



Affordability in Dubai Education Sector

Opportunities for Education Service Providers and Investors Seeking to Expand in the Middle East and North Africa



Operating and Investment Opportunities in Dubai

- > An established and recognized British educational institution is seeking to setup a school under a management agreement in the UAE. Colliers is looking to identify suitable investors who are considering exposure in UAE's education sector.
- > Colliers is seeking investors to partner with a recognized education operator in the Middle East to establish a school in Dubai as part of an upmarket residential community by way of a Joint Venture or lease of a Built-to-Suit (BTS) property.



Operating and Investment Opportunities in the Northern Emirates of UAE

Colliers has a number of opportunities in the Northern Emirates of UAE for education service providers. Market entry possible by way of:

- > Management Agreement
- > Joint Venture
- > Long-term Lease of Land and/or Property



Operating and Investment Opportunities in Egypt

Colliers is seeking to introduce American, British and German education service providers to known investors in Egypt, providing opportunities to enter the education market in Cairo and Alexandria. Possible modes of market entry include:

- > Management Agreement
- > Joint Venture
- > Long-term Lease of Land and/or Property



Operating and Investment Opportunities in East Africa

The last few years have witnessed a considerable rise in foreign investment in Africa ultimately leading to an increase in demand for master planned residential developments including supporting facilities such as schools. Colliers is seeking to introduce US and UK based education service providers to known investors in East Africa's education space and is also looking for investors who are interested in the lucrative education sector in East Africa.



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Accelerating success.



Introduction

There have been a number of recent reports and articles that schools in Dubai are expected to struggle to attract new students, will have difficulty maintaining current enrollment levels and that some schools may even close. Much of the commentary is based on the cost of education in the UAE.

At the same time a recent report published by KHDA projected that Dubai approximately requires an additional 120 new schools by 2027 with total enrollments in the schools to reach 470,000 students by 2027 from current level of 273,500. Based on population projections Colliers also estimates the total enrollment demand to reach approximately 474,000 by 2027. This is an additional 200,000 places over current levels creating demand for 134 schools at average size of 1,500 students per school.

There is no doubt that Dubai is expected to maintain its status as one of most buoyant private school market in the world, however, at the same time, a recent study released by HSBC states the cost of private education in the UAE remains second highest in the world behind Hong Kong. According to the report parents spend on average US\$99,378 (AED 365,025) to send their child to school in UAE for primary, secondary and tertiary education (with Hong Kong at US\$132,161).

Moreover, as study by Zurich – Middle East estimated the cost of education from pre-school through to university around USD 255,749 (AED 938,599). The figure is based on the total cost of education of two years at pre-school, six years at primary school, six years at secondary school and three years at a UK university. Zurich estimates cost of only pre, primary and secondary school to be USD144,001 (AED528,486) per child. These figures exclude the cost of books, trips and uniforms which could be an additional 40% for top tier schools.

The estimated revenues of private schools in Dubai in terms of tuition fees is around AED 6.8 billion by 2016/17. With the forthcoming demand Dubai is expected to maintain its status as one of the most buoyant private school sectors in the world. It is the nature of demand, predicated on fee levels, that will see the most change.

In Dubai, based on 2015/16 data, 57% of students pay tuition fees less than AED 20,000 per annum. However, many schools that opened in the last few years, especially branded international schools, have catered to the premium end of the market. With the opening of a record 15 new schools in 2016 and a further 10 new schools in 2017 there has been a slowdown of the enrollment growth rate from an annual 6.4% between 2011/12 to 2015/16 to 3.13% in 2016/17.

As the education market matures in the UAE and Dubai parents are becoming more selective in choosing a school for their children, particularly as recent reports suggest that higher cost does not translate to higher quality. This hypothesis is also supported by a KHDA School Inspection Report which shows that there does not appear to be a one-to-one correlation between tuition fee and schools ranking. Within the report there are several schools charging affordable and mid-level tuition fees ranked as 'outstanding' or 'very good'. Schools in Dubai can increase the tuition fees based on Education Cost Index (ECI) released by Dubai Statistics Centre. The ECI for 2017 was set at 2.4% (dropping from 3.21% for 2016). This allows eligible schools to increase their fees by between 2.4% to a maximum of 4.8%. The ECI is calculated considering increases in a school's operating costs which includes; teacher salaries, rent, maintenance, electricity and water charges, among a basket of other commodities.

For the academic year 2017/18 a number of schools who were ECI eligible to increase the tuition fees opted not to do so. This reflected the desire to attract and retain students and recognition of the economic background. In the 2017/2018 academic year some schools in Dubai offered scholarships, founder's discount and sibling discounts as further means of supporting their student base.

With the education landscape even more price sensitive Colliers specialist education team regularly works with investors and operators to identify what curriculums and fee segments they should target.

Colliers Affordability in Dubai's Education report provides a brief snapshot of the key factors impacting the sector and its future outlook.



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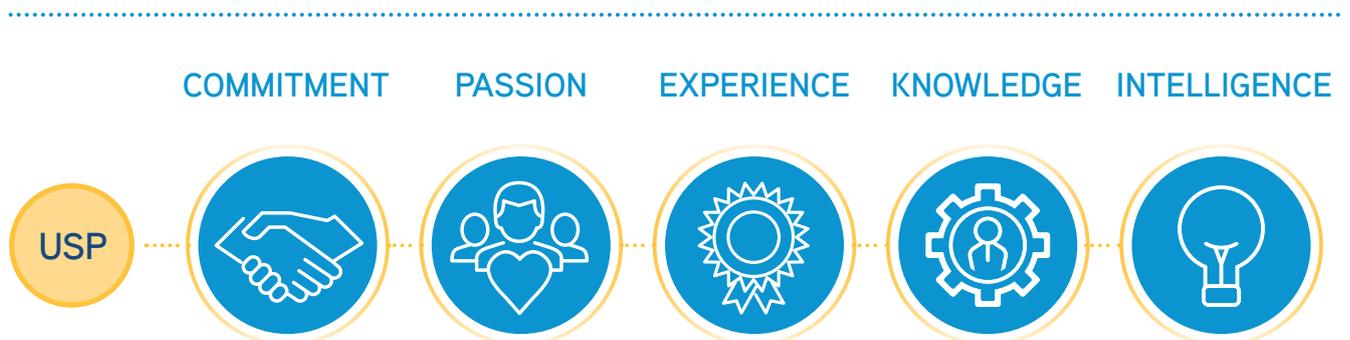
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Colliers International Education Advisory & Valuation Services team is solely focused on education related business (OpCo) and real estate (PropCo), from complex business related operational advisory to real estate related advisory.

Our group has the expertise and knowledge essential to providing forward thinking solutions to any challenging education related decisions where success is measured in high quality care delivered in a cost effective way.



Market Research | Market Entry & Expansion | Equity & Debt Fund Raising
 Highest & Best Use Study | Market & Financial Feasibility Study
 Operator Search and Selection | Land, Property & Business Valuations

Dubai Private Market Review & Analysis



Current State of Education Sector in Dubai

PRIVATE EDUCATION
Growing Market



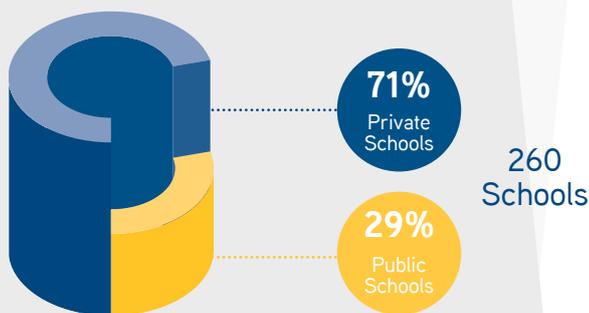
With AED 6.8 billion of tuition revenues (academic year 2016/17) the Dubai's private education market remains one of the most attractive and fastest growing market in the world. During the academic year 2016/17, as highlighted

below, a total of 260 schools exist in Dubai providing education to 303,600 students out of which 273,600 (90%) are in private schools.

