



PARTHENON

Investing in European higher education

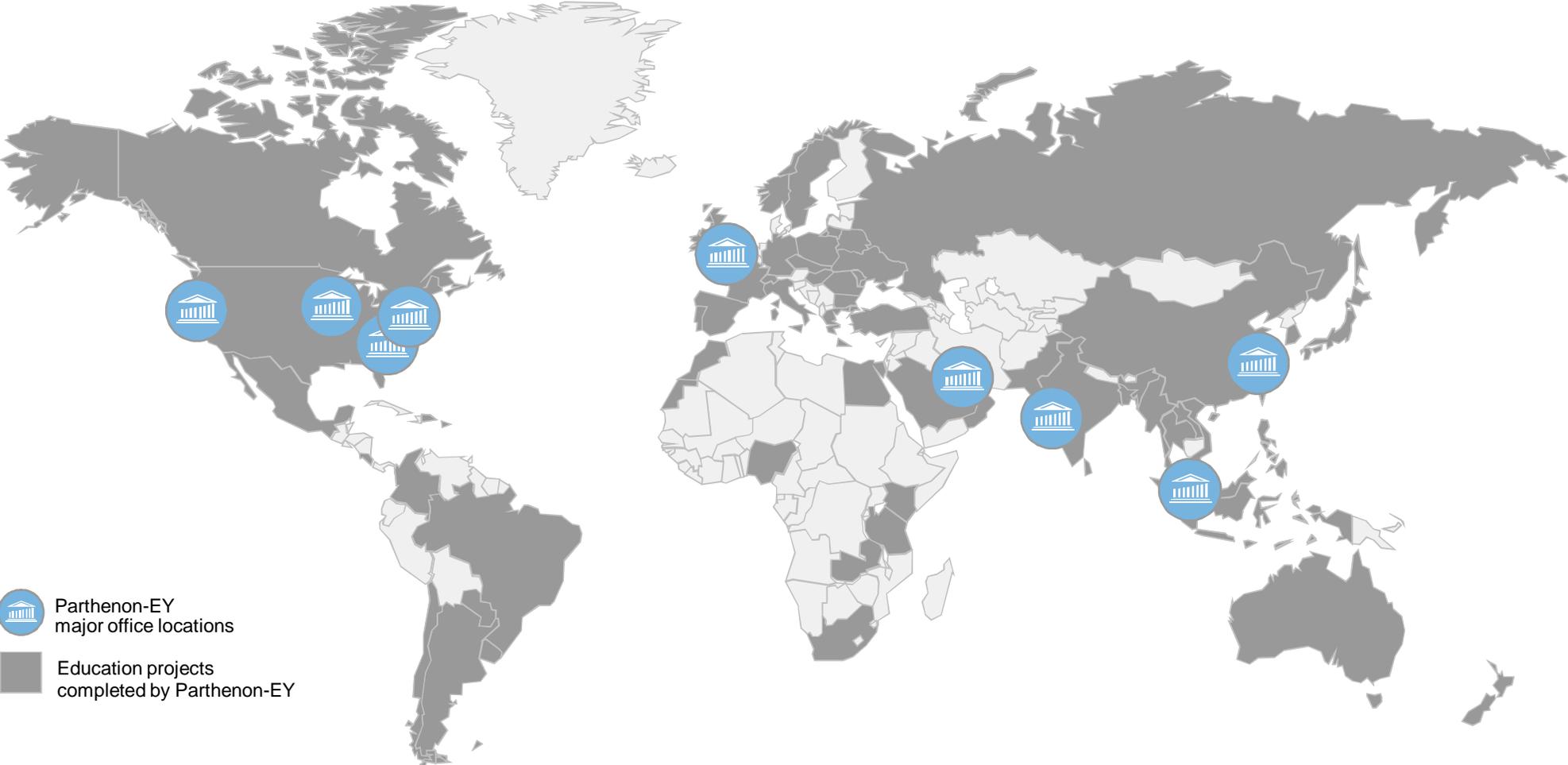
Matthew Robb, Managing Director, Parthenon-EY
Ernst & Young LLP

