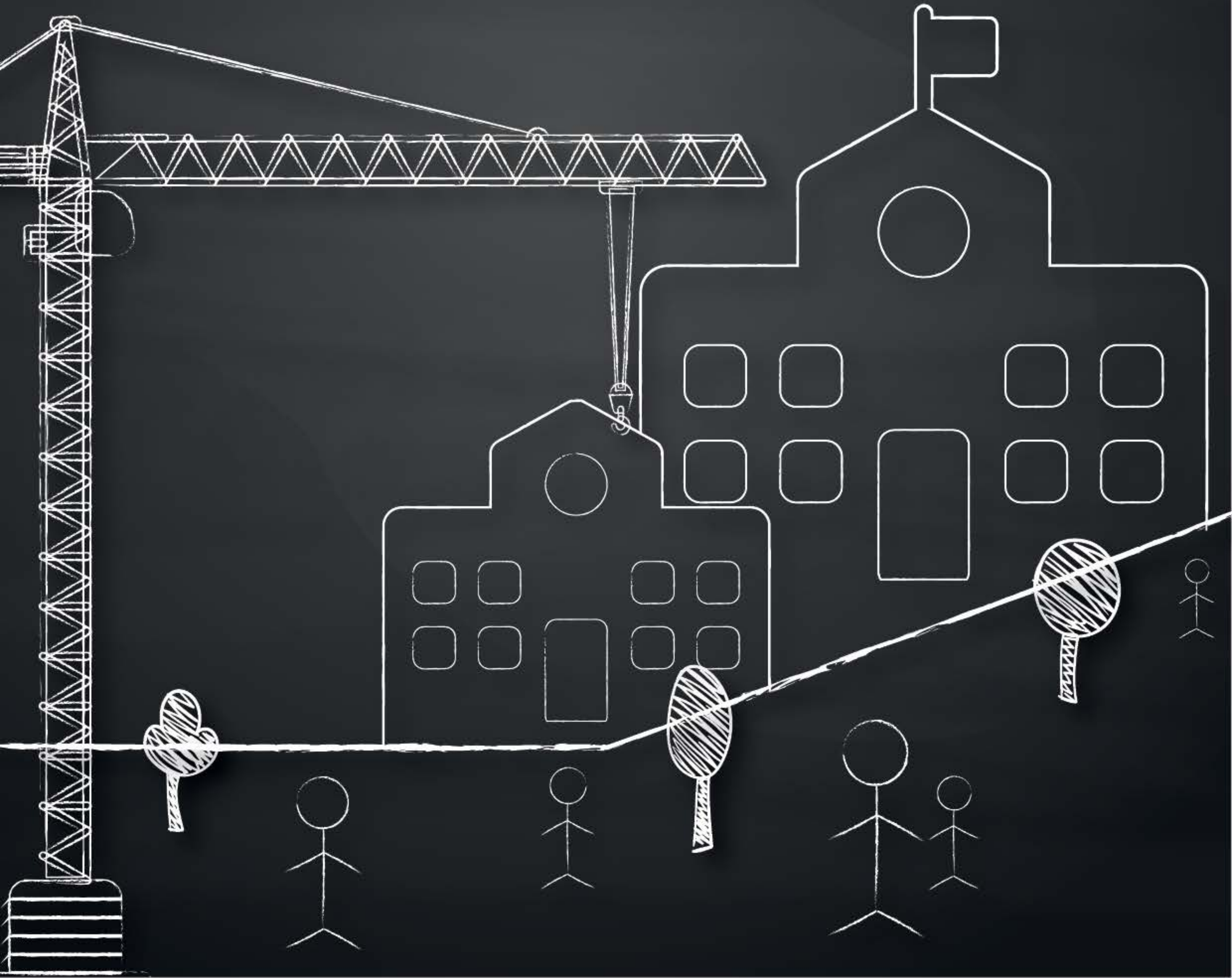
SCHOOL'S IN

WHY EDUCATION IS ATTRACTING MORE ATTENTION FROM REAL ESTATE STAKEHOLDERS IN MENA



EXECUTIVE SUMMARY

• Demand for private schools in the MENA region is increasing. This trend is being driven by the growth in the number of expatriate children of school age and the increased number of national families seeking private education for their children.