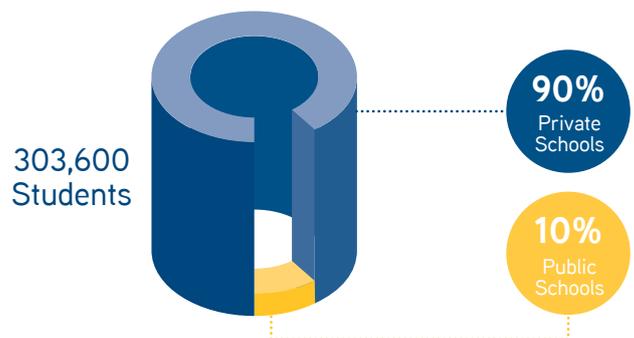
Exhibit 1:

State of Public & Private Education in Dubai

SCHOOLS IN DUBAI 2016/17



STUDENTS IN DUBAI 2016/17



Source: KHDA, Colliers International Analysis (2017) In absence of published data, the number public sector students in 2016/17 have been assumed to grow at the historical CAGR (2011/12 - 2015/16)

Private schools are the dominant component in Dubai with 71% of total schools and 90% of students. Significantly private schools have witnessed a student growth of 6.4% in last five years (2011/12 - 2015/16) compared to only 1.7% by public schools during the same period.

Additionally, private student enrollment growth has surpassed the population growth of 5.1% during the same period increasing their percentage of the school going population in Dubai. Emirati parents are also preferring to send their children to private schools with 58% of the Emirati children currently attending private schools in Dubai.



Student Population in Private Sector in Dubai by Education Cycle

According to recent reports published by KHDA there were a total of 185 private schools enrolling 273,600 students during the academic year 2016/17, reflecting an increase of 3.1% from 265,300 over the previous year.

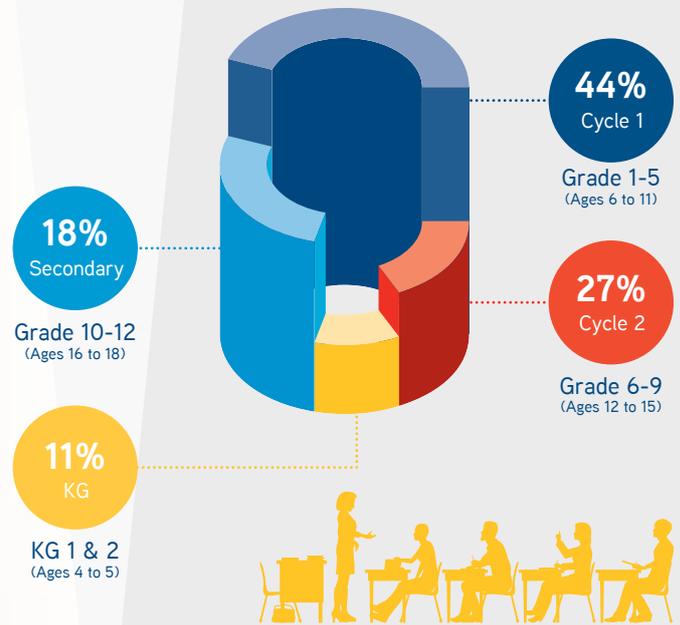
As highlighted in Exhibit 2, Dubai's private school student population is concentrated in junior grades. Approximately 55% of students enrolled within private schools are currently attending early education cycles (Kindergarten and Cycle 1) and only 18% in secondary grades.

This aligns with the Emirates demographic landscape which is mainly shaped by young expatriate families moving to the UAE. Older expatriate students often return to their home countries for secondary education primarily due to considerations of cost and especially the eligibility to enroll into preferred universities in their home countries.

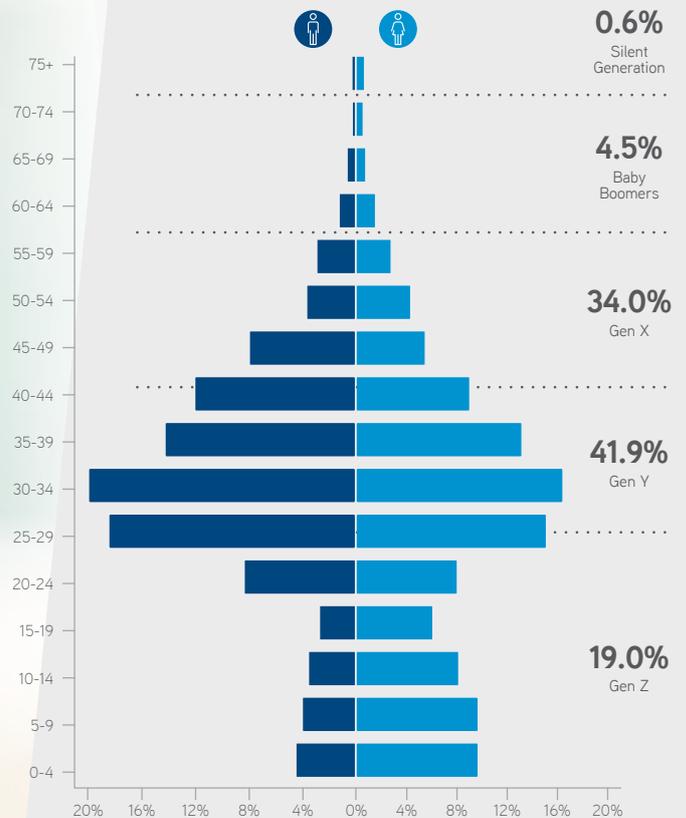
Exhibit 2:

Student Population in Private Sector in Dubai by Education Cycle

STUDENT POPULATION DISTRIBUTION 2016/17



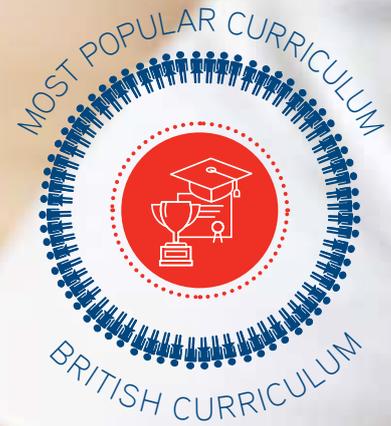
AGE-GENDER DISTRIBUTION OF POPULATION IN DUBAI 2015



Source: KHDA, Colliers International Analysis (2017)



Private School & Student Population in Dubai by Curriculum

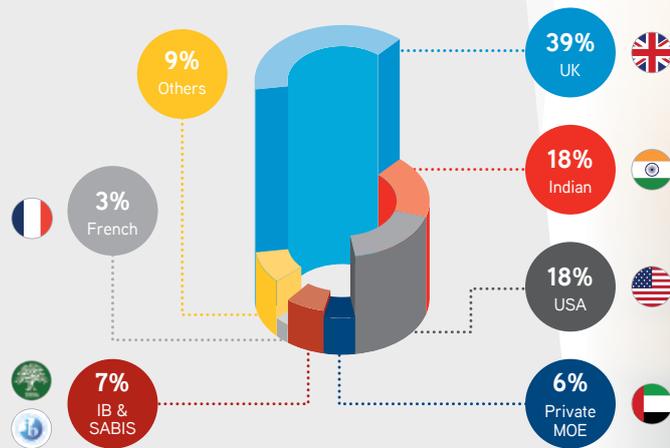


The British curriculum remains the most popular curriculum at 39% of the private schools in Dubai offering the UK curriculum containing 34% of the private student population. This is the highest share in terms of both private schools and number of students when compared to any other curriculum; it is followed in popularity the Indian and American curriculums.