November 2017



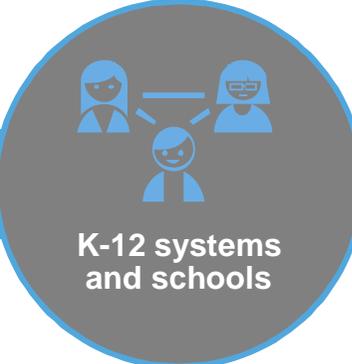
Introduction to Parthenon-EY

Global reach: more than 1,500 education strategy projects



Introduction to Parthenon-EY

Serving the entire sector



- ▶ Federal, state and local educational authorities
- ▶ Charter schools, private K-12 schools and other innovative education providers
- ▶ Foundations on the forefront of education reform
- ▶ Ministries of Education



- ▶ Public university systems
- ▶ Global research institutions
- ▶ Private, nonprofit colleges and universities
- ▶ Ministries of Education



- ▶ Educational content
- ▶ Testing, assessments and accrediting bodies
- ▶ Tutoring
- ▶ Intervention
- ▶ Special education
- ▶ Technology providers
- ▶ Consumer education products
- ▶ English language learning
- ▶ Service providers
- ▶ Corporate training



- ▶ Equity and debt investors
 - ▶ Venture capital
 - ▶ Private equity
 - ▶ Corporate
- ▶ Globally
 - ▶ North America
 - ▶ Latin America
 - ▶ Europe
 - ▶ Middle East | Africa
 - ▶ Sub-Saharan Africa
 - ▶ Asia, Southeast Asia and Asia-Pacific