• The increased demand for private education presents opportunities for real estate stakeholders (investors, developers and builders) that are seeking to increase their exposure to alternative sectors as more traditional asset classes become more competitive.

• In addition to potentially attractive financial returns, the growth of private schools is in line with government policy to raise education standards across the region. This provides comfort to real estate stakeholders and an additional social benefit, over and above the financial gains.

• Our analysis shows that more than 1,100 additional schools will be required in the five cities studied (Dubai, Abu Dhabi, Jeddah, Riyadh and Cairo) by 2020. Some 350 of these will need to be private sector schools, providing a significant area of new opportunity for real estate stakeholders.

Requirement for additional schools by 2020:

City	Total additional schools	Additional private schools
Dubai	53	36
Abu Dhabi	44	22
Riyadh	395	154
Jeddah	194	67
Cairo	424	68

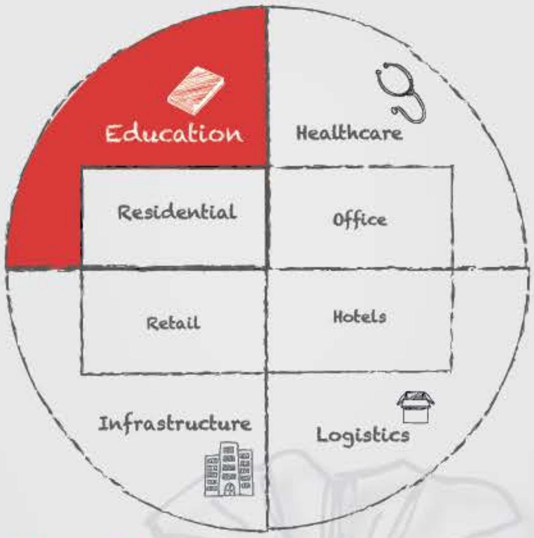
Source: JLL

WHY ALTERNATIVE REAL ESTATE INVESTMENT?

Historically, real estate investors and developers in the MENA region have focused on four traditional asset classes; residential, offices, retail and hotels. The shortage of available assets and the declining returns available from these assets in some markets have resulted in increased interest in 'alternative' asset classes over recent years.

There is no universal definition of what constitutes 'alternative real estate', and the sectors included are likely to vary across different geographies. Within the Middle East there has been growing interest in sectors such as education, healthcare, infrastructure, logistics and labour housing. This paper focuses on the education sector (and more particularly private schools).

Figure 1. Real estate investment categories



X Source: JLL

There are a number of reasons for the growth in interest of alternative assets. These include the lack of suitable high quality investments being offered and the reducing potential returns within traditional asset classes, while the demand for alternative assets is increasing. Alternative sectors also provide diversification benefits, allowing investors to diversify their portfolio and improve their overall risk-return profile.

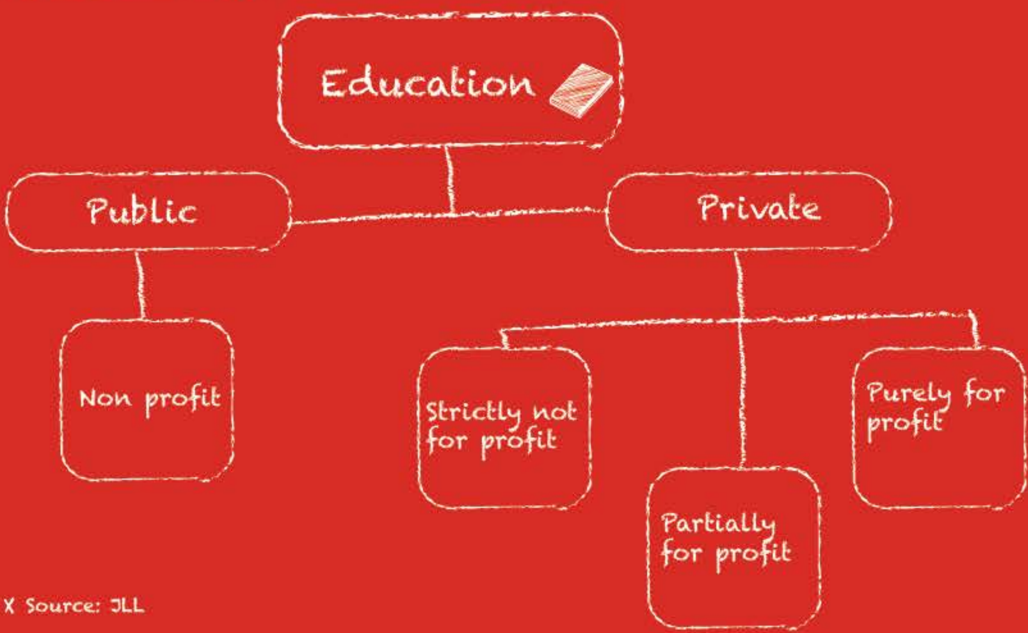
Both retail and institutional investors are seeking greater exposure to non-correlating alternative investments that provide consistent income with low volatility. The financial markets have responded to this demand by creating a number of new public and private vehicles that provide investors with exposure to new sectors of the market.