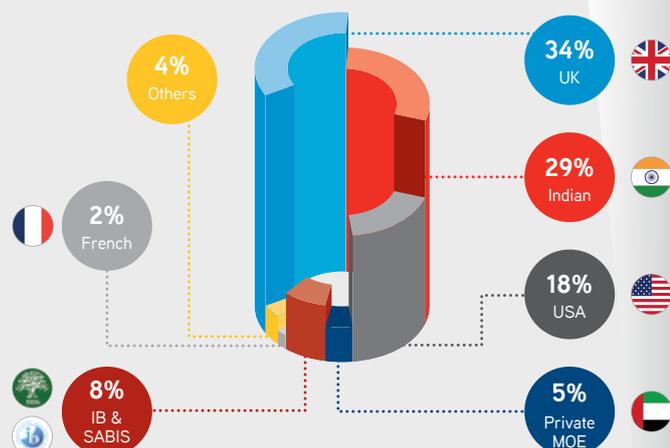
Exhibit 3:

Private School & Student Population in Dubai Curriculum

PRIVATE SCHOOLS BY CURRICULUM IN DUBAI 2016/17



PRIVATE STUDENTS BY CURRICULUM IN DUBAI 2016/17

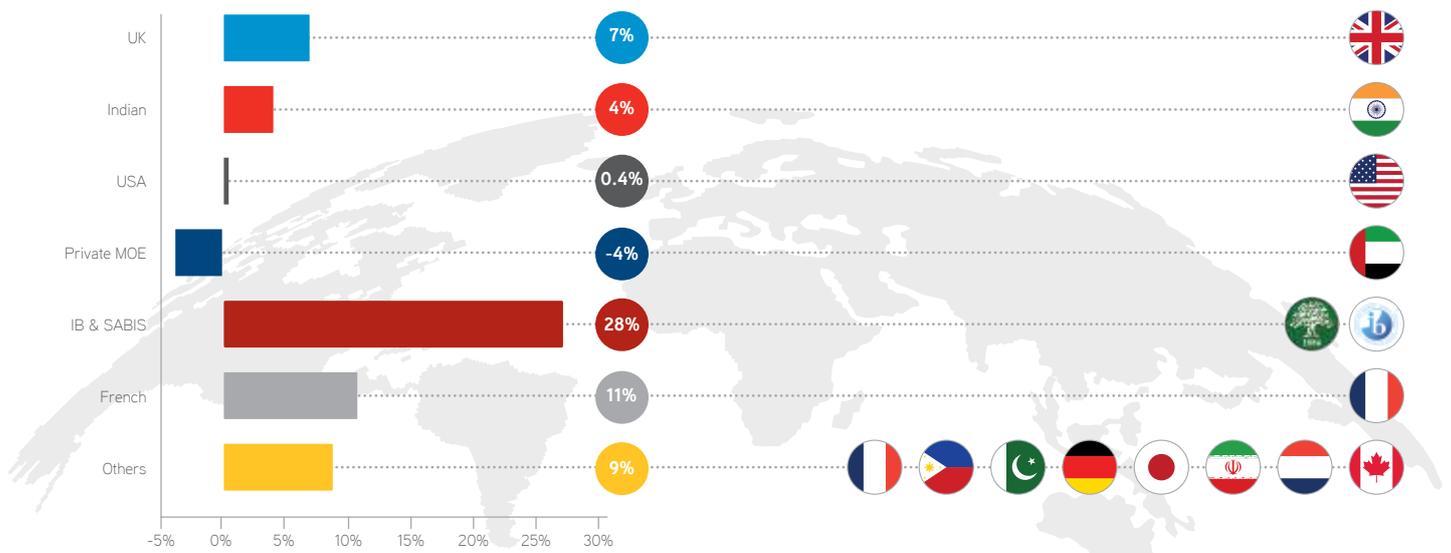


The fastest growing curricula between 2012/13 and 2016/17 are IB, British, Indian and US with the Ministry of Education curriculum declining during the same period. The other popular curriculums include SABIS, French, Philippines, Pakistani, German, Russian, Iranian and Japanese.

Source: KHDA, Colliers International Analysis (2017)

Exhibit 4:

Private Student Population CAGR in Dubai by Curriculum 2012/13 - 2016/17



Source: KHDA, Colliers International Analysis (2017)

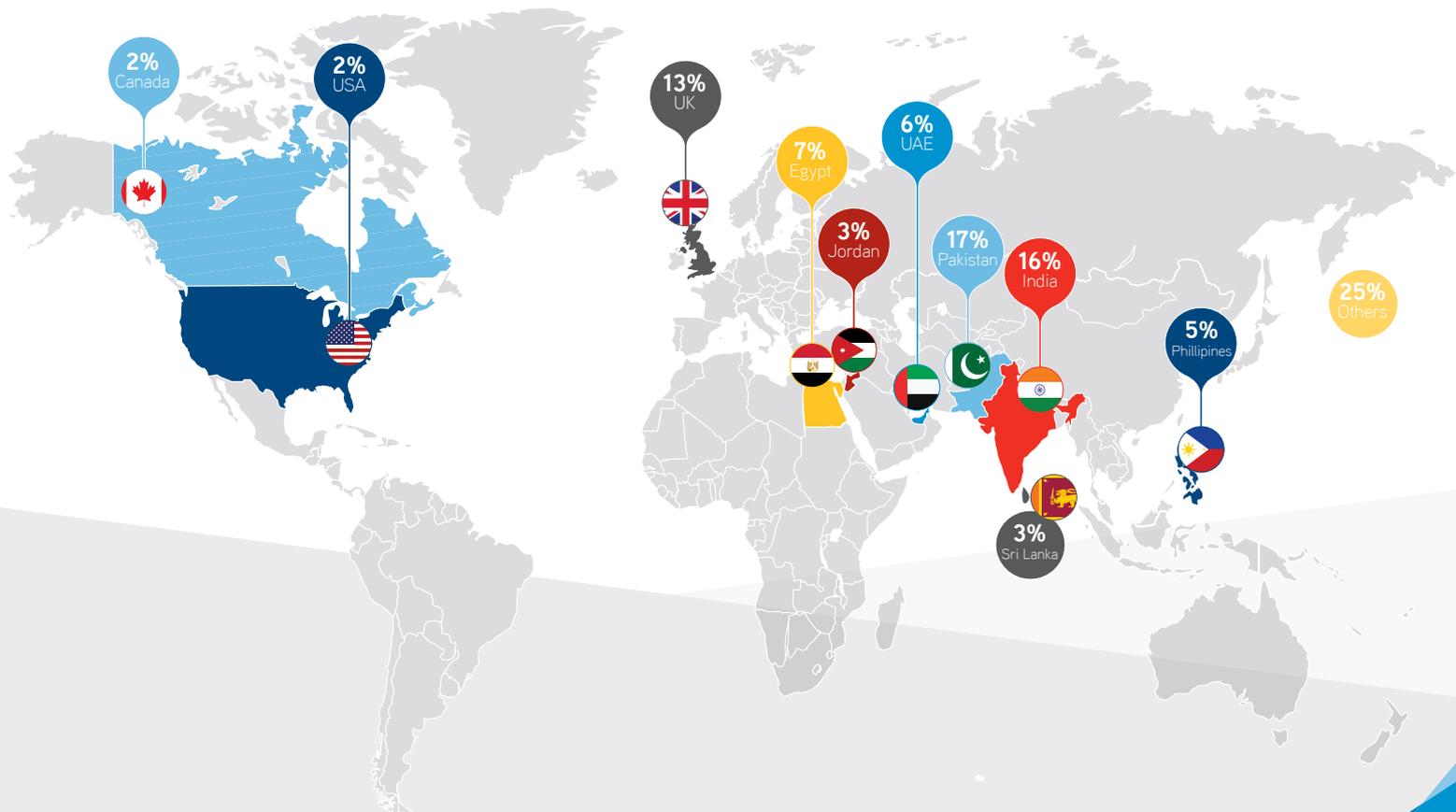




There is a substantial population residing in Dubai from the countries categorized under “Others”, especially from Pakistan and Philippines. However, there is a preference to send their children to UK, US and IB curriculum possibly through historic links. The following exhibit presents the breakdown of the student population in British Curriculum Schools in Dubai showing the top nationalities are from Pakistan, India and the Philippines.

Exhibit 5:

Breakdown of Student Population in British Curriculum Schools in Dubai

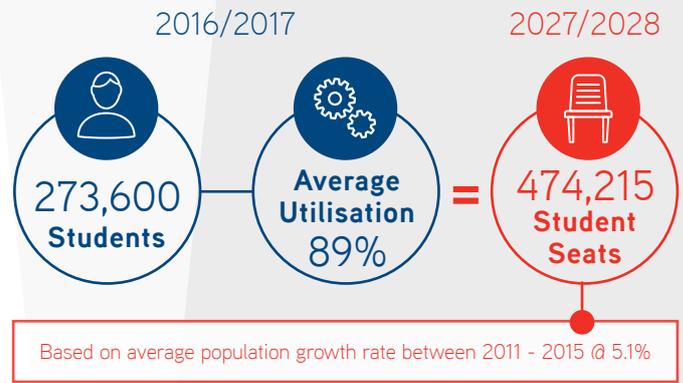


Source: KHDA, Colliers International Analysis (2017)

The Market Gap

Does Dubai need more schools and if not, will there be school closures? The data clearly supports additional schools, but Colliers also anticipates some school closures not due to lack of demand but as a result of stricter regulatory oversight, the lack of ability to adapt to economic pressures and greater competition.