Acute understanding of all aspects of global education

Investment thesis

Four key elements

01

Positive underlying macro supply and demand dynamics

02

General market liberalization and rising tertiary enrollment ratio

03

Adjacent markets opened up through post-secondary convergence

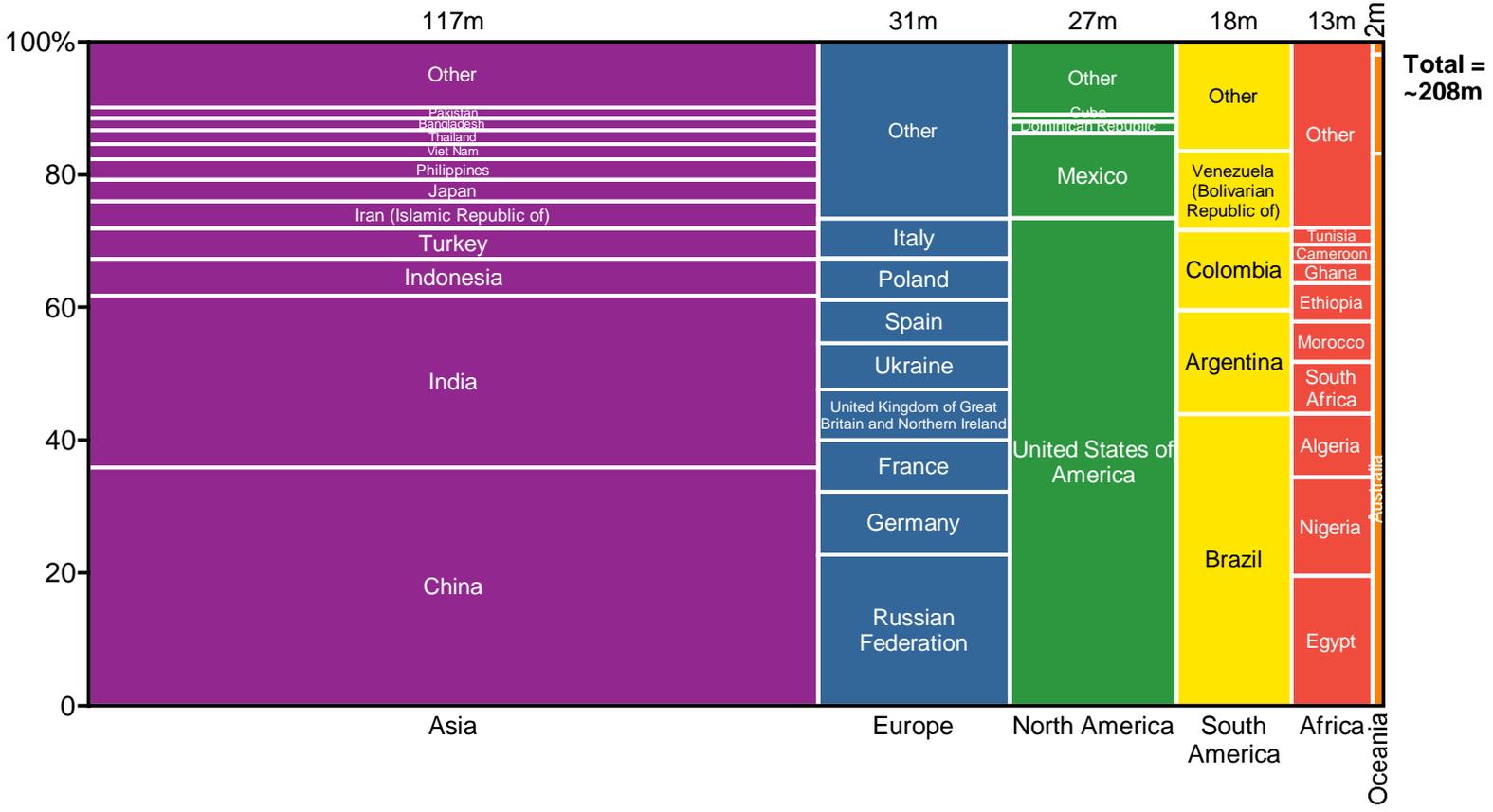
04

Sufficiently fragmented for traditional buy and build benefits

Investment thesis

~208m students enrolled in higher education

