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Good as Gold: Resilience and Continued Attractiveness of the Global K-12 Sector

May 2022

Agenda

- **K-12 education is an attractive segment**

- Private K-12 is a rapidly growing market

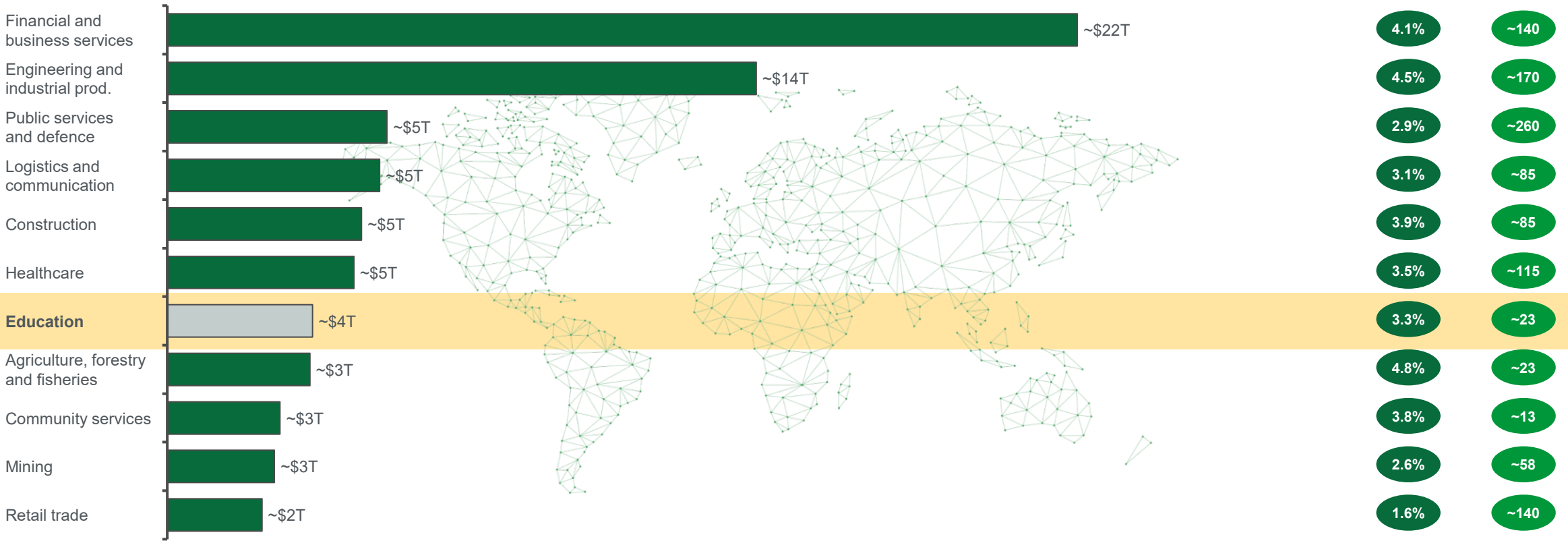- Premium private K-12 is gaining share — there is significant headroom for growth

Education is amongst the top 10 sectors globally (in value), with a worldwide GVA of ~USD 4T in 2019, and has grown at a CAGR of ~3% between 2009 and 2019

Indicative

Gross value added (GVA) is defined as the measure of the contribution to gross domestic product (GDP) made by an individual industry sector

Global gross value added by sector (2019)
Trillions of USD

Sector	GVA (2019)	CAGR (2009-19)	Companies with rev. >£1 B*
Financial and business services	~$22T	4.1%	~140
Engineering and industrial prod.	~$14T	4.5%	~170
Public services and defence	~$5T	2.9%	~260
Logistics and communication	~$5T	3.1%	~85
Construction	~$5T	3.9%	~85
Healthcare	~$5T	3.5%	~115
Education	~$4T	3.3%	~23
Agriculture, forestry and fisheries	~$3T	4.8%	~23
Community services	~$3T	3.8%	~13
Mining	~$3T	2.6%	~58
Retail trade	~$2T	1.6%	~140

*Companies listed are the number of public companies (excluding education, which includes both private and public)
Source: L.E.K. research and analysis based on data provided by Oxford Economics 2020 and data from Forbes

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Within education, the K-12 sector demonstrates salient characteristics that make it most attractive for investment

Salient characteristics of education sector by sub-segment

Sub-segments	Description	Resilience	Long-term revenue visibility	Barriers to entry	Real price growth	Non-discretionary spend	Negative working capital	Operating leverage	Student tenure
Pre-school/childcare	Traditional nursery, kindergarten, infant care and childcare services	↔	↔	↔	↑	↑	↑	↑	↓
K-12	Traditional K-12 schools and K-12 education provision	↑	↑	↑	↑	↑	↑	↑	↑
Tutoring/test prep/academic enrichment	For general reinforcement or preparation of important exams, like a national exam/HE entrance exam	↔	↓	↔	↑	↑	↑	↔	↔
English language training (ELT)	ELT programs and preparation for English exams such as IELTS, etc.	↔	↓	↔	↑	↑	↑	↔	↓
Non-academic enrichment	Engages students in non-academic activities like music, art and dance	↔	↓	↔	↑	↔	↑	↔	↓
Higher education (university)	Traditional college/university programs	↑	↑	↑	↑	↑	↑	↑	↔
Transnational education pathways	Pre-university bridging programs for international students focused on English and gaps in K-12 curriculum of source country	↔	↔	↑	↑	↑	↑	↑	↓
Continuous/adult learning (upskilling)	Short courses for adults in market relevant disciplines	↔	↓	↔	↔	↔	↑	↑	↓
Corporate training	Short training courses for new hires and existing employees	↓	↓	↔	↔	↔	↑	↔	↓
Publishing	Traditional textbook publishers for schools and universities	↓	↓	↑	↔	↑	↓	↔	↔
K-12/HE support services	Services that support K-12/HE operations such as security service, bus service, meal service and study abroad agents	↔	↓	↔	↔	↑	↓	↔	↑

Legend:
- ↓ Below sector average
- ↔ At sector average
- ↑ Above sector average

Note: HE=Higher Education, IELTS=International English Language Testing System
Source: L.E.K. research and analysis

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Global expenditure on K-12 education is estimated to be USD 3T-3.5T in 2020; it has grown at a 4%-5% CAGR in the past 20 years and is expected to reach USD 4.5T-5.5T by 2030F

K-12 stands for **"from kindergarten to 12th grade"** and equates to a school starting age of 3-5 through to grade 12 at age ~18

K-12

K-12 school education corresponds to the in-school education of children (relevant age of 3-18 years, relevant grades from kindergarten to grade 12)

K-12 services

K-12 services correspond to other ancillary services that form the ecosystem of schoolgoing students such as technology (LMS, ERP systems, etc.), tutoring (academic and non-academic), publishing, etc.

Online K-12

Online K-12 corresponds to the upcoming virtual schooling market that offers full-through online school learning

Global expenditure on education and training industry (USD)

$0.5-1T $0.5-1T
$0-0.5T
$1.5-2T
~$9.9T (2030F)
$4.5-5.5T

- Pre-K
- K-12
- Post-secondary
- Corporate
- Lifelong learning
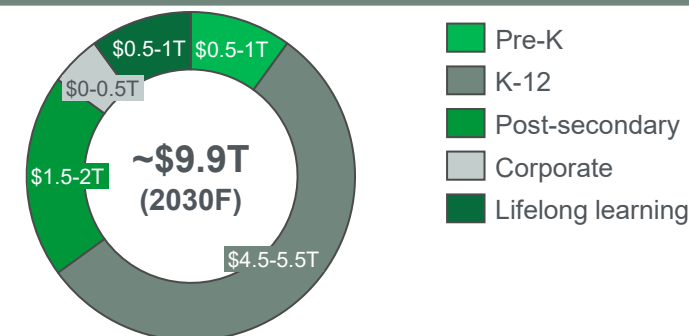
The K-12 segment accounts for 50%-55% of the total expenditure on education and training

Estimated global expenditure, K-12 school education
Trillions of USD
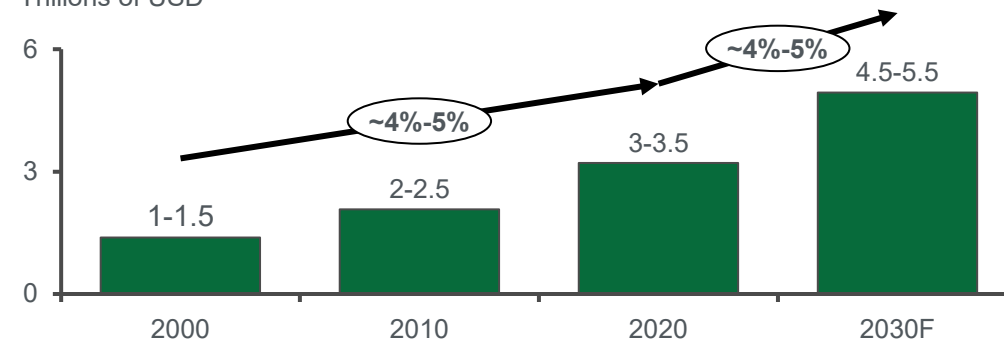
Year	Value
2000	1-1.5
2010	2-2.5
2020	3-3.5
2030F	4.5-5.5

~4%-5%   ~4%-5%

Note: LMS=learning management system, ERP=enterprise resource planning
Source: L.E.K. research and analysis, based on data from 'Education in 2030' by HolonIQ

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Agenda

- K-12 education is an attractive segment

- **Private K-12 is a rapidly growing market**

- Premium private K-12 is gaining share — there is significant headroom for growth

The private K-12 market has ~85M enrolled students across major markets and has grown at a ~2% CAGR between 2015 and 2019

Private K-12 enrolment and growth of major markets (2019)
USD

Market growth (2015-19)
- <0% p.a.
- 0% p.a.
- >2% p.a.

Canada ~0.4M

US ~11M

Mexico ~4M

Brazil ~6M

UK ~0.6M

Portugal ~0.3M

Spain ~0.6M

Italy ~0.8M

Bahrain ~0.1M

Saudi Arabia** ~1M

Dubai ~0.3M

Abu Dhabi ~0.2M

South Africa ~0.7M

China ~54M

Vietnam ~0.5M

Japan* ~4M

Australia ~0.6M

New Zealand ~0.03M
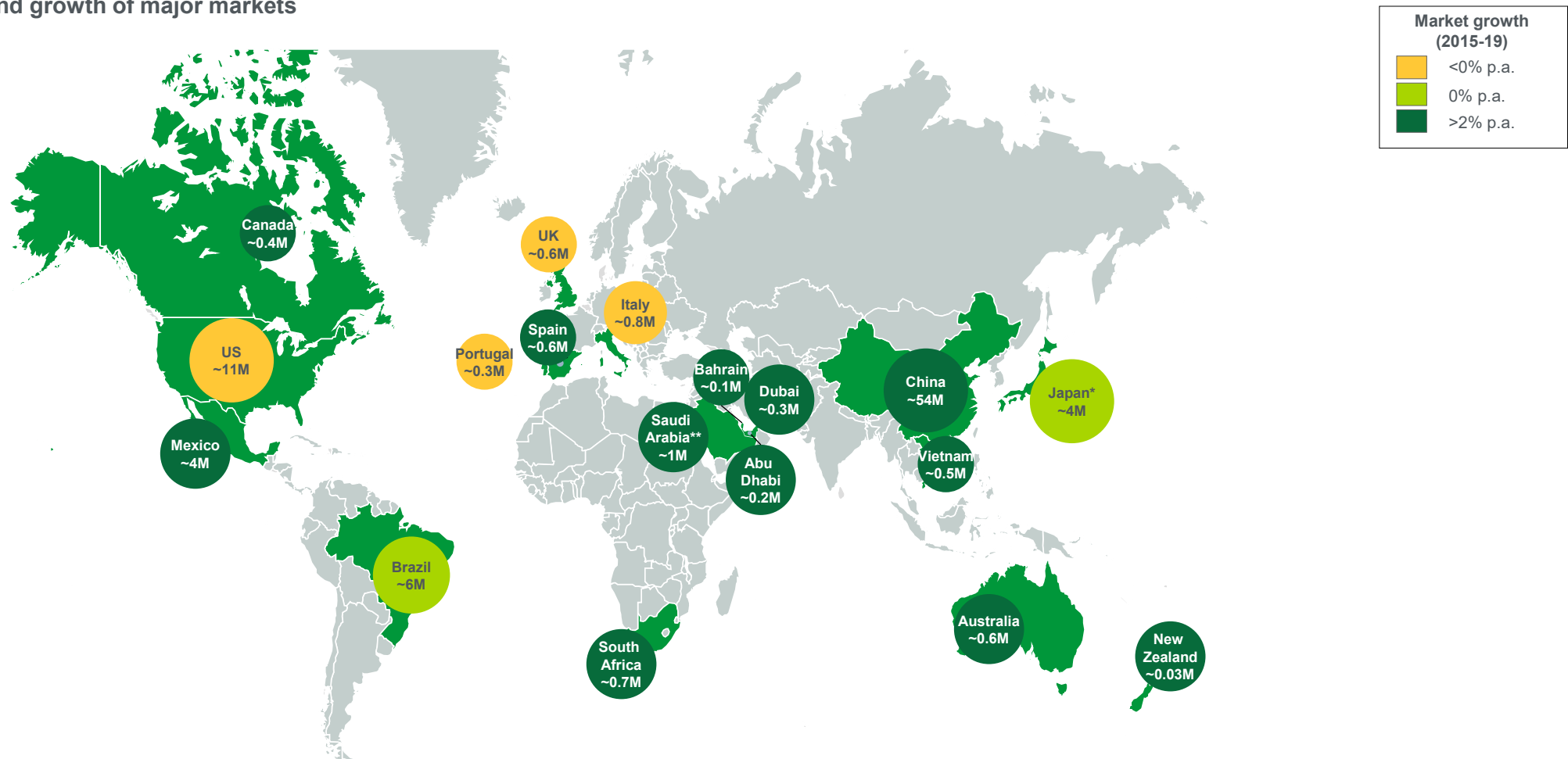
*Data for 2017; **Data for 2018; major markets globally based on size depicted
Source: L.E.K. research and analysis, based on the data from Ministry of Education or equivalent of Canada, Mexico, South Africa, Portugal, Spain, UK, Italy, Saudi Arabia, Bahrain, Abu Dhabi, Dubai, Vietnam, Japan, Australia, New Zealand, USA, Brazil and China; data from UNESCO Institute of Statistics, Statista and Xinhuanet