At present Dubai private sector capacity is approximately 308,000 seats with a very healthy occupancy level of 88.6%. Based on the current population growth rate of 5.1% per annum the total number of seats are expected to increase to around 474,000 by 2027/2028, an additional 200,600 new student seats.



TOTAL MARKET GAP =
200,600 Student Seats by Academic Year 2027/2028

Source: KHDA, Colliers International Analysis (2017)

Considering market dynamics & average school capacity the 200,600 new seats by 2027/2028 translates into roughly 134 new schools as presented below:

Exhibit 7:

Additional Demand by Curriculum

CONSIDERING MARKET DYNAMICS & AVERAGE SCHOOL CAPACITY PER CURRICULUM 2027/2028



Source: KHDA, Colliers International Analysis (2017)

Affordability in Dubai Private Schools Sector



The Affordability in the Dubai Private Sector Schools

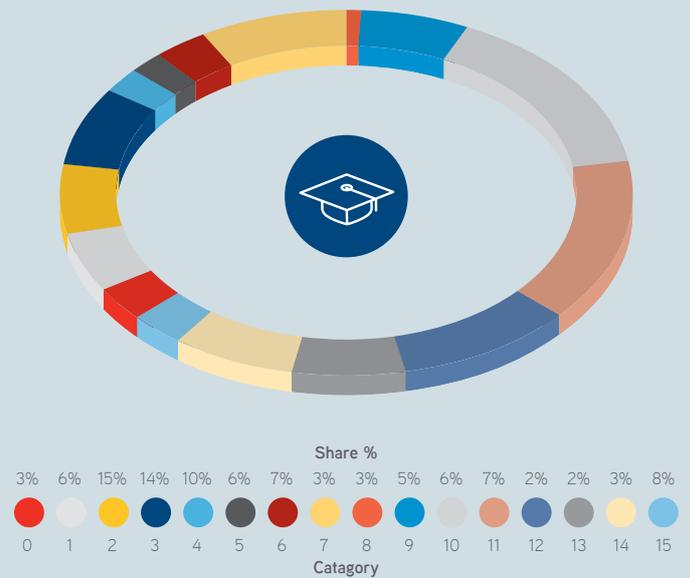
With the economic downturn one of the keys to success for private schools will be affordability in the education sector. In the more recent years most of the international and even some of the local branded schools targeted the high-income segment in Dubai (AED 50,000 to over AED 100,000 per annum).

However, based on the latest figures issued by KHDA for 2016/17 the majority of students (57.5%) pay up to AED 20,000 per annum. However detailed analysis presented in the exhibit below is based on 2015/2016 data in the absence of detailed information on 2016/2017 enrolments.

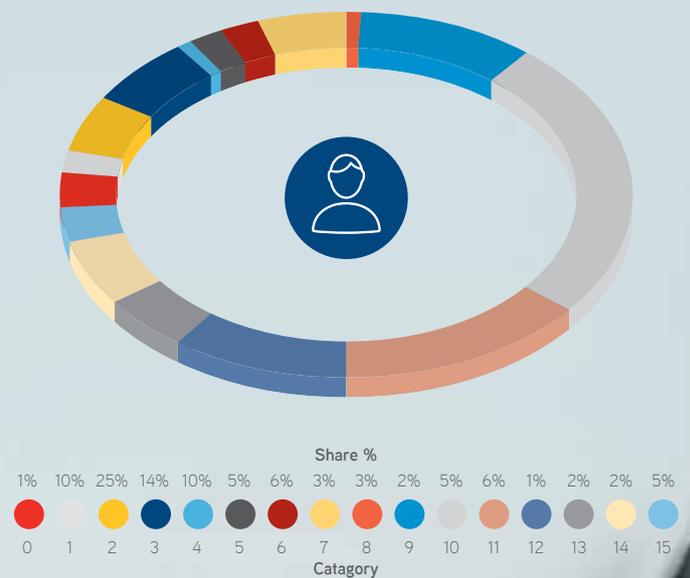
Exhibit 8: Distribution of Tuition Fees in Dubai Private Schools

| Category | Fee Range (AED / Annum) |
|----------|-------------------------|
| 0 | Free |
| 1 | Less than 5,000 |
| 2 | 5,000 to 10,000 |
| 3 | 10,001 to 15,000 |
| 4 | 15,001 to 20,000 |
| 5 | 20,001 to 25,000 |
| 6 | 25,001 to 30,000 |
| 7 | 30,001 to 35,000 |
| 8 | 35,001 to 40,000 |
| 9 | 40,001 to 45,000 |
| 10 | 45,001 to 50,000 |
| 11 | 50,001 to 55,000 |
| 12 | 55,001 to 60,000 |
| 13 | 60,001 to 65,000 |
| 14 | 65,001 to 70,000 |
| 15 | More than 70,000 |

Private Schools by Tuition Fee Category 2015/16



Private Students by Tuition Fee Category 2015/16





How much Parents' can Afford to Pay?

To analyse how much parents can afford to pay, Colliers relied upon the Dubai Statistical Centre data which provides various income quartiles and how much each income quartile spends on education. This is compared to the prevailing tuition fees paid by different categories of schools in Dubai, summarised below:

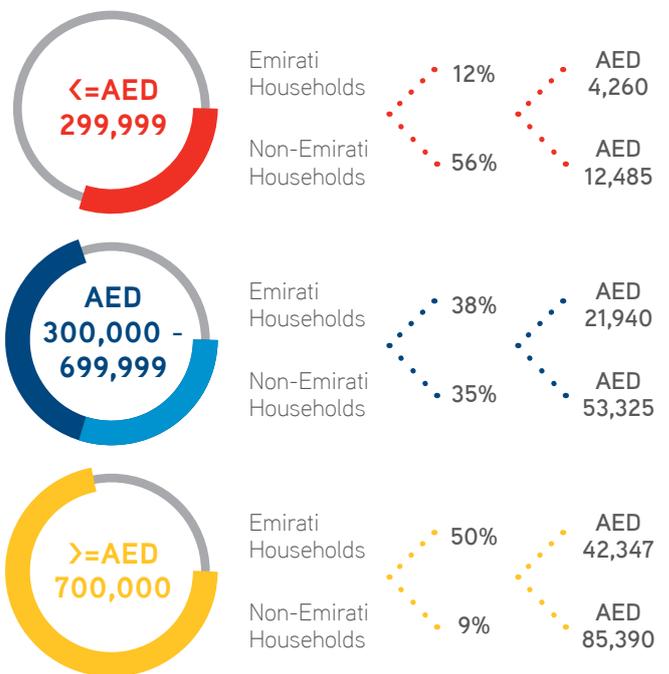
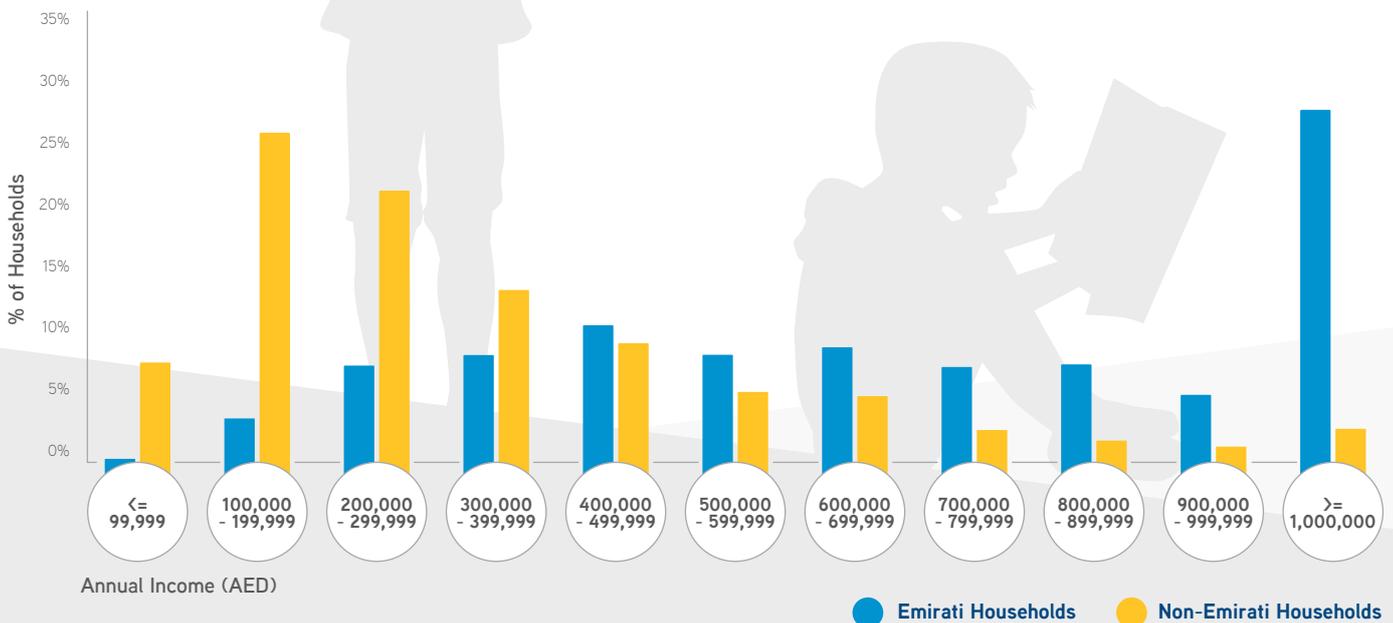
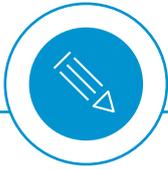