WHY EDUCATION?

School age education in MENA

This report focuses on school age education, but many of the comments made could also apply to the expanding higher education sector. Within the Middle East, schooling typically covers Kindergarten and 12 years of basic education.

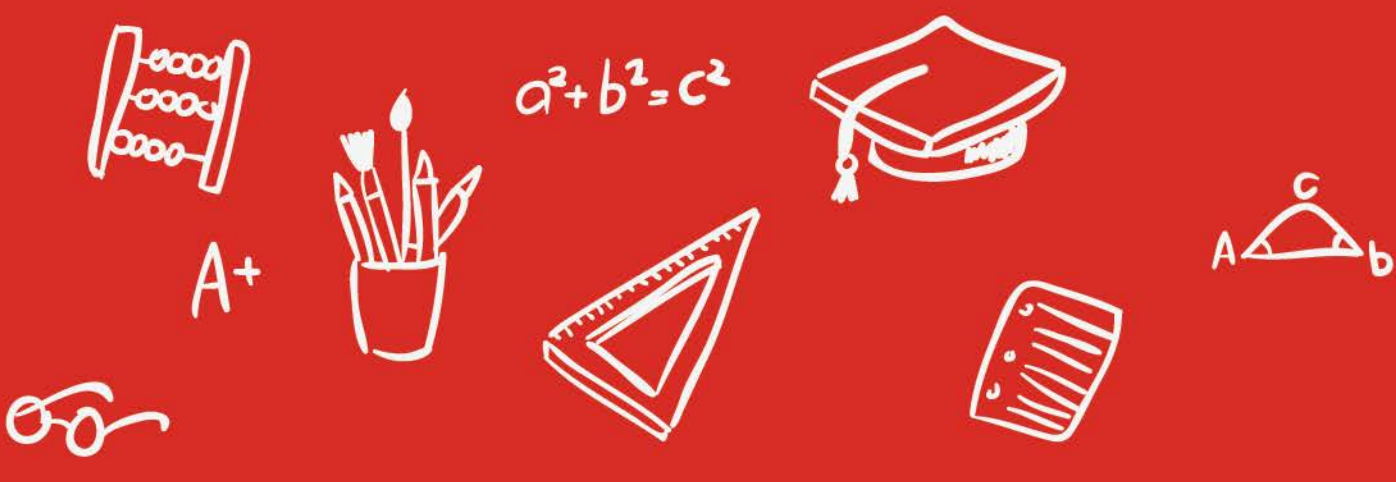
Figure 2. Different types of schools



X Source: JLL

The school age population is growing rapidly across the region and this is the main attraction of the education sector amongst real estate stakeholders. For example, in Egypt, this segment (children aged 5-19) is expected to grow by approximately 920,000 to reach 26 million persons by 2020.