Higher education* enrollment by continent, by country, 2014

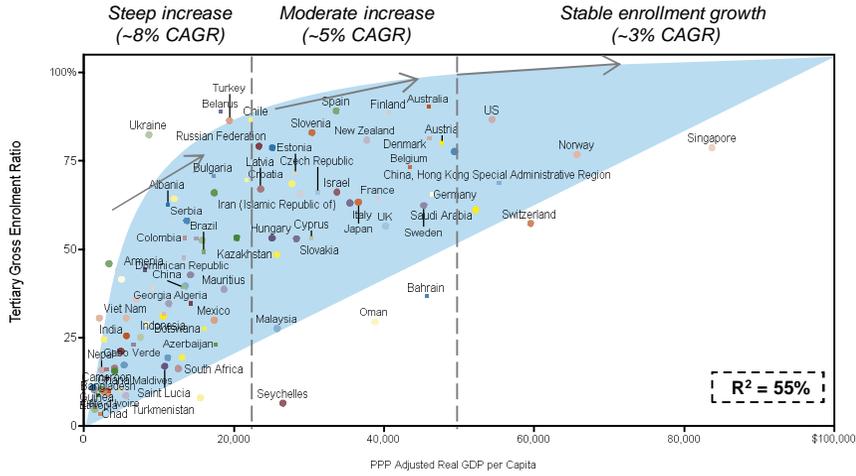


Source: UNESCO
 *Note: UNESCO Tertiary Education data includes ISCED 5,6,7 and 8 programs; 2014 is the latest year for which data is available

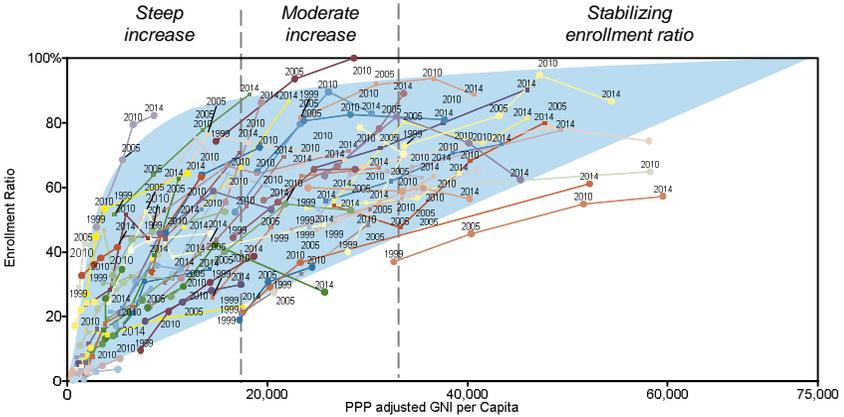
Investment thesis

TER rises with GDP

Tertiary gross enrollment ratio (GER) vs. Purchasing power parity (PPP) adjusted real GDP per capita, 2014