Exhibit 9: Income Distribution & Spend on Education by Household in Dubai



Source: Dubai Statistical Centre 2015, Colliers International Analysis (2017)



In Dubai 56% of the expatriate household earns less than AED 300,000 per annum spending 4% to 10% of their total household income on their children's education, translating into AED 12,500 per annum household expense on education. Comparatively only 12% of the Emirati households in Dubai earn less than AED 300,000 per annum spending 2% to 3% of their total household income on their children's education. This translates into only around AED 4,200 per annum household expenses on education. The households within this income bracket, send their children to schools having tuition fees under AED 10,000 per annum or spend more percentage of their income on education than average household spend on education, especially if they have more than one child. This is supported by the fact that during 2015/16, 35% of students pays annual tuition fee of AED 10,000 or less.

1



While 35% of the expatriate households in Dubai earn between AED 300,000 and AED 700,000 per annum spending 10% to 12% of their total household income on education or AED 53,000 per annum on education expenses. Compared to that 38% of the Emirati household in Dubai earn between AED 300,000 and AED 700,000 per annum and they spend 3% to 5% of their total household income on education translating into around AED 22,000 per annum on education expenses. The households within this income bracket, send their children to affordable private schools having tuition fees under AED 20,000 per annum or spend more percentage of their income on education than average household spend on education, especially if they have more than one child. This is supported by the fact that during 2015/16, 60% of students in Dubai pays annual tuition fee of AED 20,000 or less and 77% pays AED 40,000 or less.

2



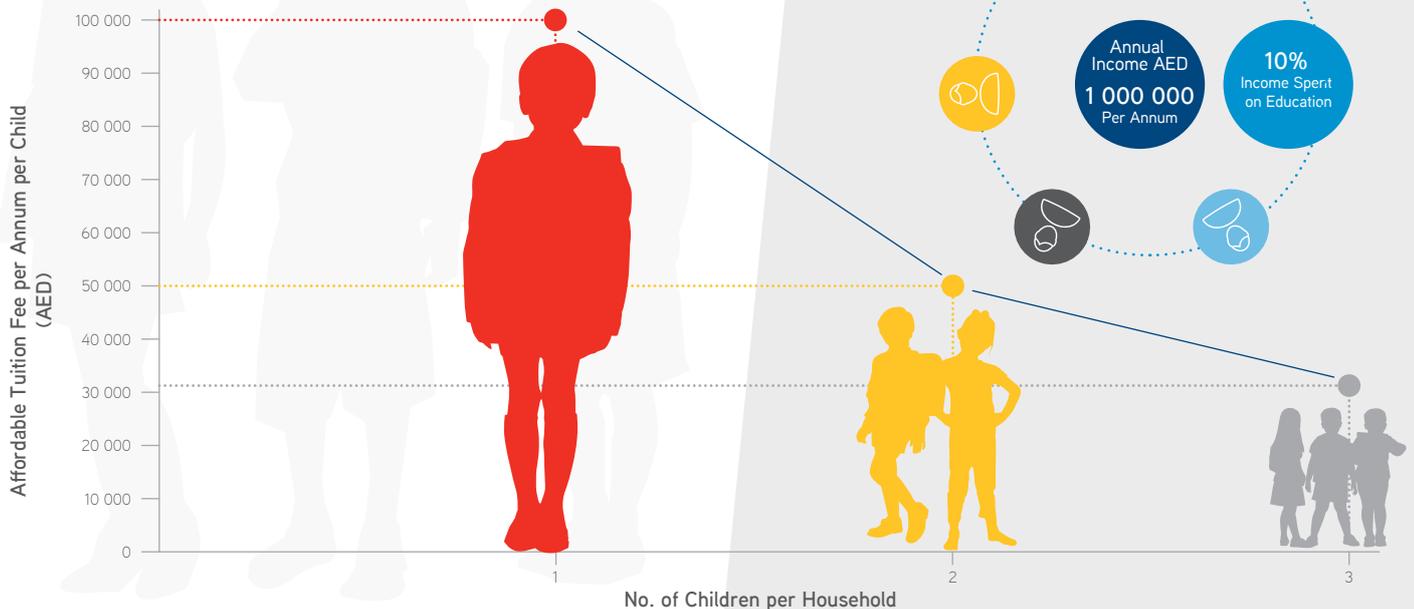
Another 9% of the expatriate households in Dubai earn over AED 700,000 per annum spending 6% to 12% of their total household income on education or AED 85,000 per annum on education expenses. Compared to that 50% of the Emirati household in Dubai earn over AED 700,000 per annum and they spend 3% to 5% of their total household income on education translating into only around AED 42,000 per annum on education expenses. The households within this income bracket, send their children to premium schools or mid-income or affordable private schools in case having more than one child. This is supported by the fact that during 2015/16 only 9% of students pays annual tuition fee of AED 60,000 or above.

3

However, the above spend is total spend on education by a household, *NOT* per child, with families having multiple children, the education spend per child further decreases. For example, if a household annual income is AED 1 million they spend roughly 10% of their income or AED 100,000 on education of their children. If they have one child, they

can send the child to one of the premium schools in Dubai that charge around AED 100,000 tuition fees per annum. However, if they have two or three children then either they look for more affordable schools or spend 20% or 30% of their income on education.