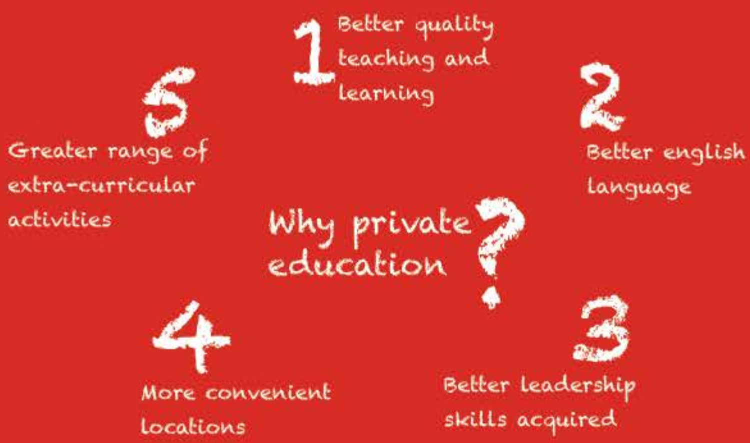
Across the MENA region, public education is fully funded by the government which provides free education to nationals. Expatriates are not typically able to attend public schools and this forms the core of the growing demand for private schools. The demand for private schools is growing faster than that for public schools in most countries across MENA for a combination of the following reasons:



1- Increased demand for private schools among National families

Despite the free availability of public schools, more and more National families are exhibiting a preference for private schools offering international curriculums, which are seen as providing a higher quality of education and better career prospects for their children. A recent study by the Dubai Schools Inspection Bureau (DSIB) confirmed this trend with Emirati parents across the UAE giving the following reasons for selecting private schools for their children:

Figure 3. Why private education?



2- Growth of expatriate workforce

The GCC has enjoyed long periods of positive economic growth which has led to a significant influx of expatriates over the past thirty years. A growing number of these expatriates are also now bringing their families to the region, creating more demand for private schools. The expatriate population is growing more quickly than the national population in many cities. For example, in Dubai, the expatriate population is forecast to grow at an average of 4.7% pa over the next five years, compared to a growth of 4.1% pa in the national population.

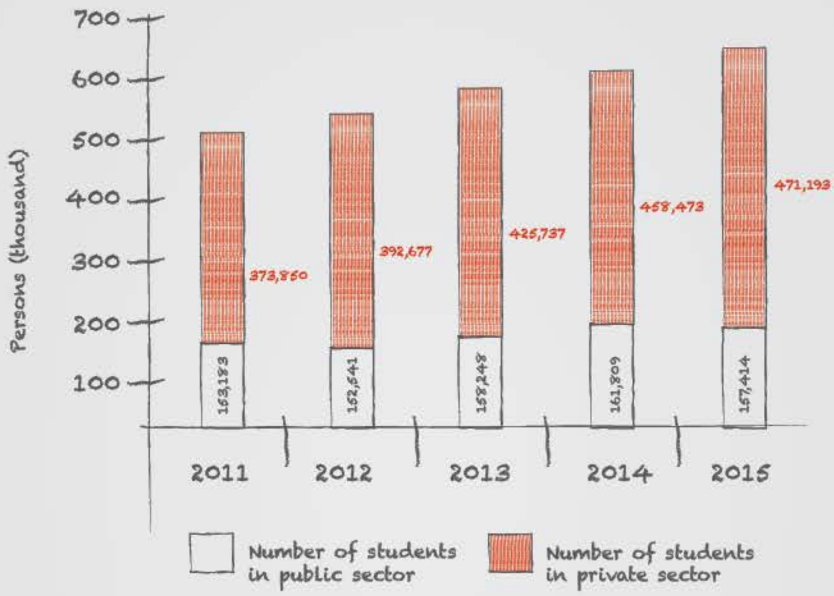
3- Increasing income levels

Global evidence shows a shift towards private education as income levels rise. According to the International Monetary Fund (IMF), average GDP per capita in the GCC stood at US $209,000 in 2015, significantly higher than the average of advanced economies at US $45,700. This highlights the ability of GCC parents to enroll their children in fee paying private schools.