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Privatisation in education is a secular megatrend that is likely to play out for decades to come; private K-12 has gained share over public schools across major markets between 2015 and 2019

Enrolment share of private* K-12 education, major markets (2019)
Percentage

■ Increase in share by >2% during 2015 and 2019
■ Increase in share by 0%-2% during 2015 and 2019

	Africa and MENA				America and LATAM	APAC					Europe			
	Saudi Arabia**	South Africa	Dubai	Abu Dhabi	Bahrain	United States	Mexico	Brazil	Australia	Vietnam	New Zealand	Italy	Spain	United Kingdom	Portugal
Share	~16%	~5%	~91%	~72%	~33%	~14%	~13%	~18%	~16%	~4%	~4%	~9%	~8%	~7%	~20%
Total K-12 enrolment (2019)	~6M	~13M	~0.3M	~0.3M	~0.2M	~76M	~30M	~41M	~4M	~17M	~1M	~0.8M	~8M	~9M	~2M

*Major markets globally depicted based on data availability; **Data for 2018; increase between 2015 and 2018;
Source: L.E.K. research and analysis based on the data from Ministry of Education or equivalent of Mexico, Brazil, South Africa, Portugal, Spain, UK, Italy, Saudi Arabia, Bahrain, Abu Dhabi, Dubai, Vietnam, Australia, New Zealand and the US; and data from Statista

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The attractiveness of private K-12 is underpinned by secular growth drivers (1/2)

1 **Poor quality of public provisioning**

> Mean PISA scores for private schools are better than for public across reading, math and science

Mean PISA scores, public vs private
(2018)

Legend: ■ Public schools ■ Private schools

Category	Public	Private
OECD int. avg. reading	482	510
OECD int. avg. math	485	512
OECD int. avg. science	485	511

> **Illustrative case study:** <40% of parents in the US were satisfied with education in public schools

Percentage parents rating 'Very Well'1, USA (2020)
Percentage (N=2200)

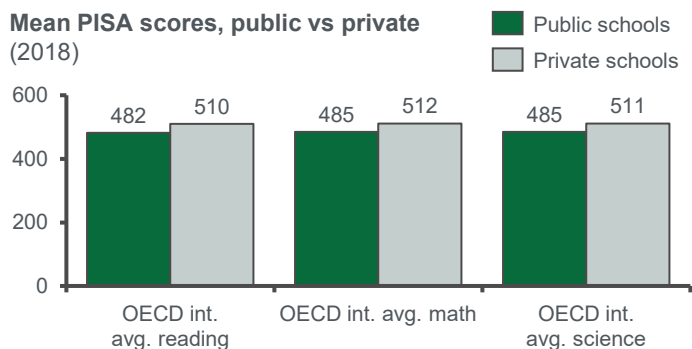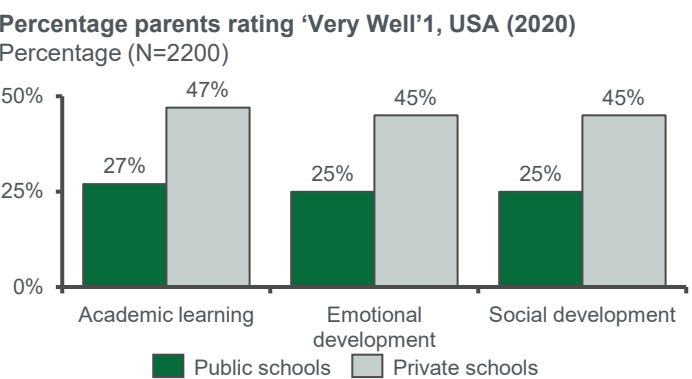| Category	Public schools	Private schools
Academic learning	27%	47%
Emotional development	25%	45%
Social development	25%	45%

Legend: ■ Public schools ■ Private schools

2 **Growing demand for English-based learning**

> Number of International English Language Testing System (IELTS) takers have increased at a 11% CAGR between 2009 and 2018

Number of IELTS takers
Millions of takers

~11%

Year	Takers
2009	~1.4
2011	~1.7
2012	~2.0
2017	~3.0
2018	~3.5
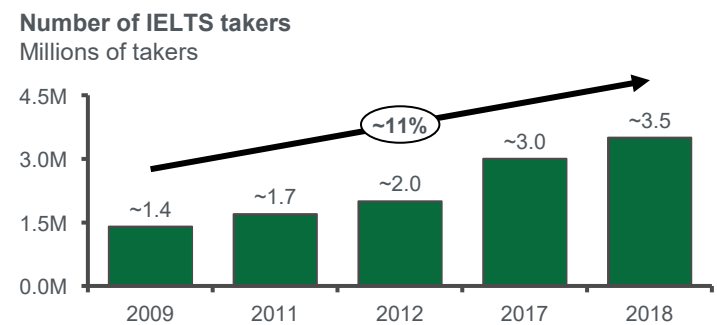
> **Illustrative case study:** International and bilingual schools with English-based learning have grown at 6%-7% CAGR between 2012 and 2020, based on ISC research

Global international schools
Number of schools

6%-7%

Year	Number of schools
2012	7K
2015	9K
2020	11K

Legend: ■ International schools ■ Bilingual international schools

3 **Focus on education outcomes**

> 83% of the parents in the global ISC survey in December 2020 think education outcomes are very important

ISC survey results (2020)
Parents' preference for academic outcomes (percentage)

Results	
Somewhat important	17
Very important	83
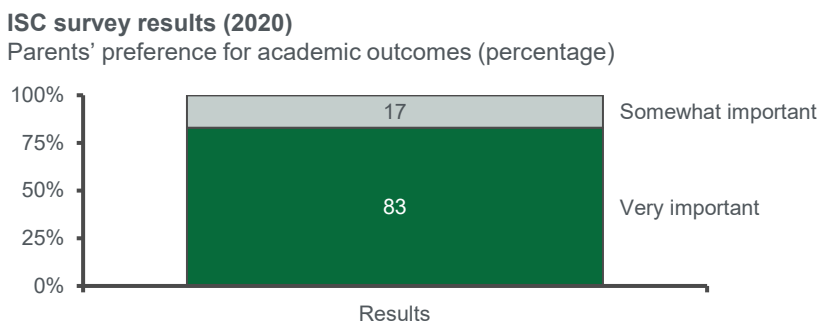
> **Illustrative case study:** Outcomes in private schools across key markets are generally better than those of public schools

University pass rate (AY2020), South Africa
Percentage

Segment	Pass rate
Premium market	95-100
Private segment	75-100
Public segment	40-75
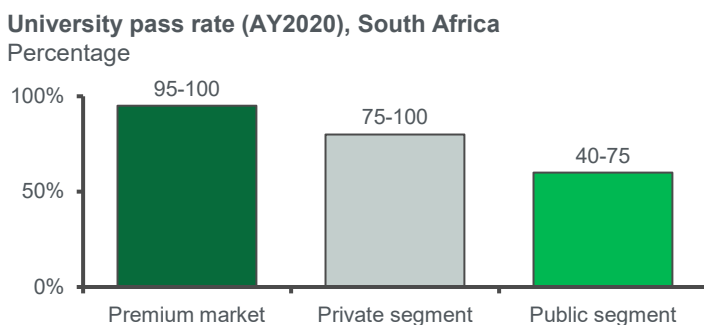
Private K-12 is a pathway for international higher education

*Percentage of parents who rated their satisfaction as 'Very Well Satisfied'
Source: L.E.K. research and analysis based on data from PISA; ISC; Statista; OECD; EdChoice Survey, November 2020 (N=2,200); EMI Oxford (The Centre for Research and Development in English Medium Instruction), 2014; IBO.org; IELTS.org; and Department of Education – South Africa

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The attractiveness of private K-12 is underpinned by secular growth drivers (2/2)

4 Demand for holistic development

As per a nationwide survey conducted in 2018 in the US, college learning outcomes are rated very important by employers

College learning outcomes rated very important by employers
Percentage of employers rated (N=400)
(2018)

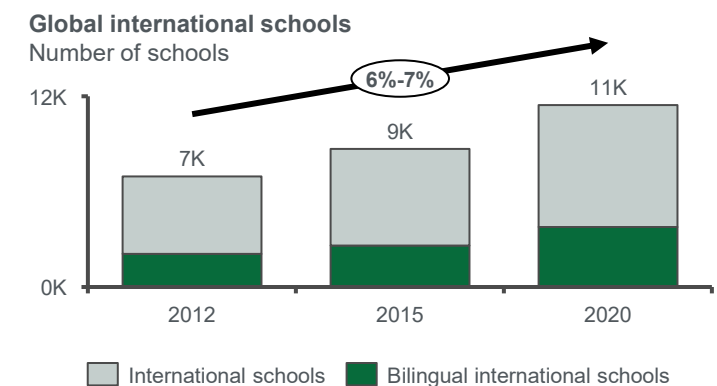|	
Critical thinking and analytical reasoning skills	81%
Apply knowledge and skills to real-world settings	80%
Locate, organize and evaluate information from multiple sources	68%
Ability to innovate and be creative	65%

Private schools are typically better equipped than public schools to inculcate 21st-century skills

Students at or above proficient in technology and engineering literacy
Percentage

~+15% point increase

Public 45%
Private 60%

5 Rising affluence in emerging markets

Middle class households on average have grown at 1%-2% CAGR between 2010 and 2021, across emerging markets, and are forecast to grow at 1%-2% CAGR in the next 5 years

Middle class households growth[1], select emerging markets (CAGR 2010-21, 2021-26F)

■ CAGR (2010-21)
■ CAGR (2021-26F)

	CAGR (2010-21)	CAGR (2021-26F)
South Africa	~3%	~2%
Kenya	~3%	~2%
Bahrain	~2%	~3%
Vietnam	~3%	~1%
Indonesia	~1%	~1%
Mexico	~3%	~1%
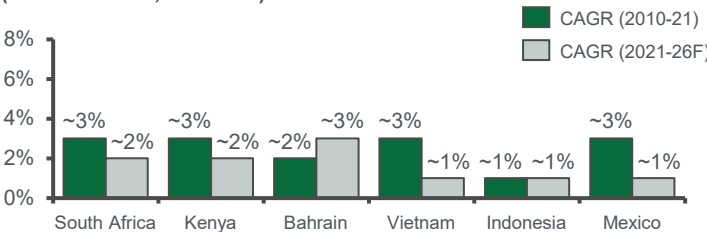
Average household disposable income on average has grown at 1%-2% CAGR between 2005 and 2019, across emerging markets, and is forecast to grow at 1%-2% CAGR in the next 5 years

Avg. household income growth, select emerging markets
CAGR

■ CAGR (2005-19)
■ CAGR (2021-26F)