77 countries from around the world higher education enrollment vs. Income, 1999 to 2014



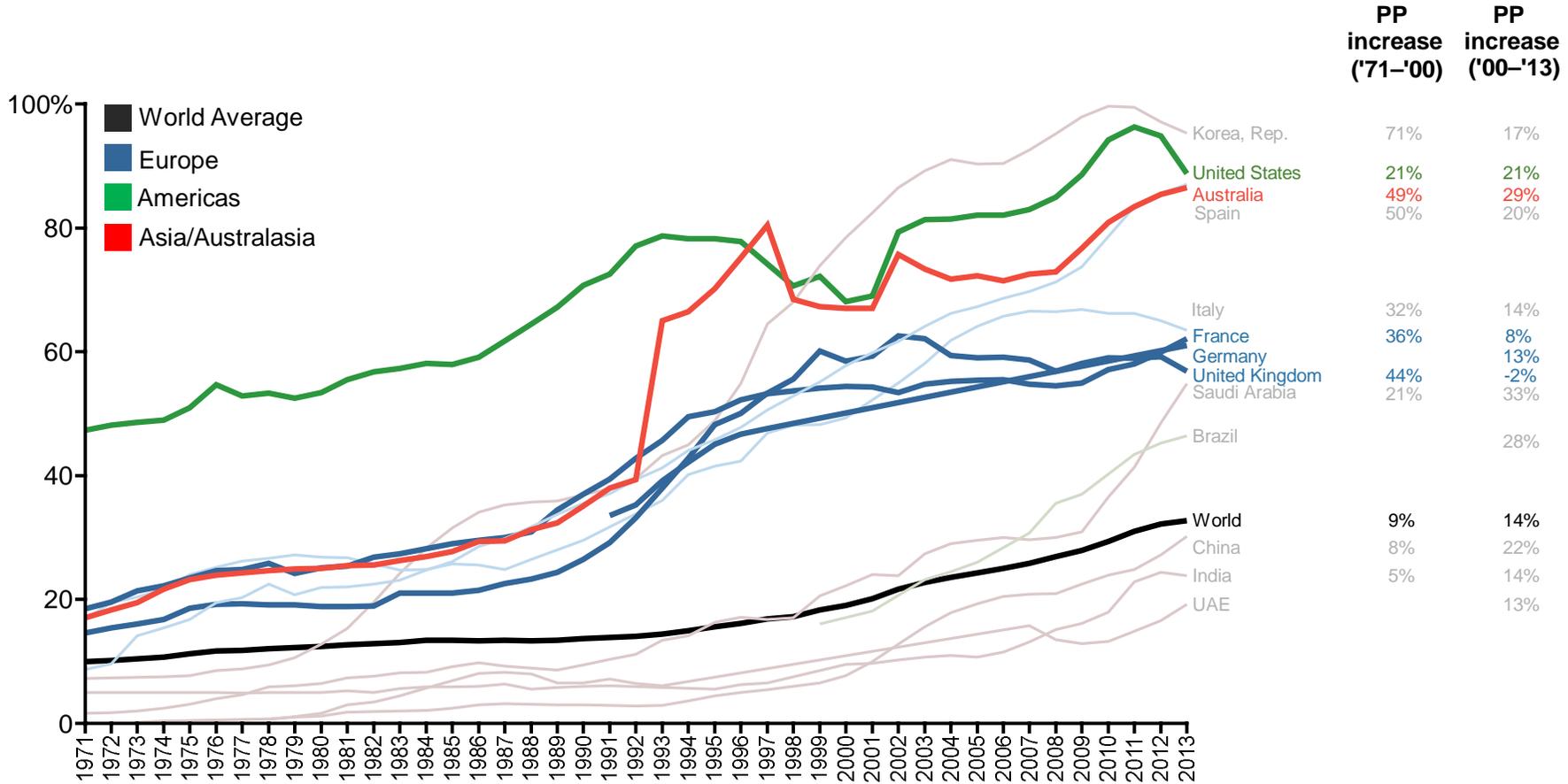
- ▶ Tertiary gross enrollment ratio (GER) of a country is directly correlated with the income per capita and the relationship holds over time
- ▶ As the GDP per capita increases, the GER also increases to help sustain the required economic growth
- ▶ The growth rate of GER tapers down at higher GDP per capita levels due to the base effect
- ▶ From a global perspective, currently we are at a **once-in-a-lifetime event of growth** in higher education, which would happen over the next 20-30 years, presenting a **great opportunity for investors**
- ▶ In this zone of rapid growth, **demand outstrips supply constantly**, which makes the market global
- ▶ The upper range for tertiary GER is ~50-100% (e.g., South Korea is close to 100%, Singapore close to 75% and France is ~55%)