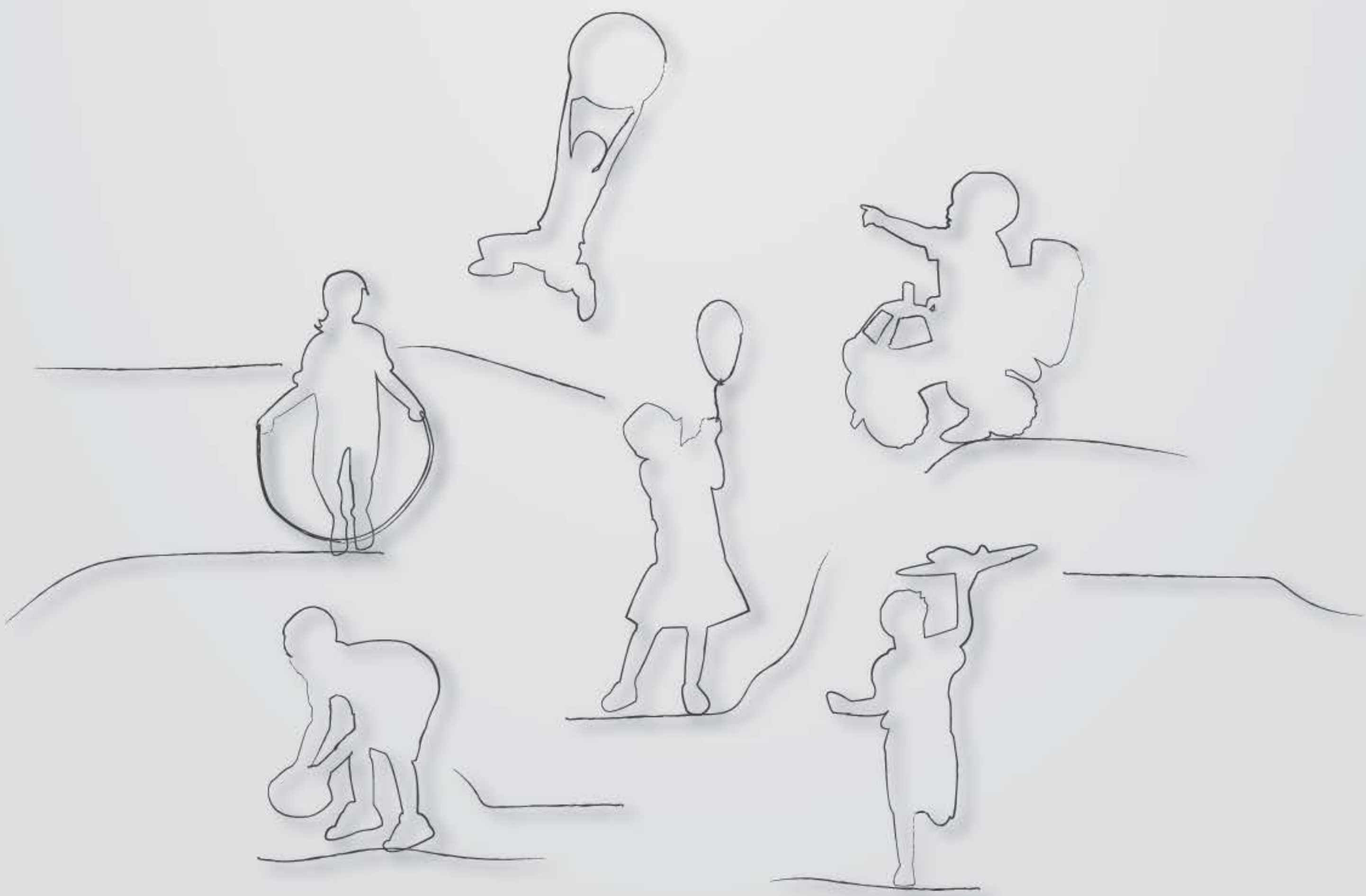
Student enrollment in private vs. public schools

In the UAE the majority of students attend private schools. According to The Federal Competitiveness and Statistics Authority (FCSA), the total number of school students in 2014/15 reached 629,000, 75% of which were in private schools.