	CAGR (2005-19)	CAGR (2021-26F)
South Africa	0%-1%	~2%
Kenya	~2%	~2%
Bahrain	~1%	0%-1%
Vietnam	~4%	~4%
Indonesia	~4%	~5%
Mexico	0%-1%	0%-1%

Africa and MENA	APAC	LATAM
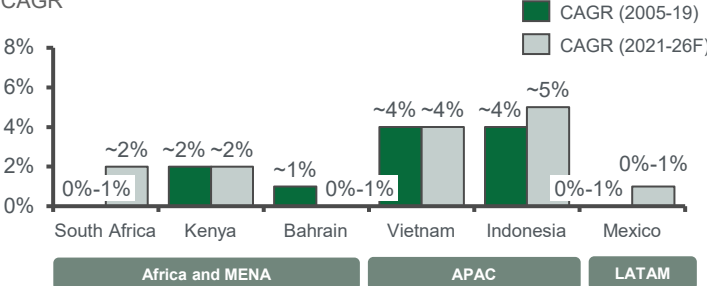
6 Rising expat population

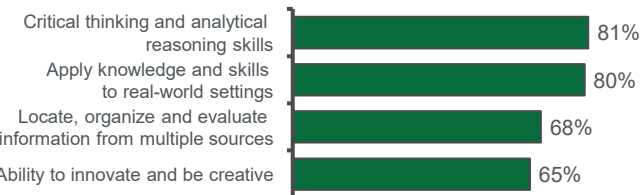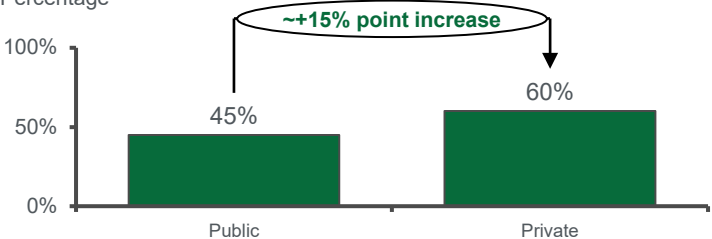**Increasing FDI across many emerging markets has led to the growth of expats in markets**

Foreign direct investment growth, select emerging markets
CAGR 2010-2019

Bahrain	~5%
Vietnam	~6%
Spain	~4%
Portugal	~6%
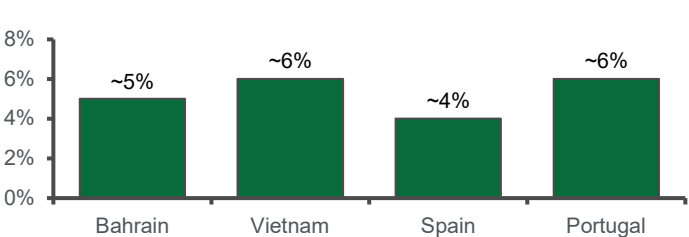
The growing expat population across many emerging markets has led to the growth of private education, as private schools are the only viable option for expats

Growth in expat population, select emerging markets
CAGR

Bahrain (2009-20)	2%-3%
Vietnam (2005-19)	~3%
Spain (2016-21)	3%-4%
Portugal (2015-19)	11%-12%

MENA	APAC	Europe
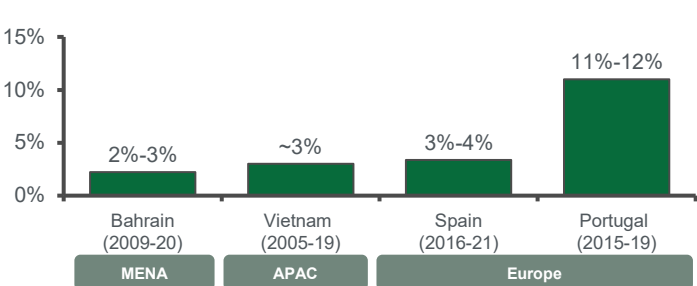
*We define the middle class in developed economies as comprising households with an annual disposable income of USD 44,900-USD 99,870 (in constant, purchasing power parity (PPP) terms). In emerging and developing economies, due to lower costs of living, we consider households with a lower income of USD 15,000-USD 45,500 (in constant, PPP terms) as belonging to the middle class.
Source: L.E.K. research and analysis based on data from Hart Research Association Report 'Selected Findings from Online Surveys of Employers and College Students Conducted on Behalf of the Association of American Colleges and Universities'; World Economic Forum; Nations Report Card; UNESCO, MoE Bahrain, INE Spain, Gabinete de Estratégia e Estudos (GEE) – Portugal; and data provided by Oxford Economics 2020

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High barriers to entry and robust business model add to the attractiveness of the private K-12 segment (1/2)

Established and recognised brands
Long lead time required to establish trusted and reputable brands

Scarcity of real estate in commercially viable areas (catchment play)
Private K-12 platforms benefit from prime real estate in attractive markets and exclusive relationships with real estate developers that help secure new locations with a minimal upfront investment

Access to upfront capital investment
Access to capital from intrinsic cash generation across platform and diversified financing sources provides competitive advantage for investing in long-term growth projects

Long student tenure*
Focused on jurisdictions where students generally stay enrolled in the same school until graduation, greatly limiting the potential for new entrants

Deep local market insights
Deep understanding of local markets and catchments through years of extensive research and experience of local management teams

Secured government licenses and regulatory approvals
Strong relationships with regulatory bodies; operate in geographies with stable and predictable global school portfolio regulatory environment

*Average of local and expat student tenure
Source: L.E.K. research and analysis

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High barriers to entry and robust business model add to the attractiveness of the private K-12 segment (2/2)

A — Fee growth above inflation

2%-3% premium of fee growth over inflation

Market-listed fees growth premium over inflation for select schools, by market (FY2017-20)
Percentage

Market	Value
South Africa	2-3
Bahrain	2-3
Vietnam	3-4
Australia	~2
New Zealand	1-2
Spain	1-2
Portugal	2-4
Italy	~3
UK	~1

- Africa and MENA: South Africa, Bahrain
- APAC: Vietnam, Australia, New Zealand
- Europe: Spain, Portugal, Italy, UK

B — Long-term revenue visibility

Average student lifetime, global benchmark by student segment
Years

Segment	Years
K-12: Local students	10-14
K-12: Expat students	3.5-6
Higher education	3-5
Stand-alone Pre-K	2-4
Tutoring	1-3
ELT/supplementary learning	0-2

C — Negative working capital requirements

Start of year — School year — End of year

Payment collection upfront *(typically no refunds)*

Throughout the year, periodic payments are made to staff/vendors:
- Monthly payment for teachers and other staff
- Periodic payments to vendors

Accounting for maintenance capex, a stable school is able to convert ~80%-90% of EBITDA to cash annually

Since schools collect payment upfront and pay vendors/teachers monthly, K-12 schools have negative working capital requirements

D — Predictable cash-flows

20%-25% EBITDA in steady state

Illustrative greenfield school cumulative EBITDA and margin evolution
Percentage

- Cumulative EBITDA
- EBITDA margin

£M — X-axis: Y0, Y1, Y2, Y3, Y4, Y5, Y6, Y7, Y8, Y9

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At an average penetration of 15%-25% currently, the private segment across major cities has headroom for growth

Africa and MENA	APAC	Europe

Penetration levels of private K-12 segment (AY2020)
Percentage

	South Africa (Johannesburg)	Bahrain	Dubai (UAE)	Abu Dhabi (UAE)	HCMC (Vietnam)	Auckland (New Zealand)	Sydney (Australia)	Melbourne (Australia)	Kuala Lumpur (Malaysia)	Johor Bahru (Malaysia)	Madrid (Spain)	London (UK)	Lisbon (Portugal)	
	~$1.2K	~$1.2K	~$1.2K	~$1.2K	~$1.2K	~$1.2K	~$1.2K	~$1.2K	~$1.2K	~$1.2K	~$1.2K	~$1.2K	~$1.2K	**Price cut-off* (USD)**
	~$14K	~$12K	~$12K	~$12K	~$15K	~$12K	~$12K	~$12K	~$14K	~$14K	~$12K	~$12K	~$12K	**Income cut-off** (USD)**
	~1.47	~0.28	~0.90	~0.42	~1.43	~0.35	~1.03	~0.99	~1.59	~0.32	~1.11	~2.40	~0.45	**Addressable population (M)**
	150-160	65-75	290-390	175-185	80-90	15-20	150-155	110-120	30-40	35-45	190-200	140-150	125-130	**Enrolment (K) (AY2020)**
	0%-1%	2%-3%	2%-3%	2.5%-3%	13%-14%	2%-3%	2%-3%	2.5%-3.5%	3.5%-4.5%	(3)%-(2)%	2%-3%	(1)-0%	0.5%-1.5%	**Enrolment CAGR AY2017-20**

*Price cut-off is the Year 9 listed fees for the most economical school in the respective segment; based on constant 2015 prices; **Income cut-off is the amount of the disposable income a family should have to afford the private and premium education, respectively; assumed ~10% of the disposable income is spent on education, except for Kuala Lumpur, Johor Bahru and South Africa (15% spend on education) and Ho Chi Minh City (HCMC) (20% spend on education)
Source: L.E.K. research and analysis based on market participant discussions and secondary research

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Agenda

- K-12 education is an attractive segment

- Private K-12 is a rapidly growing market

- **Premium private K-12 is gaining share — there is significant headroom for growth**

Within private K-12, the international and bilingual curricula school market with fee point >$6K is sized at $45B-$55B in annual revenue across key cities, globally

K-12 market size^^ (fee point >$6K) by region (AY2020)
Billions of USD

Total: $45B-$55B

$6B-$7B	$5B-$6B	$4B-$5B	$4B-$5B	$3B-$4B	$2B-$3B	$2B-$3B	$2B-$3B	$17B-$18B

Middle East | US | Asia^ | China* | EU/UK | ANZ | LATAM** | Africa** | Other markets

Middle East: Bahrain, Muscat, Egypt, Sharjah, Kuwait, Doha, Abu Dhabi, KSA (Riyadh, Jeddah, Eastern Provinces), Dubai

US: Others, New York, San Francisco

Asia^: HCMC, Kazakhstan, Jakarta, Klang, Bangkok, India, Singapore, Hong Kong

China*: Tier II cities, Shenzhen, Guangzhou, Beijing, Shanghai

EU/UK: Others, Paris, Brussels, Athens, Barcelona, Madrid, Switzerland, London

ANZ: Auckland, Sydney, Melbourne

LATAM**: Chile, Columbia, Peru, Argentina, Brazil, Mexico

Africa**: Others, Ghana, Kenya, South Africa, Nigeria, Egypt

Other markets: Other Markets

*China includes only international and bilingual schools; ^Asia includes only international schools, except HCMC; **LATAM and Africa includes schools with English as a medium of instruction; ^^Defined as market size for all schools above $6K across select non-exhaustive, major markets
Source: L.E.K. research and analysis based on market participant discussions and secondary research

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The premium segment in 20-25 major cities across EU, APAC, MENA and Africa is estimated at $9B-$11B in value ...