Source: UNESCO
 *Note: UNESCO Tertiary Education data includes ISCED 5, 6, 7 and 8 programs

Investment thesis

Europe growing to ~60% TER

Gross tertiary enrollment rates, select countries, 1971–2013

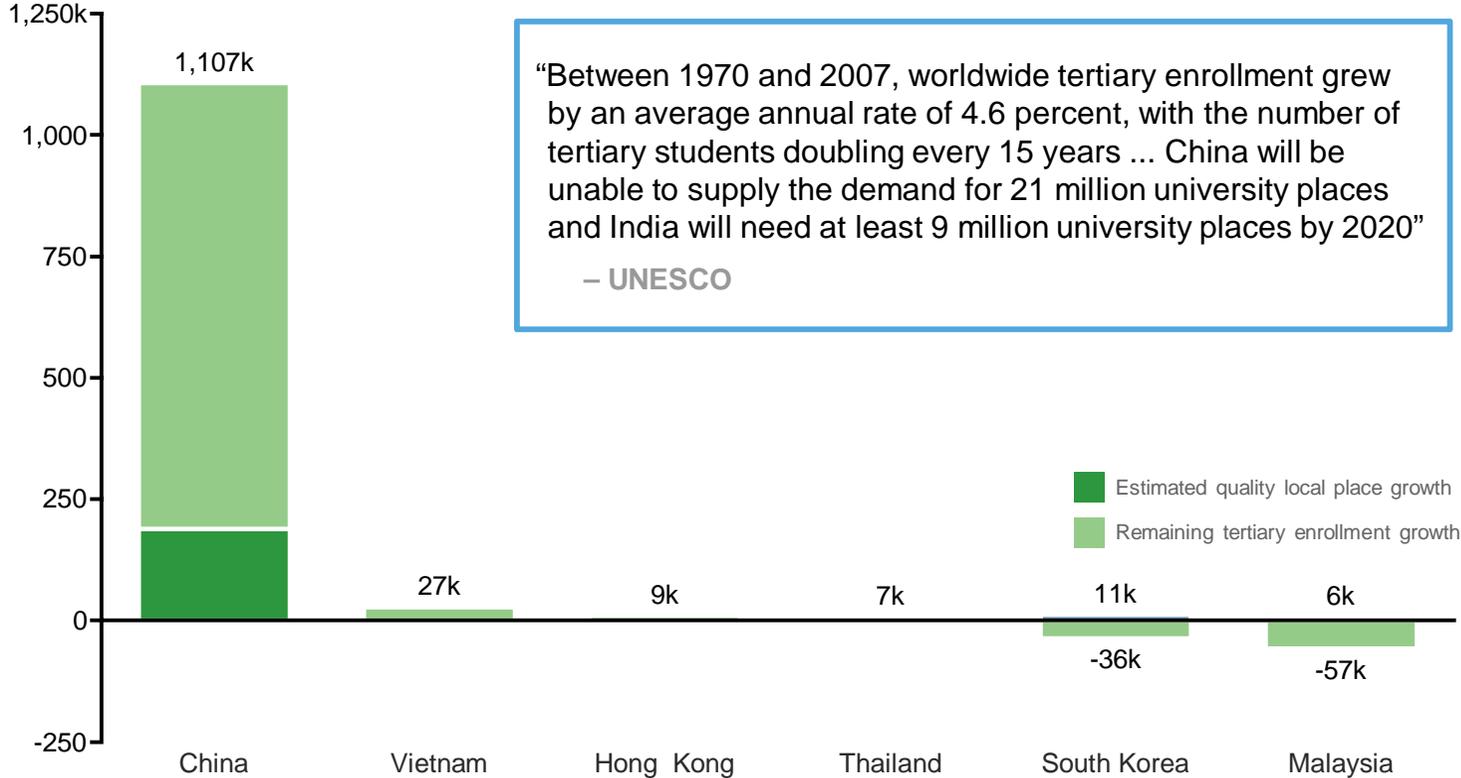


Note: Latest data available is 2013 for most countries
 Missing data for some countries (Brazil PP increase is '01-'13, Germany is '97-'13 and UAE is '93-'13)
 Source: World Bank

Investment thesis

Long-term international demand

Estimated annual tertiary enrollment growth vs. quality local supply growth, select Asian countries, 2009–14