Figure 4. Public schools vs. private schools - UAE

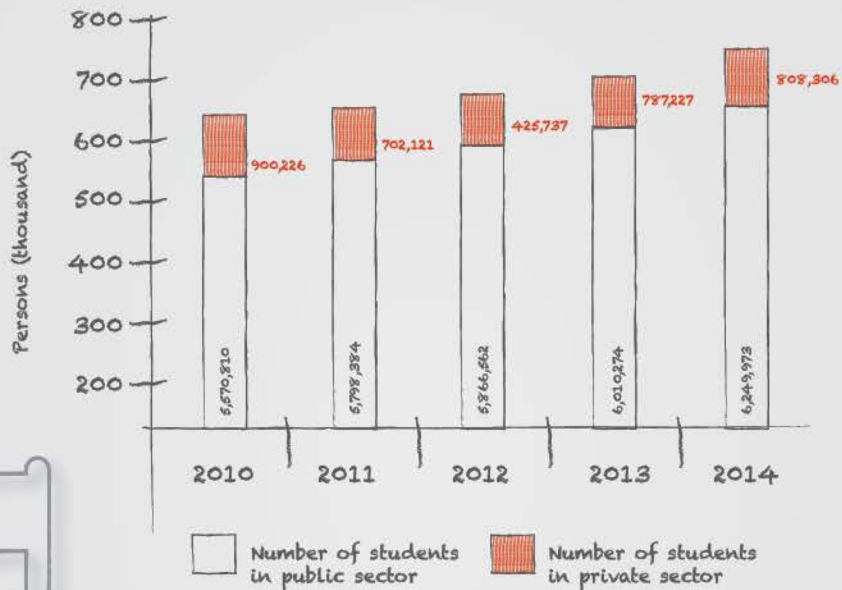


X Source: UAE FCSA, KHDA, SCAD



Conversely, in Saudi Arabia, the total number of students enrolled in the private sector increased by just 5% pa between 2011 and 2014, accounting for less than 15% of the total school population by the end of this period. Looking ahead we expect an increase in enrollments into private schools as the Government supports the development of the private sector by offering lower financing options to lessen pressure on Government budgets.

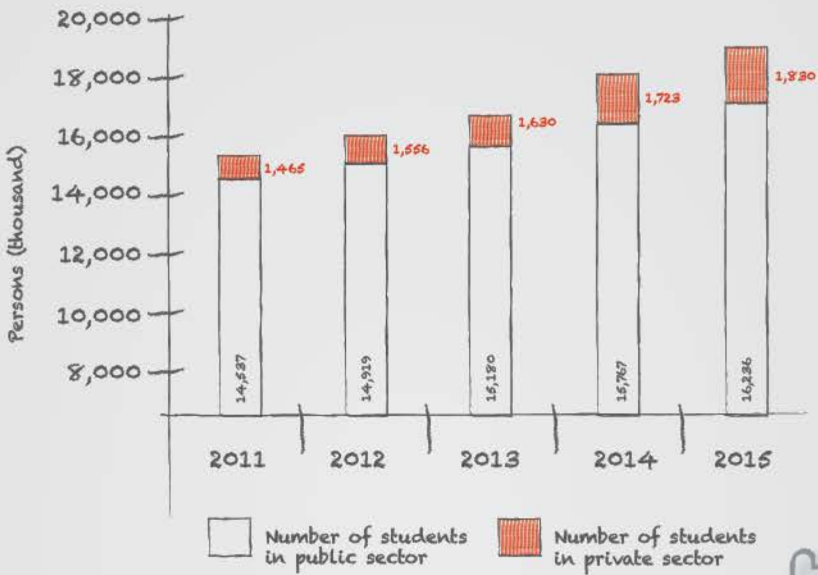
Figure 5. Public schools vs. private schools - KSA