Premium^ K-12 market size, major cities*, by region
(AY2022)
Billions of USD

<u>**Total**</u>: **$9B-$11B**
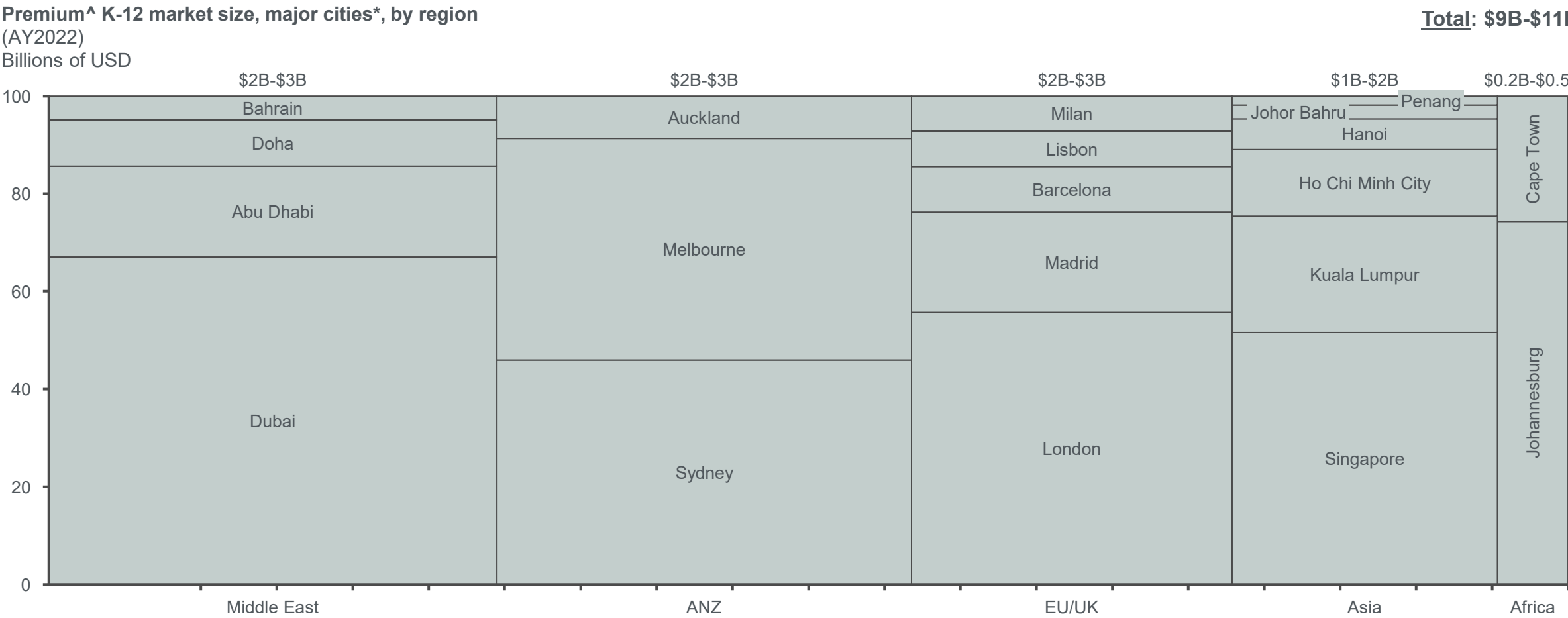
*Top cities with major premium K-12 segment; ^Premium segment (segment defined as schools with fees >USD ~6K-24K (cut-off varies from market to market based on local dynamics), based on L.E.K. research
Source: L.E.K. research and analysis and market participant discussions; Content subject to the disclaimer slide provided herein

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… and has grown faster than the rest of the private market, in most of these 20-25 cities

Africa and MENA	APAC	Europe

Enrolment growth (CAGR) premium K-12 education, select markets
Percentage

■ Premium segment CAGR (AY2017-20)
● Private segment CAGR (AY2016-19)

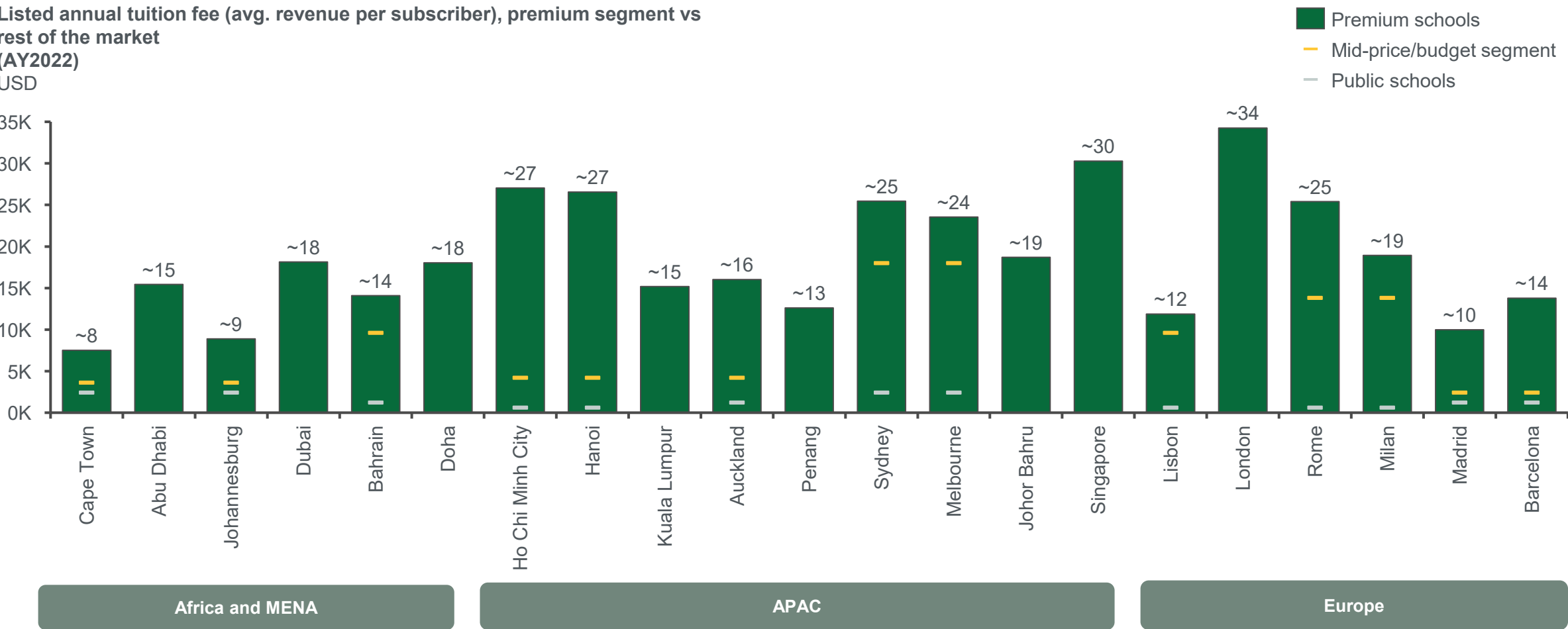| City	Premium CAGR	Total premium K-12 Enrolment (AY2022)
Johannesburg[5]	~3	36K-37K
Cape Town[4]	~3%	14.5K-15.5K
Bahrain[1]	~5%	9K-10K
Abu Dhabi	~6%	33K-34K
Dubai	~6%	103K-104K
Doha	~7%	14K-15K
Singapore	~2%	28K-29K
Kuala Lumpur	~6%	25.5K-26.5K
Johor Bahru	~6%	2K-3K
Penang	~8%	2K-3K
Auckland[5]	~3%	13.5K-14.5K
Melbourne[5]	~1%	49K-50K
Sydney[5]	~2%	46K-47K
Ho Chi Minh City	~9%	8K-9K
Hanoi[6]	~6%	3K-4K
London[6]	~3%	32K-33K
Madrid[6]	~1%	41K-42K
Barcelona[3,6]	~0%	13K-14K
Milan[6]	~4%	7K-8K
Rome[6]	~2%	4K-5K
Lisbon	~7%	12K-13K

[1]Bahrain's private enrolment growth is for AY2016-19; [2]Penang's private enrolment growth is for AY2018-20; [3]Barcelona's private enrolment growth is AY17-22; [4]For Cape Town's premium enrolment growth is for AY2017-21; [5]For South Africa, New Zealand and Australia, the private enrolment growth is for AY2016-19; [6]For select cities, the premium enrolment growth is for AY2017-22

Source: L.E.K. research and analysis based on data from school websites, etc.

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Priced at a considerable premium to mid-price and public schools …

Listed annual tuition fee (avg. revenue per subscriber), premium segment vs rest of the market (AY2022)
USD

Legend:
- ■ Premium schools
- ▬ Mid-price/budget segment
- ▬ Public schools

Chart values (Premium schools):
- Cape Town: ~8
- Abu Dhabi: ~15
- Johannesburg: ~9
- Dubai: ~18
- Bahrain: ~14
- Doha: ~18
- Ho Chi Minh City: ~27
- Hanoi: ~27
- Kuala Lumpur: ~15
- Auckland: ~16
- Penang: ~13
- Sydney: ~25
- Melbourne: ~24
- Johor Bahru: ~19
- Singapore: ~30
- Lisbon: ~12
- London: ~34
- Rome: ~25
- Milan: ~19
- Madrid: ~10
- Barcelona: ~14

Region groupings:
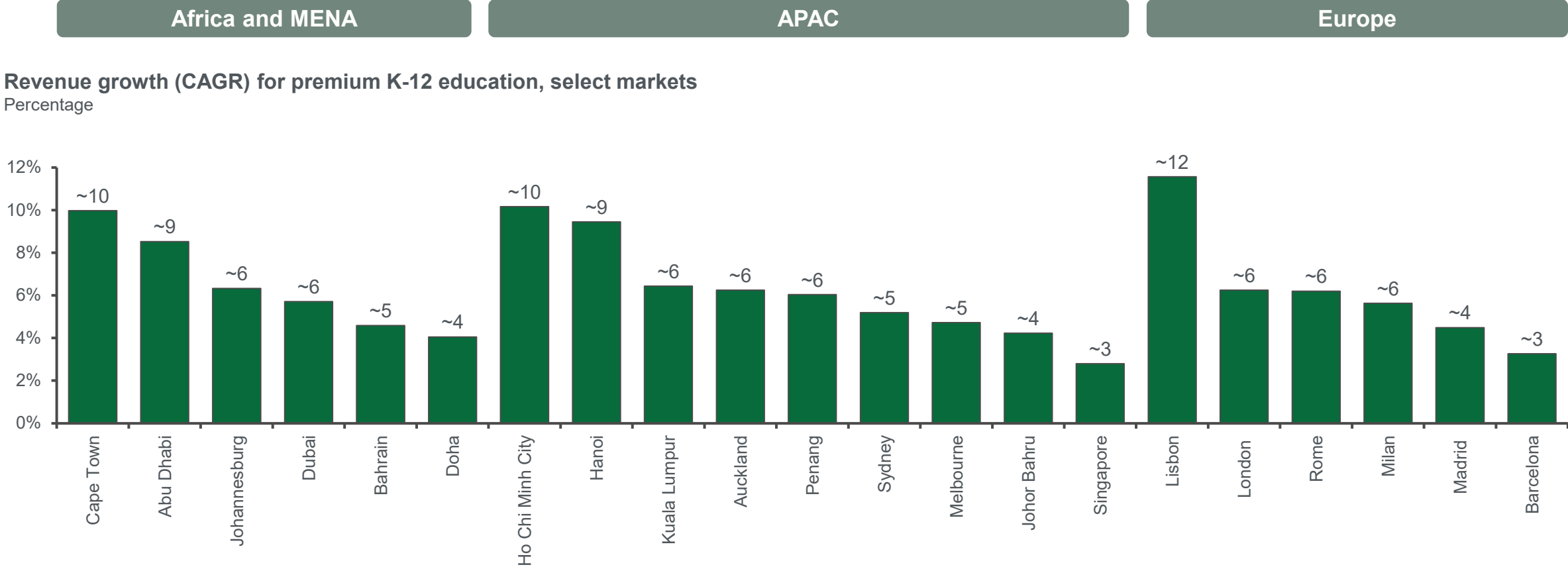- **Africa and MENA**
- **APAC**
- **Europe**

Source: L.E.K. research and analysis based on school websites and market participant discussions

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L E K ™

… the premium segment across major markets has demonstrated fee growth at a premium to inflation between AY2017 and AY2022

Africa and MENA	APAC	Europe

Fee growth of the premium segment (AY2017-22)
Percentage

■ Fee growth
● Inflation

Cape Town ~7
Abu Dhabi ~4
Johannesburg ~5
Dubai ~2
Bahrain ~3
Doha ~0.5
Ho Chi Minh City ~5
Hanoi ~3
Kuala Lumpur ~3
Auckland ~3
Penang ~2
Sydney ~3
Melbourne ~3
Johor Bahru ~2
Singapore ~2
Lisbon ~5
London ~3
Rome ~4
Milan ~3
Madrid ~3
Barcelona ~3