“Between 1970 and 2007, worldwide tertiary enrollment grew by an average annual rate of 4.6 percent, with the number of tertiary students doubling every 15 years ... China will be unable to supply the demand for 21 million university places and India will need at least 9 million university places by 2020”
 – UNESCO

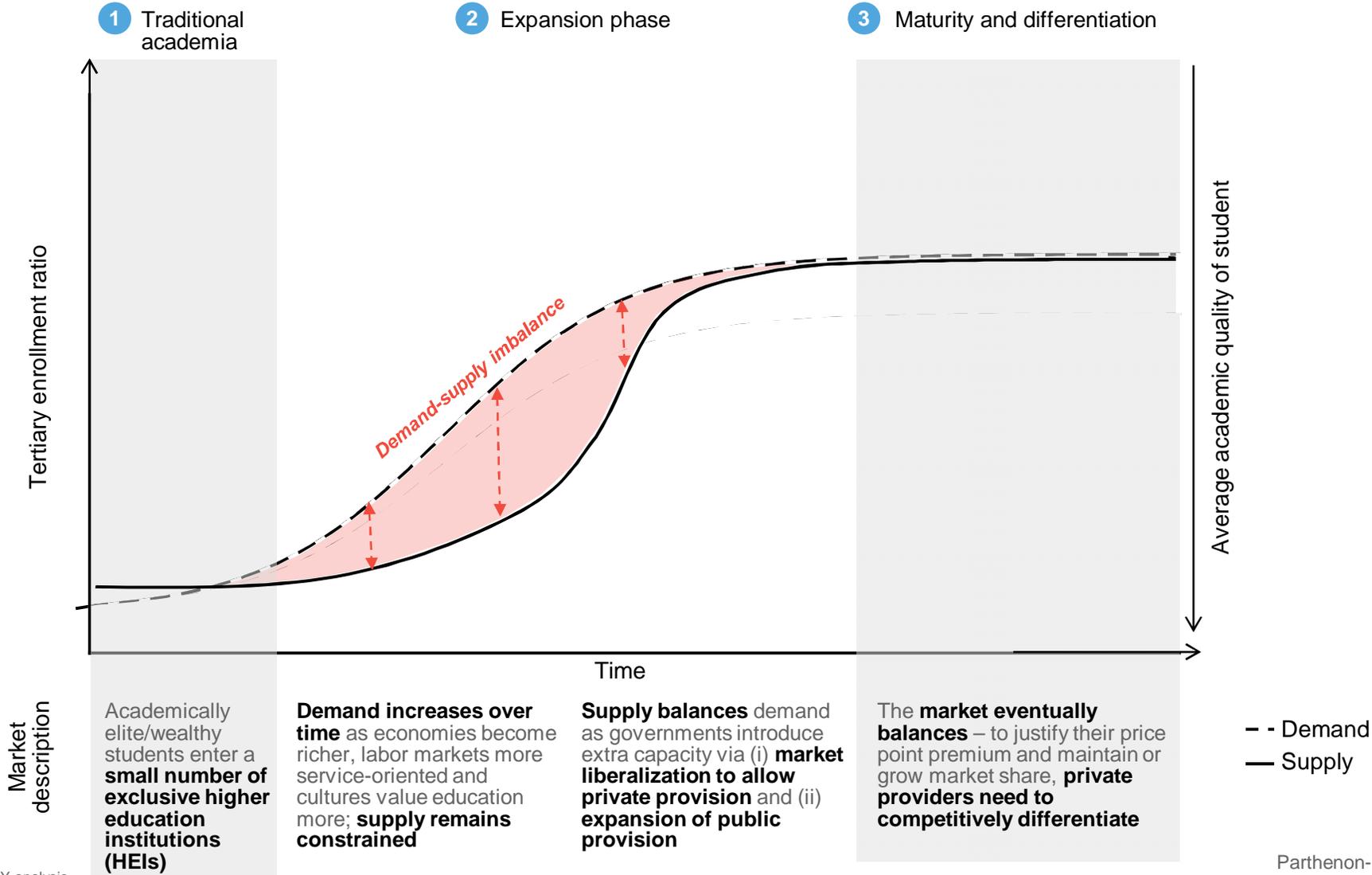
Change in # of top 400 ranked universities	17	0	0	0	1	1
Estimated % of enrollment growth covered by quality local supply growth	17%	0%	0%	0%	-43%	NA