Exhibit 10: Tuition Fees Affordability having Multiple Children

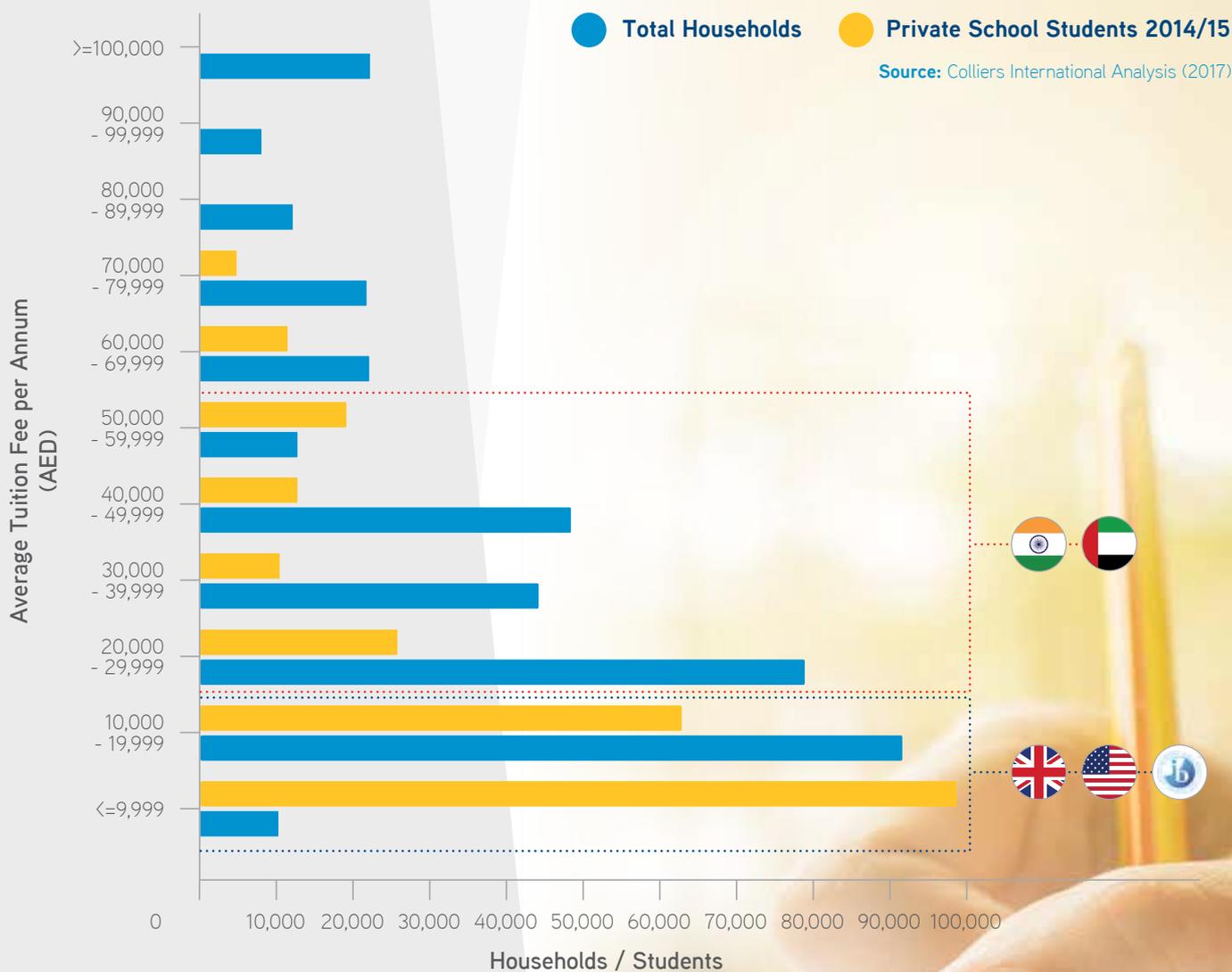


Source: Colliers International Analysis (2017)

What are the Affordable Tuition Fee Levels for different Curriculum?

The affordability for tuition fees varies for different curriculum in Dubai. Private MOE, Indian and other similar curriculum are generally on the lower end of tuition fees with British, American and IB on the upper end of the scale.

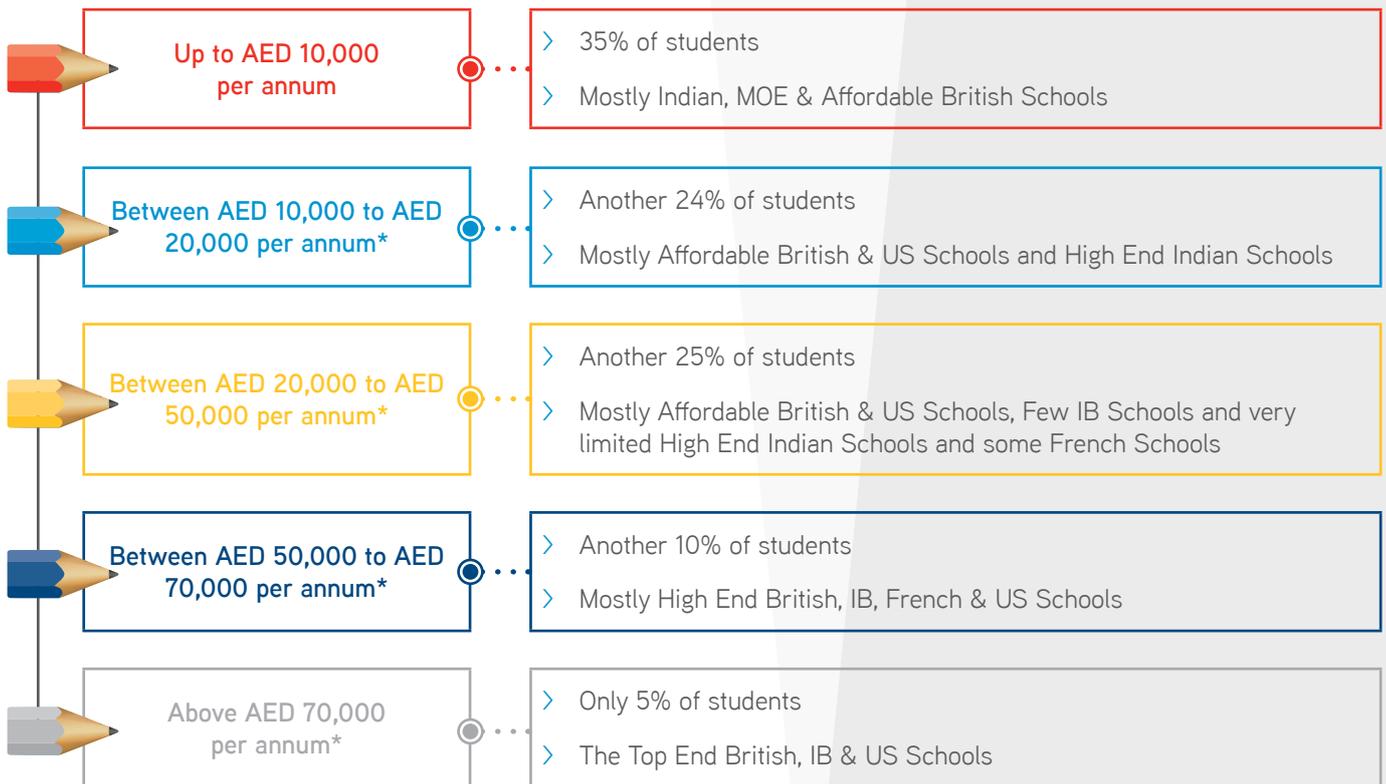
Exhibit 11:
Tuition Fees Affordability by Curriculum in Dubai



Based on Colliers analysis for Private MOE and Indian curriculums the majority of students can pay tuition fees below AED 10,000 per annum. For example, whilst there are roughly 28,000 households in Dubai who earn less than AED 10,000 per month, there are almost 98,000 students at schools with tuition fees of less than AED 10,000 per annum indicating either larger family size or they are spending less than the 10% benchmark on their children's education. Similarly there are 120,000 households in Dubai earning less than AED 20,000 per month, while there are 162,000 students paying less than AED 20,000 per annum. Exhibit 12 presents a detailed analysis of the relationship between household income and tuition fees in Dubai.

Exhibit 12:

The Affordability in Private Education Sector in Dubai



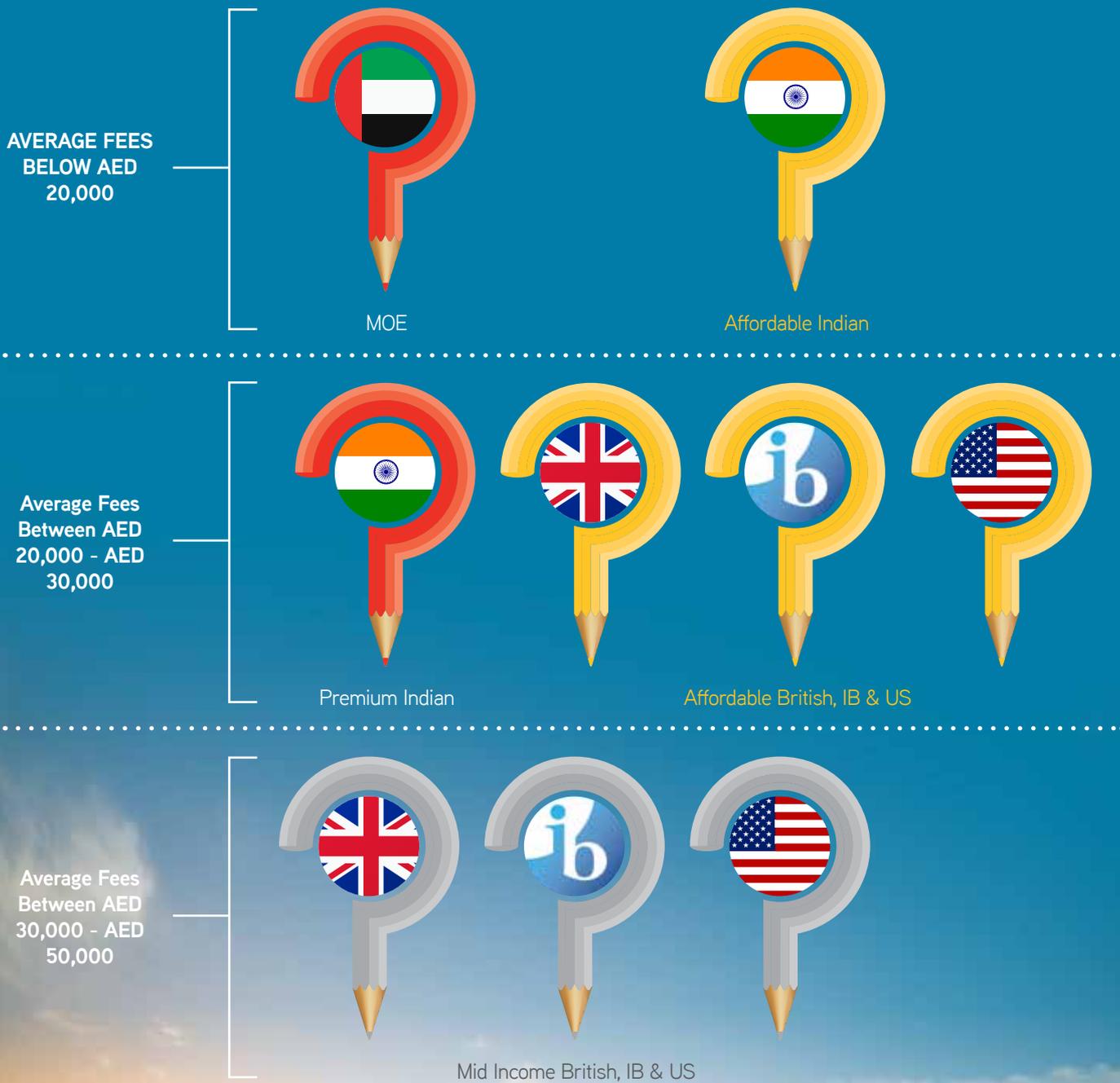
*Based on 2015/16 data, 50% of total students in Dubai up to AED 20,000 fees per annum

Source: Colliers International Analysis (2017)



Exhibit 13:

Targeted Affordable Tuition Fees in Dubai Private Education Sector in Dubai



The Growth Corridors

New Dubai remains the most attractive growth corridor for expansion of new schools linked to the proliferation of new affordable residential developments.

This support's Colliers analysis that in the short-to-medium term the demand for education in Dubai will be focused on the affordable school sector.

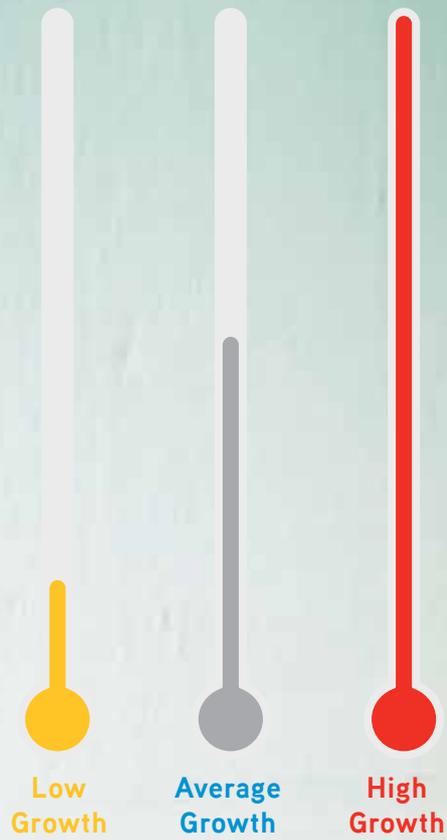
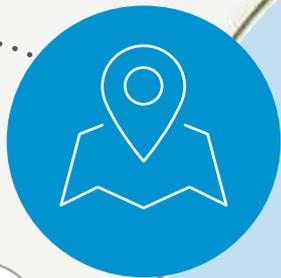
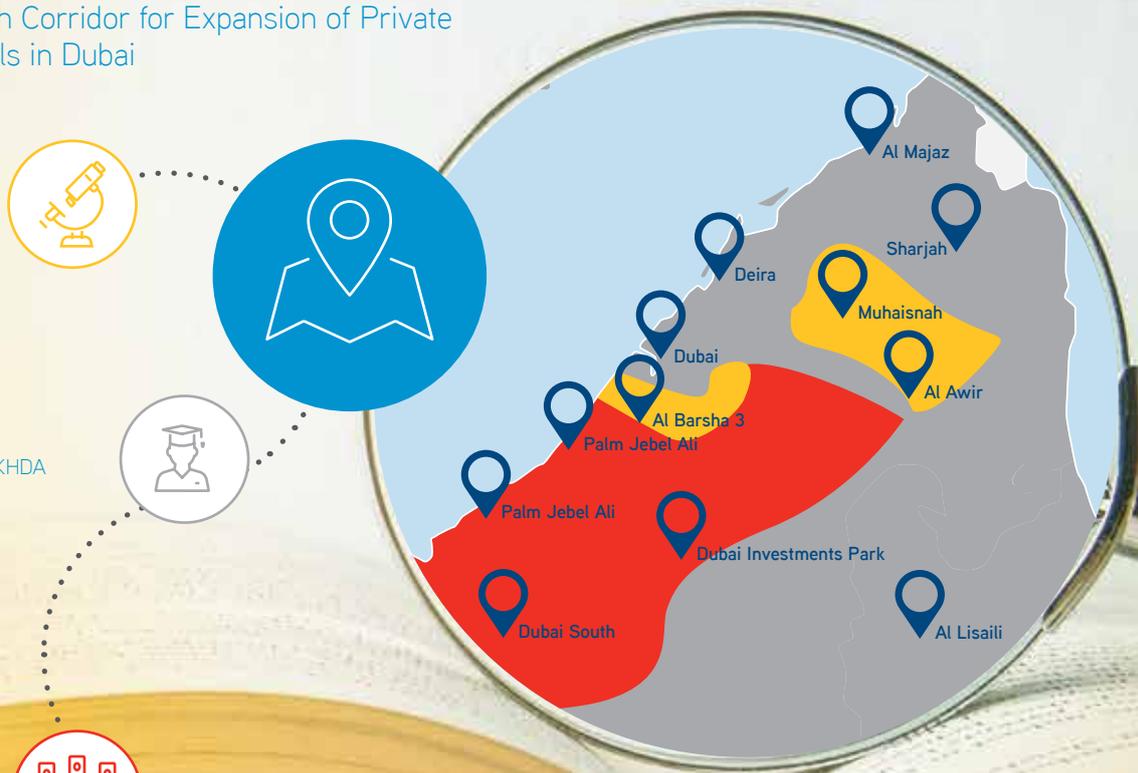


Exhibit 14:
Growth Corridor for Expansion of Private Schools in Dubai

Source: KHDA



How Attractive are “Affordable Schools” from Investment Prospective?



Based on Colliers’ experience operators and investors can achieve approximately the same returns when investing in well managed affordable schools as compared to a similar investment in premium schools. This is can be attributed to several factors such as; reduced capital investment levels, a relatively faster ramp-up period, often higher utilisation rates and an overall higher number of students per class. Demand for greater affordability is not only restricted to Dubai and Abu Dhabi but throughout the other Emirates.