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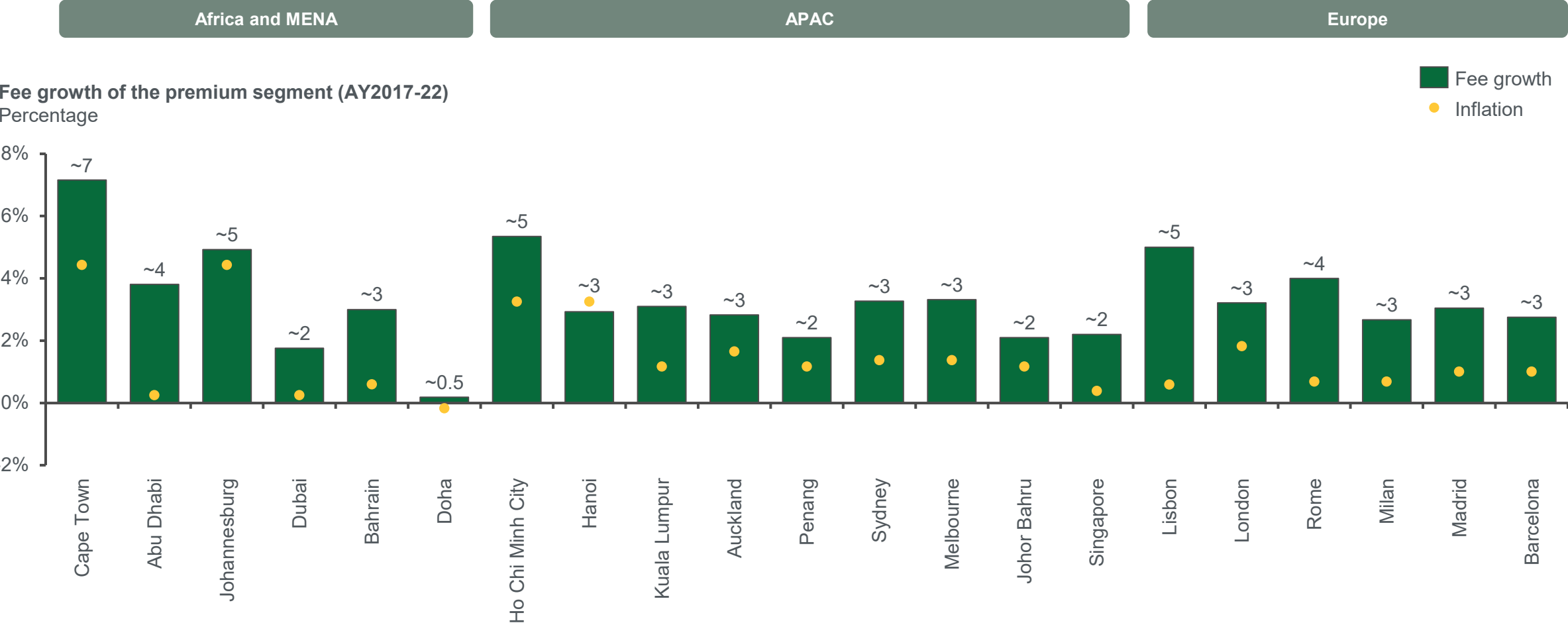
Overall, during the past 5-6 years, the premium segment has seen strong revenue growth …

| Africa and MENA | APAC | Europe |

Revenue growth (CAGR) for premium K-12 education, select markets
Percentage

Bar chart values:
- Cape Town: ~10
- Abu Dhabi: ~9
- Johannesburg: ~6
- Dubai: ~6
- Bahrain: ~5
- Doha: ~4
- Ho Chi Minh City: ~10
- Hanoi: ~9
- Kuala Lumpur: ~6
- Auckland: ~6
- Penang: ~6
- Sydney: ~5
- Melbourne: ~5
- Johor Bahru: ~4
- Singapore: ~3
- Lisbon: ~12
- London: ~6
- Rome: ~6
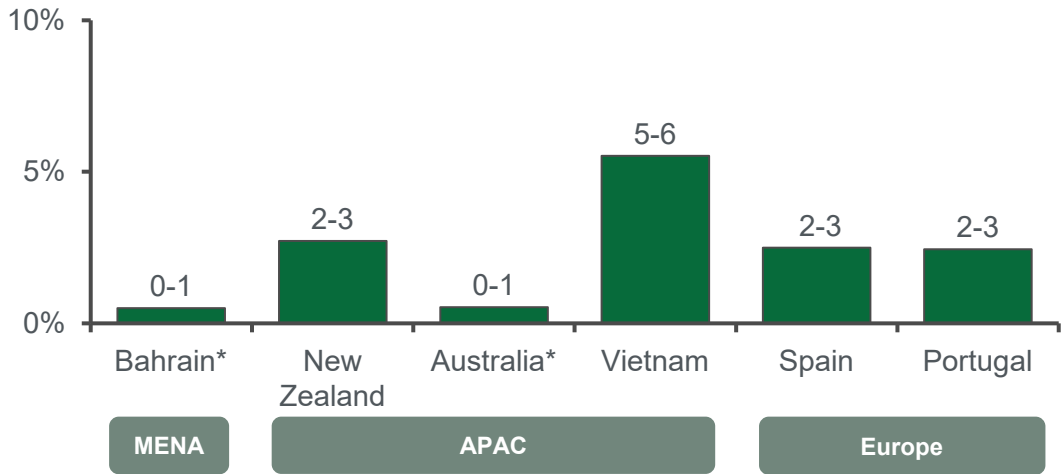- Milan: ~6
- Madrid: ~4
- Barcelona: ~3

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…. backed by growing affluence and increasing fees, with an increase in white collar salary across the major cities

1 | Growing affluence

Avg. household income of the top-decile growth, select markets (2015-19)
Percentage

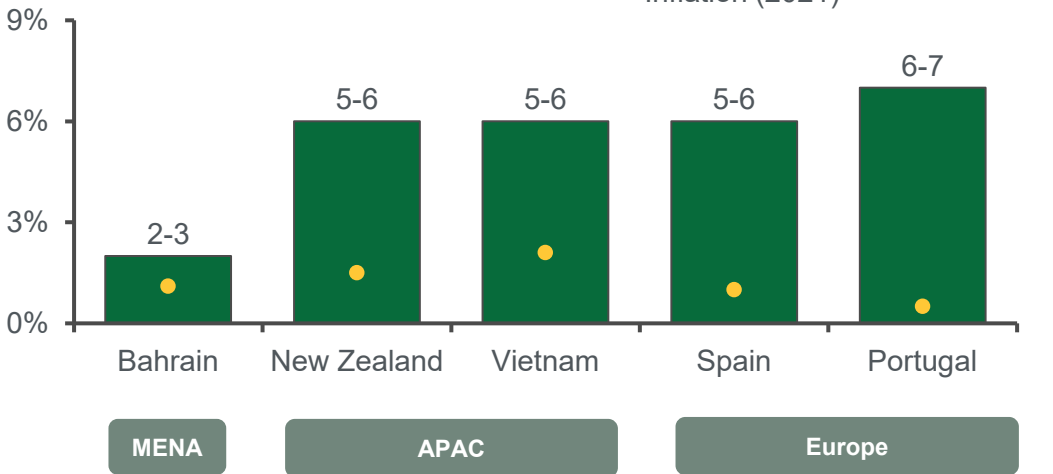| Market	Value
Bahrain*	0-1
New Zealand	2-3
Australia*	0-1
Vietnam	5-6
Spain	2-3
Portugal	2-3

MENA — APAC — Europe

The average household income of the most affluent decile has grown across markets; this is backed by the economic growth in these markets

2 | Fee growth with increase in white collar salary

Estimated average salary increase select markets
Percentage

■ Average salary increase (2021)
● Inflation (2021)

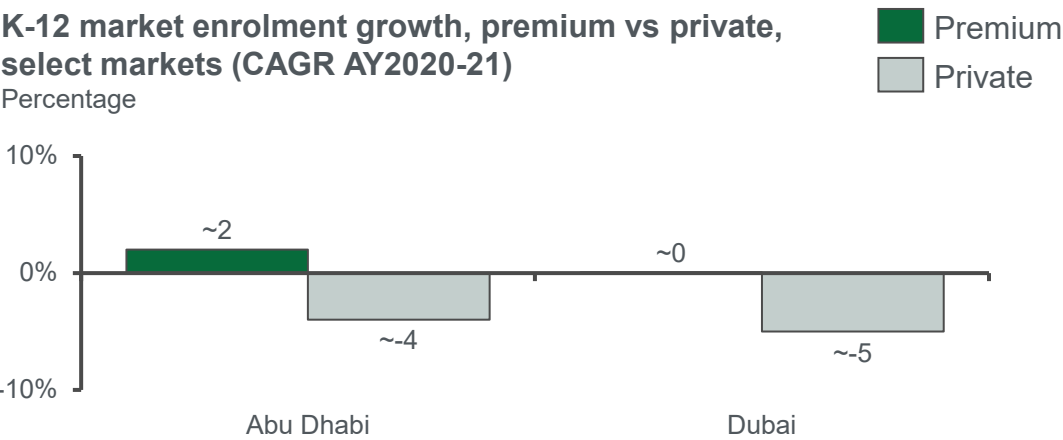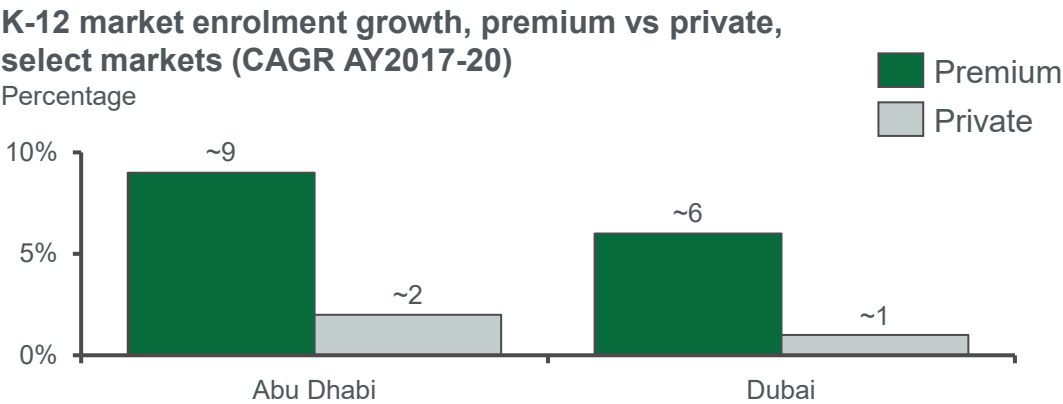| Market	Value
Bahrain	2-3
New Zealand	5-6
Vietnam	5-6
Spain	5-6
Portugal	6-7

MENA — APAC — Europe

The average increase in salary is higher than the inflation rate across markets; recovery in the economies across region post-COVID-19 has further accelerated the increase in salaries
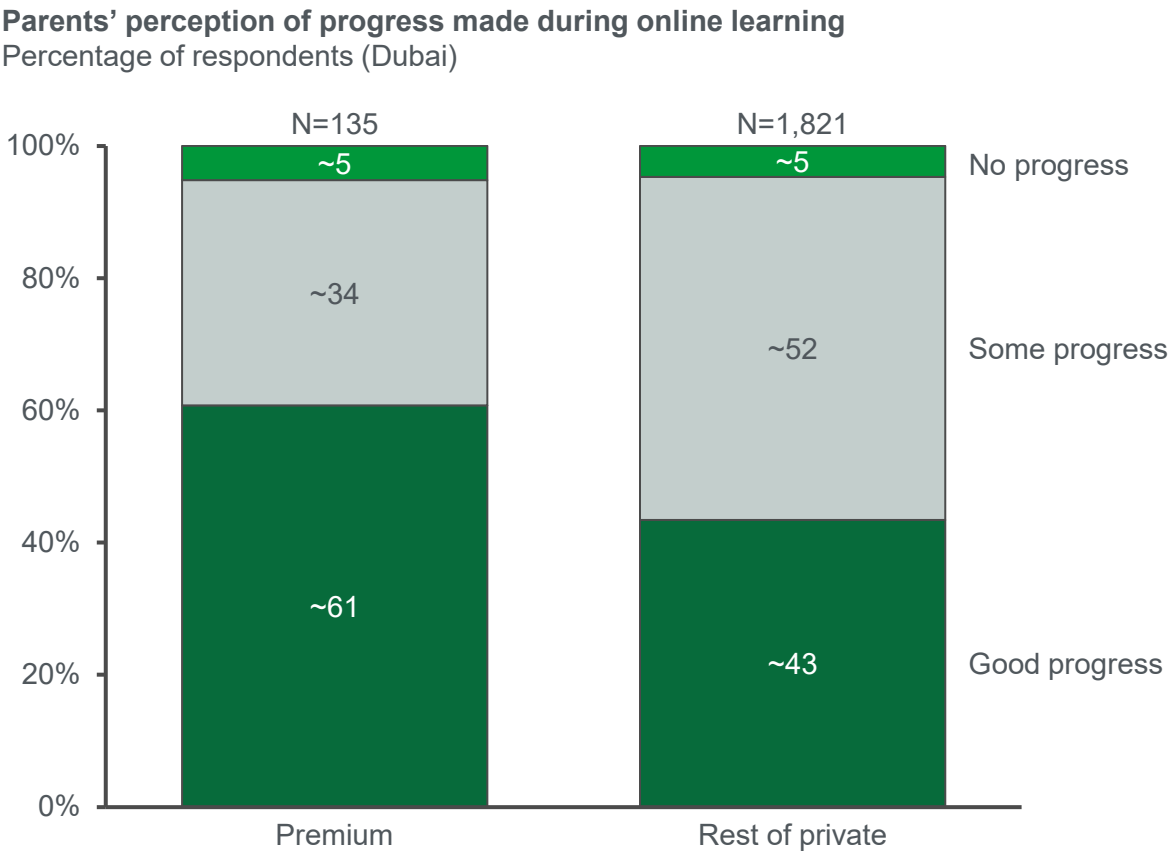
*For Bahrain and Australia, the growth rate of average household income of the top decile is from 2010 to 2019
Source: L.E.K. research and analysis based on data from Salary Explorer