Note: Tertiary enrollment growth is estimated based on reported tertiary enrollment ratio, university enrollments and 18-year-old population in 2009 and 2014
 Source: Shanghai University rankings, Euromonitor, UNESCO, Parthenon-EY analysis

Investment thesis

Evolution of private providers

Evolution of higher education market in developed countries

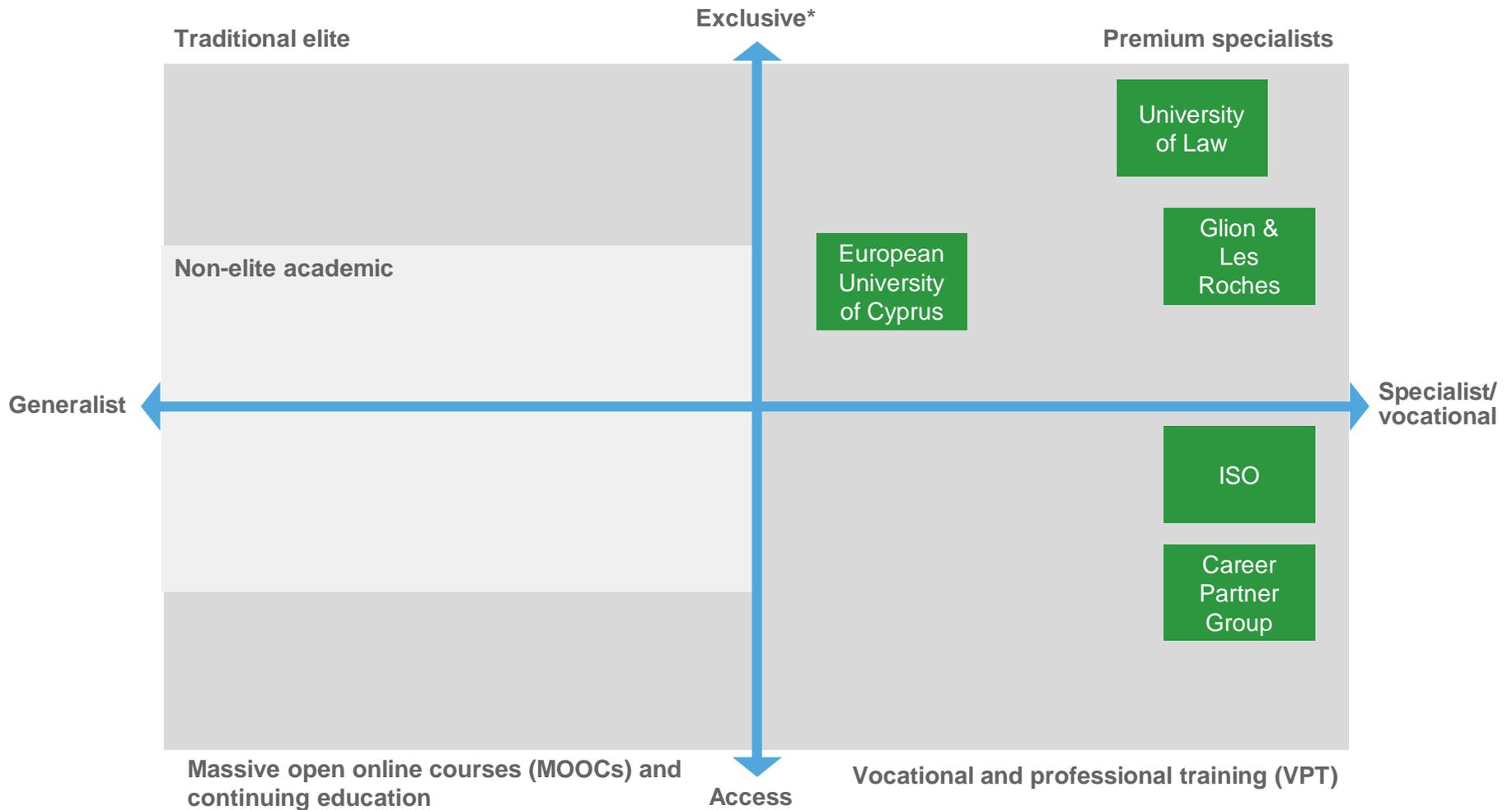


Source: Parthenon-EY analysis

Investment thesis

Private university groups occupy the market spaces not traditionally covered by not-for-profit HEIs

Segmentation of *undergraduate* higher education institutions



About Parthenon-EY

Parthenon joined Ernst & Young LLP on August 29, 2014. Parthenon-EY is a strategy consultancy, committed to bringing unconventional yet pragmatic thinking together with our clients' smarts to deliver actionable strategies for real impact in today's complex business landscape. Innovation has become a necessary ingredient for sustained success. Critical to unlocking opportunities is Parthenon-EY's ideal balance of strengths – specialized experience with broad executional capabilities – to help you optimize your portfolio of businesses, uncover industry insights to make investment decisions, find effective paths for strategic growth opportunities and make acquisitions more rewarding. Our proven methodologies along with a progressive spirit can deliver intelligent services for our clients, amplify the impact of our strategies and make us the global advisor of choice for business leaders.

About Parthenon-EY's Education practice

The Parthenon-EY Education practice of Ernst & Young LLP — the first of its kind across management consulting firms — has an explicit mission and vision to be the leading strategy advisor to the global education industry. To achieve this, we invest significantly in dedicated management and team resources so that our global experience extends across public sector and nonprofit education providers, foundations, for-profit companies and service providers, and investors. We have deep experience and a track record of consistent success in working closely with universities, colleges, states, districts, and leading educational reform and service organizations across the globe.

Contact us



Matthew Robb
Managing Director

mrobb@parthenon.ey.com
+44 (0) 207 201 0475
+44 (0) 779 134 9 228

Follow us for regular updates



Twitter | @Parthenon_EY



Facebook | facebook.com/ParthenonEY



LinkedIn | linkedin.com/company/parthenon-ey

parthenon.ey.com

EY | Assurance | Tax | Transactions | Advisory

About EY

EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organization and may refer to one or more of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. For more information about our organization, please visit ey.com.

Ernst & Young LLP is a client-serving member firm of Ernst & Young Global Limited operating in the US.

Parthenon-EY refers to the combined group of Ernst & Young LLP and other EY member firm professionals providing strategy services worldwide. Visit parthenon.ey.com for more information.

© 2017 Ernst & Young LLP.
All Rights Reserved.

EYG no. 06749-173GBL

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax or other professional advice. Please refer to your advisors for specific advice.

ey.com