The table below presents KPIs of different schools in Dubai. The data represents almost 70% of the schools in each category. Some of the schools depending upon the brand, network and number of branches and location can perform below or above these KPIs.

| Parameter | Unit | Affordable | Affordable / Mid-Market | Upper-mid | Premium |
|-------------------------------|-----------------------------|---------------|-------------------------|-----------------|---------------|
| Land Area | sqm per student | 5-9 | 8-10 | 11-15 | 20-25 |
| Built-up Area | sqm per student | | 7-10 | 10-12 | 12-15 |
| Construction Cost | AED per sqm of BUA | 3,000 - 3,500 | 3,500 - 4,500 | 5,000 - 6,500 | 5,500 - 7,000 |
| Pricing - Average Tuition Fee | AED per annum / Per Student | 0 - 25,000 | 25,001 - 50,000 | 50,001 - 70,000 | 71,000++ |
| Student Teacher Ratio | Students per teacher | 15-17 | 14-15 | 12-14 | 11-12 |

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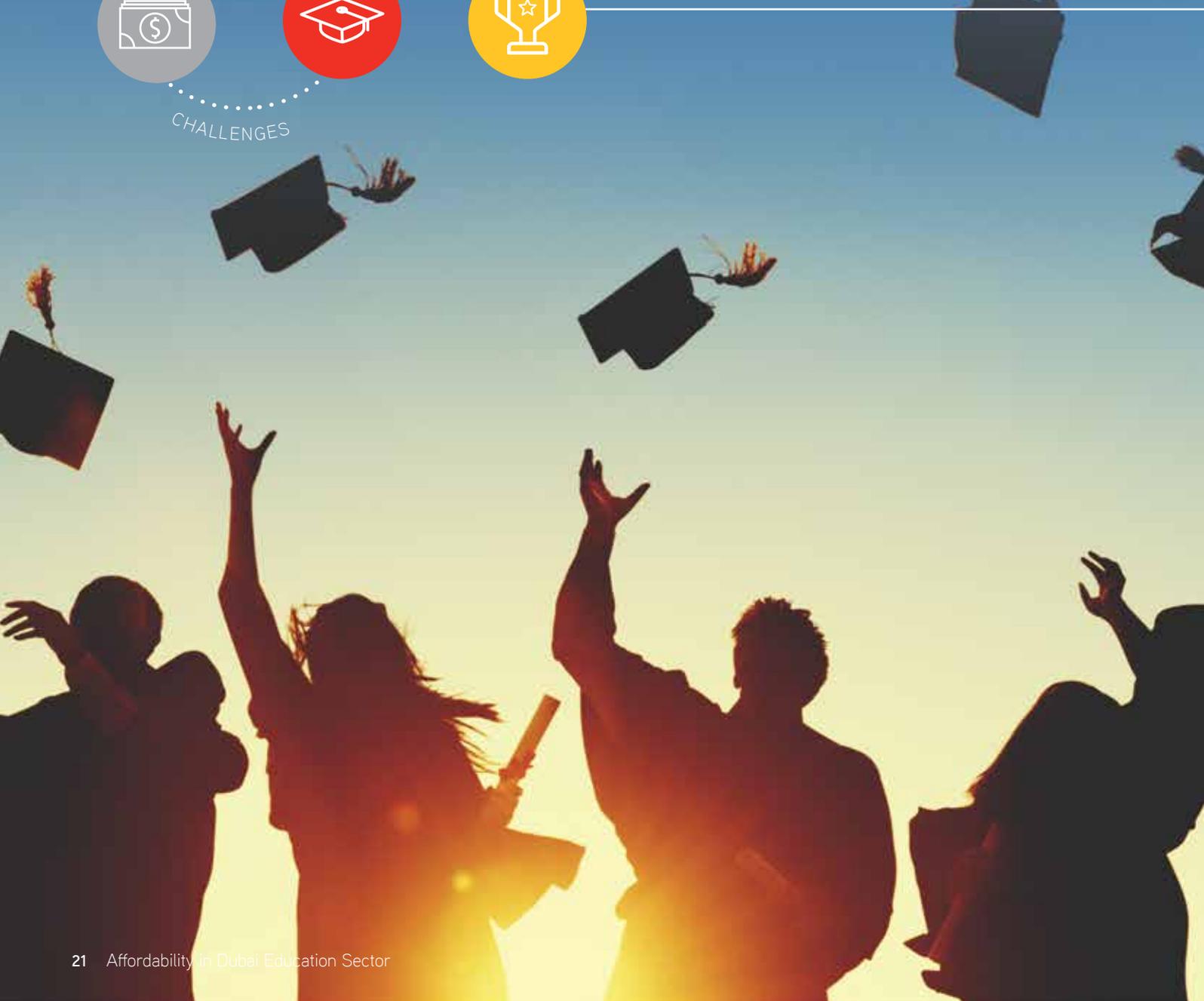
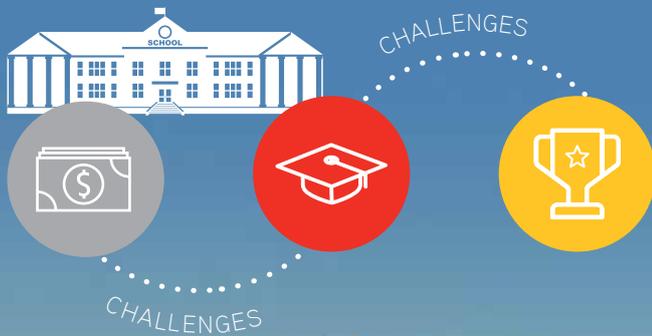
Conclusion

The private education sector in Dubai still offers several lucrative opportunities for investors and operators however, it also possesses several challenges, such as high capital cost, a paucity of quality teaching staff, staff retention, greater regulatory oversight and increased competition. As the education market matures in the UAE parents, now with a greater range of options, are becoming more selective. Being more expensive does not guarantee better quality. Further, because of the slow-down in economic activities and increased competition the demand for affordable schools is expected to remain high.

Colliers International is working alongside a number of investors and operators assisting them in their plans of

either expansion of the existing brand or attracting new international brands to the region. An integral component of this assistance is often through traditional funding options, such as debt and equity, or emerging funding options, such as OpCo / PropCo, or a Joint Venture (JV) with an investor.

With over 500 offices in 68 countries and centres of excellence platforms across the globe, Colliers International brings together global innovations with in-depth local knowledge. For further inquiries, please contact one of our experts.



Colliers International Service Lines



> Commercial Valuations



> Residential Valuations



> Hospitality



> Healthcare & Education



> Development Solutions



> Retail Advisory



> Retail Leasing



> Corporate Solutions
> Property Management
> Sales and Leasing



Mixed Use
Developments



Retail



Hospitality



Healthcare
& Life
Sciences



Education
& Human
Capital



Infrastructure
& Public Private
Partnership



Airport Cities
& City Centres



Ports &
Waterfront
Development



Industrial
& Special
Economic Zones



Leisure, Tourism
& Culture
Development



Entertainment



Sports Cities

Colliers International

Healthcare | Education | PPP

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Economic Impact Studies
Market & Competitive Studies
Market & Financial Feasibility Studies
Financial Modelling
Market & Commercial Due Diligence
Land, Property & Business Valuation
Mergers & Acquisitions Assistance
Buy Side Advisory / Sell Side Advisory
Sale & Lease Back Advisory
Public Private Partnership (PPP) & Privatisation
Operator Search & Selection and Contract Negotiation
Site Selection & Land / Property Acquisition
Asset & Performance Management
Performance Management & Industry Benchmark Surveys

CONDUCTED STUDIES FOR

Nurseries
Kindergarten
Schools (Primary and Secondary)

- British Curriculum
- American Curriculum
- French Curriculum
- Indian Curriculum
- German Curriculum

Nursing College
Medical College
Business College
Science and Art Universities



Our team in the MENA region:

Feasibility Studies | Due Diligence | Investment Memorandums (IM) 2010 -2017

200+ (US\$ 8 Billion+)

24 Million SqFt+ BUA

200,000+ Students Seats

Feasibility Studies | Investment
Memorandums | Due Diligence Financing &
Refinancing
Merger & Acquisitions

Land | Property | Business Valuation 2010 - 2017

50+ (US\$ 10 Billion+)

10 Million SqFt+ BUA

90,000+ Students Seats

School Valuations for End of Year
Audit | Financing & Refinancing
Merger & Acquisition

Operator Search & Selection | Contract Negotiation 2010 - 2017

20,000+ Students Seats 10 Assignments



Winner of World Finance 2013
Infrastructure Investment
Award for Real Estate, Health-
care and Education for Middle
East and Africa



Winner of World Finance
2013 Public Private Part-
nership Award for Healthcare
and Education for Middle
East and Africa



Winner of the Best Asset
Based Valuations Adviser of
the Year



Colliers International Middle East is
shortlisted as Finalist for following
categories

1. Best Consultants
– to the Private Sector
2. Education Infrastructure
– Best Education Property Consultants
3. Best Financial Advisor



Winner of The Education
Investor Awards for the
“Best Education Property
Consultant Award” for 2016,
for our continuous contribu-
tion to the Education sector
in the MENA Region &
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