L E K ™

The premium K-12 segment has also demonstrated higher resilience than the overall private sector during the pandemic in major markets globally
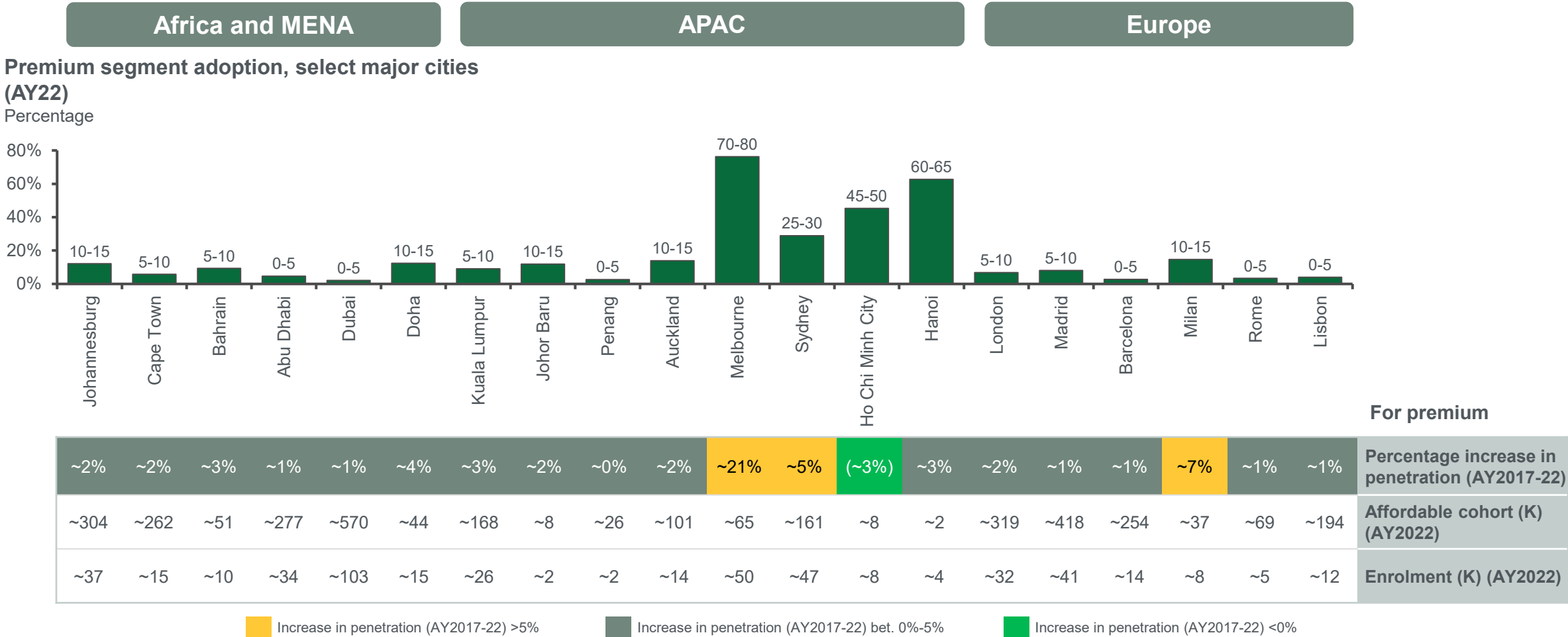
Case study

K-12 market enrolment growth, premium vs private, select markets (CAGR AY2017-20)
Percentage

- ■ Premium
- ■ Private

Abu Dhabi: Premium ~9, Private ~2
Dubai: Premium ~6, Private ~1

K-12 market enrolment growth, premium vs private, select markets (CAGR AY2020-21)
Percentage

- ■ Premium
- ■ Private

Abu Dhabi: Premium ~2, Private ~-4
Dubai: Premium ~0, Private ~-5

Q. Has your child continued to make progress and learn new things?

Parents' perception of progress made during online learning
Percentage of respondents (Dubai)

N=135 (Premium): No progress ~5, Some progress ~34, Good progress ~61
N=1,821 (Rest of private): No progress ~5, Some progress ~52, Good progress ~43

Source: L.E.K. research and analysis based on data from L.E.K. Parent Survey, KHDA data and market participant discussions
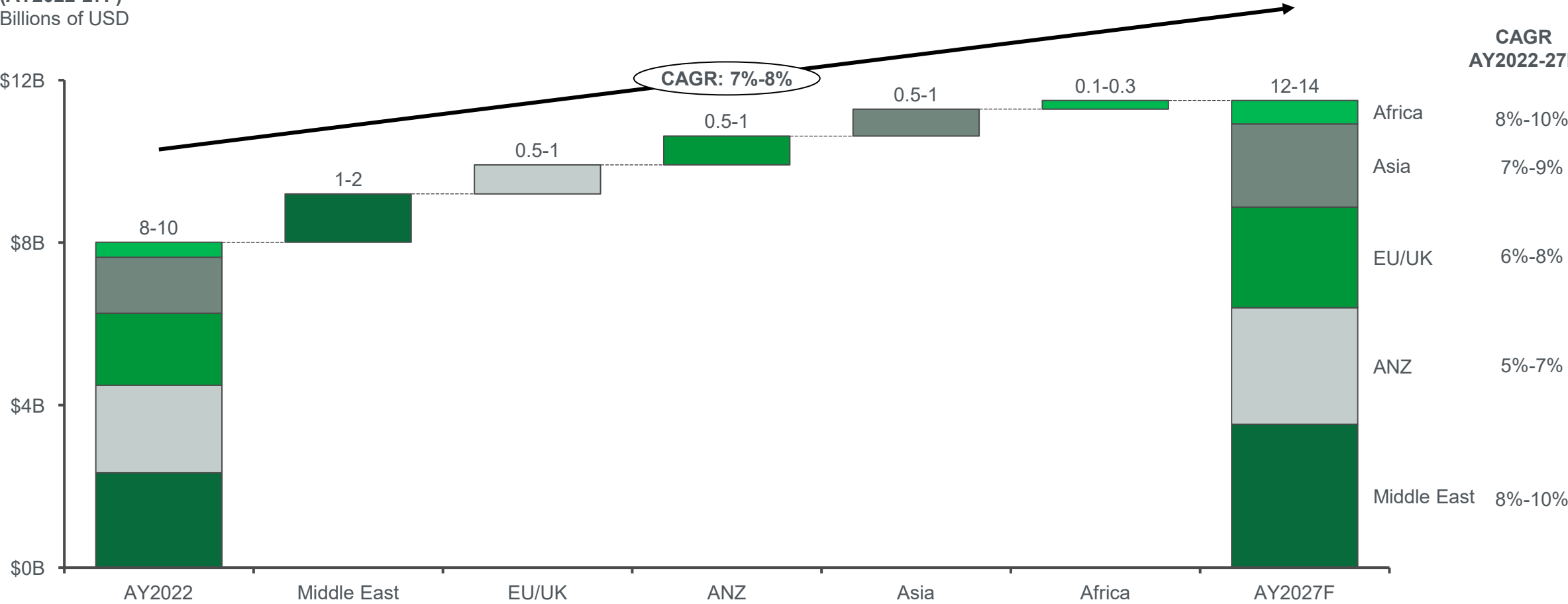
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At an average penetration of 5%-15% currently, the premium segment across major cities has headroom for growth

Africa and MENA	APAC	Europe

Premium segment adoption, select major cities (AY22)
Percentage

	~2%	~2%	~3%	~1%	~1%	~4%	~3%	~2%	~0%	~2%	~21%	~5%	(~3%)	~3%	~2%	~1%	~1%	~7%	~1%	~1%	**For premium**
																						Percentage increase in penetration (AY2017-22)
	~304	~262	~51	~277	~570	~44	~168	~8	~26	~101	~65	~161	~8	~2	~319	~418	~254	~37	~69	~194	**Affordable cohort (K) (AY2022)**
	~37	~15	~10	~34	~103	~15	~26	~2	~2	~14	~50	~47	~8	~4	~32	~41	~14	~8	~5	~12	**Enrolment (K) (AY2022)**

■ Increase in penetration (AY2017-22) >5%   ■ Increase in penetration (AY2017-22) bet. 0%-5%   ■ Increase in penetration (AY2017-22) <0%

Note: Values for Australia, New Zealand and South Africa are from AY2017 to AY2021
Source: L.E.K. research and analysis based on data from school websites, market participant discussions, and data provided by Oxford Economics

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The premium K-12 segment across the top 20-25 cities is estimated to grow (in value) at 7%-8% CAGR and reach revenue scale of $12B-$14B by 2027F …
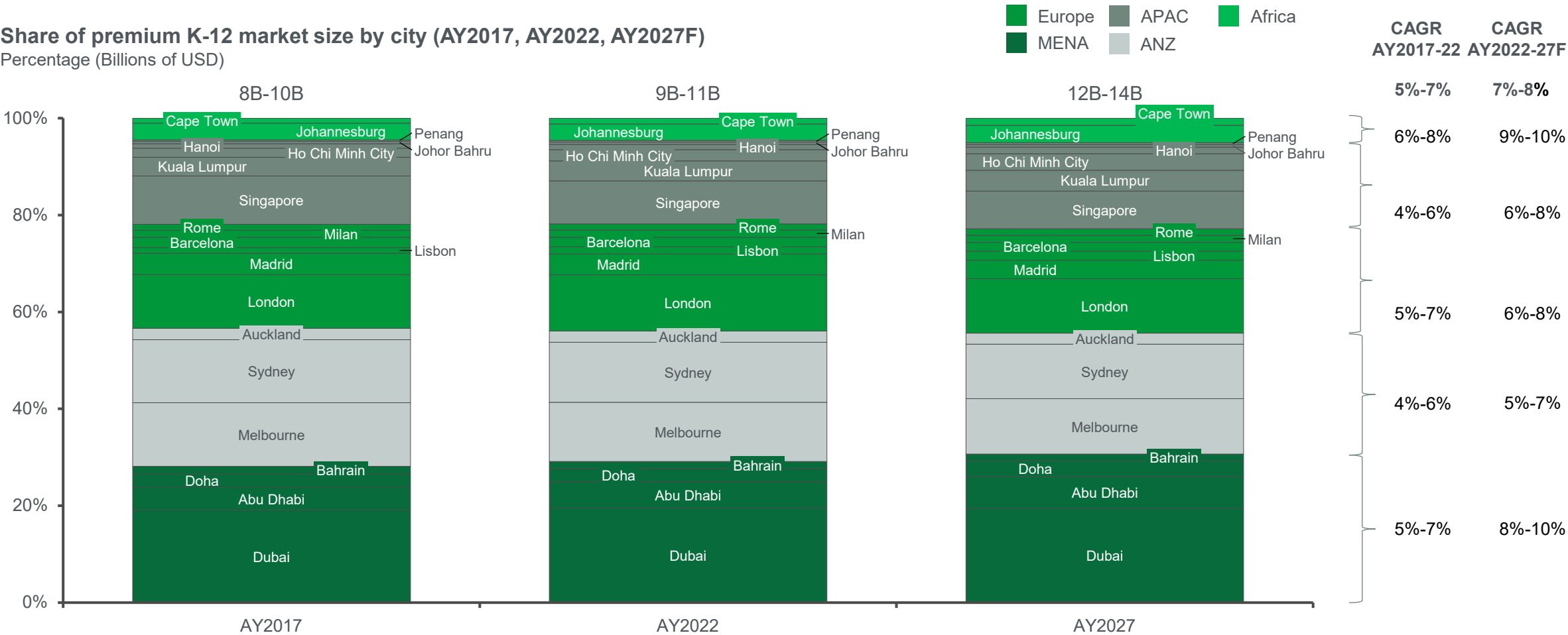
Premium K-12 market-size waterfall by region (AY2022-27F)
Billions of USD

CAGR: 7%-8%

	CAGR AY2022-27F
Africa	8%-10%
Asia	7%-9%
EU/UK	6%-8%
ANZ	5%-7%
Middle East	8%-10%

Waterfall values: AY2022: 8-10; Middle East: 1-2; EU/UK: 0.5-1; ANZ: 0.5-1; Asia: 0.5-1; Africa: 0.1-0.3; AY2027F: 12-14

Note: Market size estimation only covers top 20-25 cities across regions; methodology based on demographics, affordability and penetration trends
Source: L.E.K. research and analysis based on school websites and market participant discussions; content subject to the disclaimer slide provided herein

