1.4	1.2	3.0	1.2	0	1.0
Mongolia	1.3	1.0	1.4	2.2	0	1.4
Romania	1.2	1.0	1.9	1.6	0	1.0

Source: ICG's calculations based on the ISAFM Database.

FUNDING AND ABILITY TO PAY

Overview of Select Scholarships to Study in Denmark

Country	Institution	Number	Value	Duration	Destination	Level
USA	American-Scandinavian Foundation	80 in 2010, but varies by year	Fellowships (up to USD 23,000) and grants (up to USD 5,000)	Fellowship one year, grants one to three months	Scandinavian countries	Postgraduate
	Fulbright	1,500 yearly	Full grant	Up to one year	155 countries	Postgraduate
Canada	CIHR-SSHRC-NSERC	250 yearly	Up to CAD 6,000	3-6 months	-	Postgraduate
EU	European Union (LLP)	5,728 exchanges inbound to DK in 2009-10	Stipend varies	Up to one year	EU and select other European countries	All
India	Inlaks Foundation	350+ over last three decades	Up to USD 85,000	Up to two years	America, UK, Europe	Postgraduate
	Narotam Sekhsaria Foundation	-	Interest free loans	Duration of study	Global	Postgraduate
China	Chinese Scholarship Council	12,769 in 2009 (4,152 to Europe)	-	-	Global	Postgraduate
South Korea	Government (Global Korea Scholarship)	-	Adjusted annually based on tuition	-	-	-

FUNDING AND ABILITY TO PAY

Perspectives

- **Understanding a market's (student's) ability to pay and/or acquire third party funding is essential to calibrate market engagement strategies for any tuition fee charging country**
- **The global trend over the last 20 years has moved towards self-paying students; the impact of scholarships has shrunk**
- **Australia, New Zealand, the UK, and the US enroll a combined 1+ million international tuition fee eligible students (please note that this does not mean that each student pays tuition fees)**
- **In many instances (or markets), scholarships are not a key driver for international degree seeking students...**
- **...nor can scholarships be counted on as a lead recruiting driver anymore**

AGENDA

Housekeeping

Trends in International Education

International Student Enrollment in Denmark

Overview of Recruiting Markets

Denmark's Footprint in International Education

Funding and Ability to Pay

Recruitment Opportunities

Discussion

RECRUITMENT OPPORTUNITIES

Opportunity Matrix – Europe (I)

	Domestic Pool	Outgoing Pool	English Language Ability	Competition	Denmark Footprint	Ability to Pay	Political Instability
Bulgaria	**	**	***	Medium	****	*	6.0
Estonia	*	*	*****	Medium	*****	**	6.7
Hungary	**	*	****	Medium	****	**	6.1
Latvia	*	*	***	Medium	*****	**	6.7
Lithuania	*	*	***	Medium	*****	**	6.1
Poland	***	***	***	High	****	***	4.5
Romania	***	**	****	Medium	****	*	6.4

RECRUITMENT OPPORTUNITIES

Opportunity Matrix – Asia (II)

	Domestic Pool	Outgoing Pool	English Language Ability	Competition	Denmark Footprint	Ability to Pay	Political Instability
Bangladesh	***	**	**	Medium	***	**	7.5
China	*****	*****	**	High	**	***	4.8
India	*****	*****	**	High	**	***	4.5
Iran	***	***	**	Low	**	**	6.2
Kazakhstan	**	***	**	Low	*	*	4.8
Mongolia	**	*	*	Low	*	*	6.1
Nepal	**	**	**	Low	****	***	7.5

RECRUITMENT OPPORTUNITIES

Opportunity Matrix – Asia plus Russia and Turkey (III)

	Domestic Pool	Outgoing Pool	English Language Ability	Competition	Denmark Footprint	Ability to Pay	Political Instability
Pakistan	**	***	***	Medium	***	**	7.8
Philippines	***	*	***	High	*	***	6.8
South Korea	****	****	**	High	*	***	5.1
Vietnam	***	***	*	Medium	*	***	4.3
Russia	****	***	***	Medium	***	**	6.5
Turkey	***	***	**	Medium	***	**	6.8

RECRUITMENT OPPORTUNITIES

Opportunity Matrix – Rest of World (IV)

	Domestic Pool	Outgoing Pool	English Language Ability	Competition	Denmark Footprint	Ability to Pay	Political Instability
Egypt	N/A	*	***	Medium	*	**	5.4
South Africa	**	*	*****	High	***	***	7
Nigeria	**	***	**	Medium	**	**	7
Mexico	***	**	***	High	***	***	6.1
Brazil	****	**	***	Medium	***	***	5.4
USA	*****	*****	-	High	****	*****	5.3
Australia	***	**	-	Medium	****	*****	3.6

Notes: The Political Stability indicator for Egypt does not take into consideration the recent political developments.

RECRUITMENT OPPORTUNITIES

Perspectives

- This discussion so far has centered on countries as target markets
- This is understandable, and pragmatic. At the same time, sophisticated recruiting is moving away from country-based recruiting model
- Instead, the approach is based on granular segmentation models which drill deeply into students' specific recruiting attributes
- Thus, rather than recruiting in “China”, best practice models focus on, for example, partnering with high quality international curricula secondary schools in select Chinese metro areas with a view on both domestic as well as expat students
- Another example is the ability to data mine for potential students on online platforms such as LinkedIn or Facebook (rather than trying to simply post recruiting-relevant information)

Recruiting international students has become a highly competitive science

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