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… in line with or slightly faster than the historically demonstrated performance across regions

Share of premium K-12 market size by city (AY2017, AY2022, AY2027F)
Percentage (Billions of USD)

Legend: Europe, MENA, APAC, ANZ, Africa

	CAGR AY2017-22	CAGR AY2022-27F
	5%-7%	7%-8%
	6%-8%	9%-10%
	4%-6%	6%-8%
	5%-7%	6%-8%
	4%-6%	5%-7%
	5%-7%	8%-10%

Chart columns: AY2017 (8B-10B), AY2022 (9B-11B), AY2027 (12B-14B)

Note: Data mentioned for Australia, South Africa and New Zealand represents AY2016-21 and AY2021-26
Source: L.E.K. research and analysis and market participant discussions

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Europe	Enrolment forecast — Key parameters						
	AY2017	AY2020	AY2022	AY2027F	CAGR 2017-20	CAGR 2020-22	CAGR 2022-27F
Local demand assessment							
Demographics: Relevant population (aged 3-18)							
Lisbon	450k-500k	450k-500k	450k-500k	450k-500k	0%-1%	(1)%-0%	(1)%-0%
Madrid	~1.1M	~1.1M	~1.1M	~1.1M	1%-2%	0%-1%	(1)%-0%
Milan	~0.8M	~0.8M	~0.8M	~0.7M	0%	(1)%-0%	(1)%-0%
Affordability*: Average HH disposable income (in thousands of USD)							
Lisbon	~38	~40	~39	~41	1%-2%	(1)%-0%	0.5%-1.5%
Madrid	~51	~53	~52	~56	0%-1%	(2)%-(1)%	1%-2%
Milan	~56	~57	~55	~57	0%-1%	(2)%-(1)%	0%-1%
Adoption %							
Lisbon	0-5	0-5	0-5	3-8	-	-	-
Madrid	6-7	7-8	7-8	9-10	-	-	-
Milan	6-11	8-13	12-17	25-30	-	-	-
Market enrolment potential (K)							
Lisbon	5.5-6.5	6.5-7.5	7.5-8.5	9-10	5%-7%	4%-6%	4%-6%
Madrid	31-32	32-33	33-34	35-36	1%-2%	1%-2%	0%-1%
Milan	4.2-4.7	4.5-5	5-5.5	6.1-6.6	5%-7%	~0%	2%-3%
Expat demand assessment							
FDI stock (in billions of USD)							
Lisbon	~133	~155	~143	~169	5%-6%	(5)%-(4)%	3%-4%
Madrid	~772	~886	~777	~947	3%-4%	(6)%-(5)%	3%-4%
Milan	449	~530	~400	~507	5%-6%	(14)%-(13)%	4%-5%
Market enrolment potential (in thousands of USD)							
Lisbon	2.5-3.5	3-4	4-5	6.5-7.5	9%-10%	9%-10%	7.5%-9.5%
Madrid	7-8	7-8	7-8	8-9	1%-2%	1%-2%	2%-3%
Milan	1.8-2.2	1.9-2.3	2.2-2.4	2.8-3.8	2%-3%	~0%	4%-5%
Total demand assessment (K)							
Lisbon	7.5-9.5	9.5-11.5	11.5-13.5	15.5-17.5	6%-8%	6%-8%	6%-8%
Madrid	38-39	40-41	41-42	43-44	1%-2%	1%-2%	1%-2%
Milan	6-7	6-7	7-8	8-9	5%-6%	~0%	3%-4%
Fee growth (in thousands of USD)							
Lisbon	9-10	10-11	11-12	15-16	2%-4%	2%-4%	3.5%-5.5%
Madrid	8-9	9-10	9-10	11-12	3%-4%	2%-3%	3%-4%
Milan	16-17	18-19	18-19	22-23	4%-5%	0%-1%	3%-4%
Estimated gross tuition fees revenue (in thousands of USD)							
Lisbon	80-96	114-126	138-150	240-276	10%-12%	11%-13%	11%-13%
Madrid	324-336	384-395	407-419	515-527	5%-6%	3%-4%	4%-5%
Milan	96-120	120-156	120-156	186-210	9%-10%	0%-1%	6%-8%

*Based on constant 2015 prices; HH=household
Source: L.E.K. research and analysis based on data from Oxford Economics

● Better than historic   ● In line with historic   ● Unfavourable compared to historic

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Europe	Enrolment forecast — Key parameters				CAGR 2017-20	CAGR 2020-22	CAGR 2022-27F
	AY2017	AY2020	AY2022	AY2027F			
Local demand assessment							
Demographics: Relevant population (aged 3-18)							
Barcelona	~0.8k	~0.8k	~0.8k	~0.8k	0-1%	0-1%	(1)-0%
Naples	~0.6k	~0.6k	0.6k	~0.5k	(2)-(1)%	(3)-(2)%	(2)%
Rome	~0.7k	~0.7k	0.6k	~0.6k	(1)-0%	(1)-0%	(1)-0%
London	~2.3M	~2.4M	~2.4M	~2.5M	1-2%	0-1%	0-1%
Affordability*: Average HH disposable income (in thousands of USD)							
Barcelona	~47	~47	~46	~49	0%-1%	(2)%-(1)%	1%-2%
Naples	41-42	41-42	40-41	41-42	0%	(2)%-(1)%	0%-1%
Rome	48-49	49-50	47-48	49-50	0%-1%	(1)%-0%	0%-1%
London	105-110	105-110	100-105	105-110	(1)%-0%	(3)%-(2)%	1%-2%
Adoption %							
Barcelona	2-3	2-3	2-3	3-4	-	-	-
Naples	1-2	1-2	1-2	2-3	-	-	-
Rome	0-5	0-5	0-5	3-8	-	-	-
London	4-9	5-10	5-10	5-10	-	-	-
Market enrolment potential (K)							
Barcelona	6-7	6-7	6-7	7-8	1%-2%	0%	1%-2%
Naples	1-2	1-2	1-2	1-2	2%-3%	2%-3%	2%-3%
Rome	1.7-2.2	1.9-2.4	2.1-2.6	2.5-3.0	5%-7%	~0%	3%-4%
London	19-20	20-21	21-22	24-25	2%-3%	2%-3%	2%-3%
Expat demand assessment							
FDI stock (in thousands of USD)							
Barcelona	~772	~886	~777	~947	3%-4%	(6)%-(5)%	3%-4%
Naples	~449	~530	~400	~507	5%-6%	(14)%-(13)%	4%-5%
Rome	449	~530	~400	~507	5%-6%	(14)%-(13)%	4%-5%
London	~2,324	~2,555	~2,182	~2,184	3%-4%	(8)%-(7)%	5%-6%
Market enrolment potential (K)							
Barcelona	6-7	6-7	6-7	8-9	0%-1%	0%-1%	3%-4%
Naples	1-2	1-2	1-2	1-2	1%-2%	1%-2%	4%-5%
Rome	2-2.4	1.9-2.3	2.2-2.6	2.8-3.2	2%-3%	~0%	4%-5%
London	9-10	9-10	10-11	14-15	3%-4%	3%-4%	5%-6%

*Based on constant 2015 prices; HH=household
Source: L.E.K. research and analysis based on data from Oxford Economics

● Better than historic   ● In line with historic   ● Unfavourable compared to historic

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Overall growth in the premium segment across these top cities is expected to be driven by strong macroeconomic fundamentals, growing affluence and increasing adoption (3 of 9)

Europe	AY2017	AY2020	AY2022	AY2027F	CAGR 2017-20	CAGR 2020-22	CAGR 2022-27F
Enrolment forecast — Key parameters							
Total demand assessment (K)							
Barcelona	13-14	13.5-14.5	13-14	15-16	0%-1%	0%-1%	2%-3%
Naples	2-3	2-3	2-3	2-3	1%-2%	1%-2%	3%-4%
Rome	4-4.5	4-4.5	4.5-5.5	5.3-6.3	5%-6%	~0%	4%-5%
London	28-29	30-31	32-33	38-39	2%-3%	2%-3%	3%-4%
Fee growth (in thousands of USD)							
Barcelona	12-13	12.5-13.5	13-14	16-17	2%-3%	2%-3%	3%-4%
Naples	18-19	18-19	19-20	20-21	0%-1%	0%-1%	1%-2%
Rome	20-21	23-24	25-26	31-32	3%-4%	3%-4%	4%-5%
London	29-30	32-33	34-35	39-40	3%-4%	3%-4%	3%-4%
Estimated gross tuition fees revenue (in millions of USD)							
Barcelona	156-168	168-180	180-192	240-252	3%-4%	3%-4%	5%-7%
Naples	35-40	35-40	40-45	55-60	2%-3%	2%-3%	5%-6%
Rome	78-102	114-138	114-138	174-198	10%-11%	0%-1%	8%-10%
London	820-830	980-990	1,110-1,120	1,550-1,560	6%-7%	6%-7%	6%-7%

● Better than historic   ● In line with historic   ● Unfavourable compared to historic

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South Africa	Enrolment forecast — Key parameters						
	AY2017	AY2020	AY2021	AY2026F	CAGR 2017-20	CAGR 2020-21	CAGR 2021-26F
Demand Assessment							
Demographics: Relevant population (M) (aged 3-18)							
Johannesburg	~2.4	~2.6	~2.7	~2.9	2%-3%	2%-3%	1%-2%
Cape Town	~1.1	~1.1	~1.2	~1.2	1%-2%	1%-2%	4%-5%
Affordability*: Average HH disposable income (in thousands of USD)							
Johannesburg	~17	~14	~14	~15	(5)%-(4)%	(2)%-(1)%	1%-2%
Cape Town	~20	~17	~17	~18	(5)%-(4)%	(1)%-0%	1%-2%
Adoption %							
Johannesburg	9-10	10-11	12-13	13-14	-	-	-
Cape Town	4-5	5-6	5-6	6-7	-	-	-
Market enrolment potential (K)							
Johannesburg	34-35	36-37	36-37	42-43	1%-2%	0%	2.5%-3.5%
Cape Town	13-14	14-15	14-15	18-19	2%-3%	2%-3%	4%-5%
Fee growth (in thousands of USD)							
Johannesburg	7-8	8-9	8-9	11-12	5%-6%	4%-5%	5%-6%
Cape Town	5-6	6-7	7-8	10-11	7%-8%	7%-8%	7%-8%
Estimated gross tuition fees revenue (in millions of USD)							
Johannesburg	240-265	312-324	324-336	491-503	6%-8%	4%-5%	8%-9%
Cape Town	72-84	96-108	108-120	192-204	9%-10%	7%-8%	12%-13%

● Better than historic ● In line with historic ● Unfavourable compared to historic

*Based on constant 2015 prices; HH=household
Source: L.E.K. research and analysis based on data from Oxford Economics

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Overall growth in the premium segment across these top cities is expected to be driven by strong macroeconomic fundamentals, growing affluence and increasing adoption (5 of 9)

Middle East	AY2017	AY2020	AY2022	AY2027F	CAGR 2017-20	CAGR 2020-22	CAGR 2022-27F
Local demand assessment							
Demographics: Relevant population (K) (aged 3-18)							
Bahrain	~293	~286	~304	~304	(1)%-0%	3%-4%	0%-1%
Dubai	~854	~906	~901	~990	1%-2%	(1)%-0%	1%-2%
Abu Dhabi	~357	~423	~421	~509	5%-6%	(1)%-0%	3%-4%
Doha	~135	~141	~152	~164	1%-2%	(2)%-(1)%	0%-1%
Affordability*: Average HH disposable income (in thousands of USD)							
Bahrain	62-63	62-63	60-61	61-62	0%	(2)%-(1)%	0%-1%
Dubai	135-136	151-152	166-167	178-179	3%-4%	4%-5%	1%-2%
Abu Dhabi	165-170	200-205	215-220	235-240	5%-6%	3%-4%	1%-2%
Doha	130-140	140-150	150-160	160-170	1%-2%	4%-5%	1%-2%
Adoption %							
Bahrain	5-10	5-10	5-10	10-15	-	-	-
Dubai	1-6	1-6	1-6	1-6	-	-	-
Abu Dhabi	2-7	2-7	2-7	2-7	-	-	-
Doha	5-10	10-15	10-15	20-25	-	-	-
Market enrolment potential (K)							
Bahrain	3.5-4.5	4.5-5.5	4.5-5.5	6-7	6%-7%	0%-1%	4.5%-5.5%
Dubai	8-9	10-11	12-13	18-19	14%-15%	6%-7%	8%-9%
Abu Dhabi	8-9	10-11	12-13	20-21	8%-9%	10%-11%	9%-10%
Doha	3-3.5	4.5-5	5-5.5	9.5-10	11%-12%	7%-8%	12%-13%
Expat demand assessment							
FDI stock (in billions of USD)							
Bahrain	~27	~30	~28	~32	4%-5%	(4)%-(3)%	2%-3%
Dubai	~141	~175	~129	~250	7%-8%	(15)%-(14)%	14%-15%
Abu Dhabi	~141	~175	~129	~250	7%-8%	(15)%-(14)%	14%-15%
Doha	~42	~39	~45	~53	(4)%-(3)%	7%-8%	3%-4%
Market enrolment potential (K)							
Bahrain	4-5	4.5-5.5	4.5-5.5	5-6	3%-4%	(3)%-(2)%	1%-2%
Dubai	78-79	90-91	91-92	105-106	4%-5%	0%-1%	3%-4%
Abu Dhabi	18-19	21-22	21-22	24-25	4%-5%	(1)%-0%	3%-4%
Doha	8-9	10-11	9-10	12-13	5%-6%	(6)%-(5)%	6%-7%

Enrolment forecast — Key parameters

● Better than historic ● In line with historic ● Unfavourable compared to historic

*Based on constant 2015 prices; HH=household
Source: L.E.K. research and analysis based on data from Oxford Economics

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Overall growth in the premium segment across these top cities is expected to be driven by strong macroeconomic fundamentals, growing affluence and increasing adoption (6 of 9)

Middle East	AY2017	AY2020	AY2022	AY2027F	CAGR 2017-20	CAGR 2020-22	CAGR 2022-27F
Enrolment forecast — Key parameters							
Total demand assessment (K)							
Bahrain	8-9	9-10	9-10	11-12	5%-6%	(2)%-(1)%	3%-4%
Dubai	85-86	100-101	103-104	124-125	5%-6%	1%-2%	3%-4%
Abu Dhabi	27-28	32-33	33-34	44-45	5%-6%	2%-3%	5%-6%
Doha	12-13	14-15	14-15	22-23	7%-8%	(1)%-0%	8%-9%
Fee growth (in thousands of USD)							
Bahrain	12-13	13-14	14-15	16-17	2%-3%	0%-1%	3%-4%
Dubai	16-17	17-18k	18-19	21-22	1%-2%	1%-2%	3%-4%
Abu Dhabi	12-13	14-15	15-16	20-21	4%-5%	2%-3%	5%-6%
Doha	17-18	17-18	17-18	20-21	0%-1%	0%-1%	2%-3%
Estimated gross tuition fees revenue (in millions of USD)							
Bahrain	108-120	132-144	132-144	174-210	7%-8%	(1)%-0%	6%-8%
Dubai	1,400-1,420	1,740-1,760	1,860-1,880	2,660-2,680	5%-6%	3%-4%	7%-8%
Abu Dhabi	340-360	460-480	510-530	890-910	10%-11%	5%-6%	11%-12%
Doha	210-230	260-280	260-280	440-460	7%-8%	(1)%-0%	11%-12%

● Better than historic ● In line with historic ● Unfavourable compared to historic

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APAC	Enrolment forecast — Key parameters						
	AY2017	AY2020	AY2021	AY2026F	CAGR 2017-20	CAGR 2020-21	CAGR 2021-26F
Demand Assessment							
Demographics: Relevant population (M) (aged 3-18)							
Auckland	~0.351	~0.360	~0.359	0.36-0.38	0%-1%	(1)%-0%	0%-1%
Sydney	~1.0	~1.0	~1.0	~1.1	1%-2%	0%-1%	1%-2%
Adelaide	~0.3	~0.3	~0.3	~0.3	0%-1%	0%-1%	0%-1%
Melbourne	~0.9	~1.0	~1.0	~1.0	2%-3%	0%-1%	1%-2%
Affordability*: Average HH disposable income (in thousands of USD)							
Auckland	~74	~73	~76	~82	(1)%-0%	5%-6%	1%-2%
Sydney	~108	~111	~106	~107	0%-1%	(5)%-(4)%	0%-1%
Adelaide	~87	~88	~83	~87	0%-1%	(6)%-(5)%	0%-1%
Melbourne	~85	~86	~81	~88	0%-1%	(6)%-(5)%	1%-2%
Adoption %							
Auckland	10-13	12-15	12-15	15-18	-	-	-
Sydney	20-25	22-27	22-27	32-37	-	-	-
Adelaide	18-23	20-25	25-30	27-32	-	-	-
Melbourne	52-57	57-62	73-79	75-80	-	-	-
Market enrolment potential (K)							
Auckland	12-13	13-14	13.5-14.5	16-17	3%-4%	3%-4%	3%-4%
Sydney	41-45	44-48	45-49	48-52	1%-2%	1%-2%	1%-2%
Adelaide	7-8	7-8	7-8	8-9	1%-2%	1%-2%	2%-3%
Melbourne	45-49	47-51	48-52	52-56	1%-2%	1%-2%	1.5%-2.5%
Fee growth (in thousands of USD)							
Auckland	14-15	15-16	15-16	18-19	3%-4%	2%-3%	3%-4%
Sydney	20-24	24-28	24-28	28-32	3.5%-4.5%	1%-2%	3.5%-4.5%
Adelaide	14-18	15-19	15-19	18-22	2%-3%	1%-2%	2%-3%
Melbourne	20-21	23-24	23-24	28-29	3.5%-4.5%	0%-1%	3.5%-4.5%
Estimated gross tuition fees revenue (in millions of USD)							
Auckland	168-180	204-216	216-228	300-325	5%-7%	6%-8%	5%-7%
Sydney	900-1,020	1,080-1,120	1,140-1,260	1,500-1,620	5%-6%	3%-4%	5%-6%
Adelaide	110-120	120-130	130-140	170-180	3%-4%	2%-3%	5%-6%
Melbourne	900-1,000	1080-1,120	1,140-1,260	1,500-1,620	5%-6%	2%-3%	5%-7%

*Based on constant 2015 prices; HH=household
Source: L.E.K. research and analysis based on data from Oxford Economics

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APAC	Enrolment forecast — Key parameters				CAGR 2017-20	CAGR 2020-22	CAGR 2022-27F
	AY2017	AY2020	AY2022	AY2027F			
Local demand assessment							
Demographics: Relevant population (M) (aged 3-18)							
Ho Chi Minh City	~1.6	~1.7	~1.8	~2	2%-3%	2%-3%	2%-3%
Hanoi	~1.6	~1.6	~1.7	~1.7	0%-1%	0%-1%	0%-1%
Singapore	-	-	-	-	-	-	-
Affordability*: Average HH disposable income (in thousands of USD)							
Ho Chi Minh City	~9	~11	~12	~16	7%-8%	5%-6%	4%-5%
Hanoi	~9	~10	~11	~14	4%-5%	1%-2%	4%-5%
Singapore	-	-	-	-	-	-	-
Adoption %							
Ho Chi Minh City	45-46	54-55	44-45	42-43	-	-	-
Hanoi	60-61	61-62	62-63	64-65	-	-	-
Singapore	-	-	-	-	-	-	-
Market enrolment potential (in thousands of USD)							
Ho Chi Minh City	2-2.5	3-3.5	3.5-4	6-7	10%-11%	7%-8%	11%-13%
Hanoi	0.5-1	1-2	1-2	2-3	11%-12%	7%-8%	12%-13%
Singapore	-	-	-	-	-	-	-
Expat demand assessment							
FDI stock (in billions of USD)							
Ho Chi Minh City	~153	~183	~200	~262	6%-7%	4%-5%	5%-6%
Hanoi	~153	~183	~200	~262	6%-7%	4%-5%	5%-6%
Singapore	~764	~1,005	~952	~1,460	9%-10%	(3)%-(2)%	8%-9%
Market enrolment potential (K)							
Ho Chi Minh City	4-4.5	5-5.5	4.5-5	5-6	8%-9%	(9)%-(8)%	5%-6%
Hanoi	1-2	2-3	2-3	3-4	13%-14%	(9)%-(7)%	5%-6%
Singapore	27-28	28-29	28-29	31-32	1%-2%	(2)%-(1)%	2%-3%
Total demand assessment (K)							
Ho Chi Minh City	6-7	8-9	8-9	12-13	9%-10%	(3)%-(2)%	8%-9%
Hanoi	2-3	4-5	3-4	~6	12%-13%	(2)%	8%-9%
Singapore	27-28	28-29	28-29	31-32	1%-2%	(2)%-(1)%	2%-3%
Fee growth (in thousands of USD)							
Ho Chi Minh City	20-21	25-26	26-27	36-37	5%-6%	4%-5%	6%-7%
Hanoi	23-24	24-25	26-27	31-32	3%-4%	2%-3%	3%-4%
Singapore	27-28	29-30	30-31	33-34	2%-3%	2%-3%	2%-3%
Estimated gross tuition fees revenue (in millions of USD)							
Ho Chi Minh City	132-144	215-228	215-228	455-467	16%-17%	1%-2%	14%-16%
Hanoi	60-72	84-96	108-120	180-192	10%-11%	7%-8%	12%-13%
Singapore	730-750	830-850	850-870	1,050-1,100	4%-5%	0%-1%	4%-5%

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APAC	Enrolment forecast — Key parameters				CAGR 2017-20	CAGR 2020-22	CAGR 2022-27F
	AY2017	AY2020	AY2022	AY2027F			
Local demand assessment							
Demographics: Relevant population (M) (aged 3-18)							
Kuala Lumpur	~1.6	~1.6	~1.6	~1.7	(1)%-0%	0%-1%	0%-1%
Johor Bahru	~0.4	~0.4	~0.4	~0.4	(1)%-0%	(1)%-0%	(1)%-0%
Penang	~0.1	~0.1	~0.1	~0.1	(1)%-0%	(1)%-0%	(1)%-0%
Affordability*: Average HH disposable income (in thousands of USD)							
Kuala Lumpur	~30	~32	~32	~39	3%-4%	(2)%-(1)%	4%-5%
Johor Bahru	~18	~19	~19	~23	1%-2%	(1)%-0%	4%-5%
Penang	~25	~27	~26	~32	1%-2%	(2)%-(1)%	3%-4%
Adoption %							
Kuala Lumpur	6-7	7-8	~9	9-10	-	-	-
Johor Bahru	9-10	11-12	11-12	10-11	-	-	-
Penang	2-3	2-3	2-3	2-3	-	-	-
Market enrolment potential (K)							
Kuala Lumpur	12-13	14-15	15-16	19-20	6%-7%	1%-2%	4%-5%
Johor Bahru	0.9-1	1.1-1.2	0.9-1	1.2-1.3	4%-5%	(7)%-(6)%	4%-5%
Penang	0.6-0.7	0.7-0.8	0.6-0.7	0.8-0.9	5%-6%	(7)%-(6)%	6%-7%
Expat demand assessment							
FDI stock (in billions of USD)							
Kuala Lumpur	~222	~246	~245	~293	3%-4%	(1)%-0%	3%-4%
Johor Bahru	~222	~246	~245	~293	3%-4%	(1)%-0%	3%-4%
Penang	~222	~246	~245	~293	3%-4%	(1)%-0%	3%-4%
Market enrolment potential (K)							
Kuala Lumpur	10-11	11-12	10-11	12-13	5%-6%	(5)%-(4)%	2%-3%
Johor Bahru	1.2-1.3	1.5-1.6	1.4-1.5	2.1-2.2	7%-8%	(2)%-(1)%	8%-9%
Penang	1.3-1.4	1.7-1.8	1.7-1.8	2.7-2.8	8%-9%	0%-1%	9%-10%
Total demand assessment (K)							
Kuala Lumpur	22-23	26-27	~26	~32	6%-7%	(1)%-0%	4%-5%
Johor Bahru	2.2-2.3	2.6-2.7	2.4-2.5	3.3-3.4	6%-7%	(4)%-(3)%	6%-7%
Penang	2-2.2	2.5-2.7	2.4-2.6	3.6-3.8	7%-8%	(2)%-(1)%	8%-9%
Fee growth (in thousands of USD)							
Kuala Lumpur	13-14	14-15	15-16	18-19	3%-4%	3%-4%	4%-5%
Johor Bahru	16-17	17-18	18-19	21-22	2%-3%	2%-3%	3%-4%
Penang	11-12	12-13	12-13	14-15	2%-3%	2%-3%	3%-4%
Estimated gross tuition fees revenue (in millions of USD)							
Kuala Lumpur	280-300	370-390	380-400	580-600	9%-10%	2%-3%	8%-9%
Johor Bahru	35-40	45-50	45-50	70-75	8%-9%	(2)%-(1)%	10%-11%
Penang	20-25	30-35	30-35	50-55	10%-11%	0%-1%	11%-12%

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