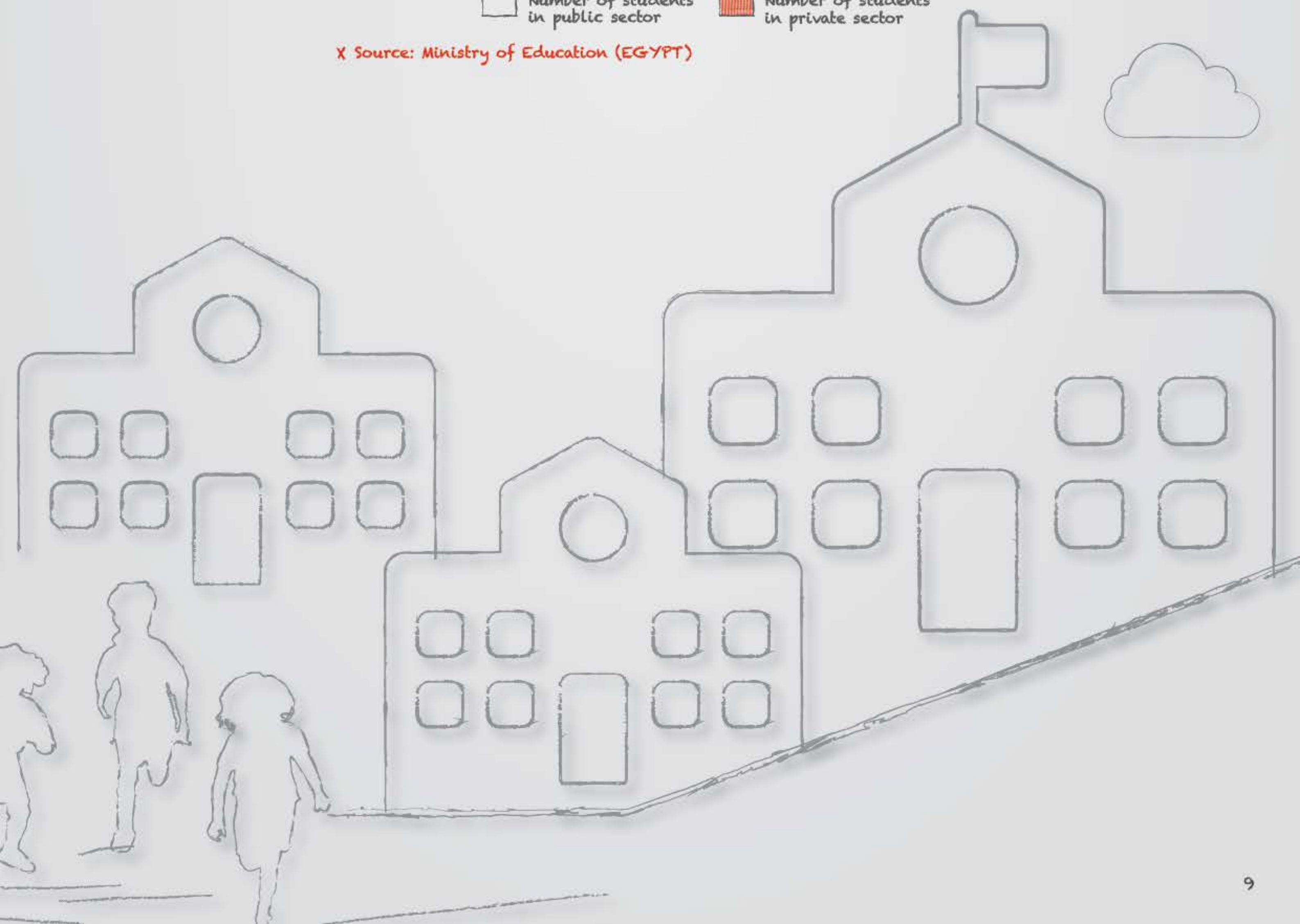
X Source: Ministry of Education (KSA)

In Egypt, the picture is similar to Saudi Arabia, with the private sector currently accounting for a minority of all places (just 10% of the 18 million children enrolled in 2015/2016). As with elsewhere in the region, this percentage is expected to increase over the next 5 years.

Figure 6. Public schools vs. private schools - Egypt



X Source: Ministry of Education (EGYPT)



INVESTOR'S PERSPECTIVE ON EDUCATION

Generally speaking, there are two ways that investors can benefit from the growth of private education across the region, either at a business level (by investing in an education provider (such as GEMS)) or by investing in the physical real estate.

Regardless of the approach, the education sector has attracted the interest of many investors across the MENA region. Private equity firms have been very active in recent years and now play a pivotal role in the private education sector by providing funding and support to grow these institutions. Saudi Arabia's Sedco Capital Regional and MENA Real Estate Asset Management team is one such investor, they believe the segment is defensive, backed by government support and capable of generating yields of approximately 8-9% pa. They are currently looking into several kingdom wide opportunities, with build-to-suit being their "speciality" approach.

Stakeholder comment: Sedco Capital Asset Management

> "At present, we have two operating schools in our portfolio along with a number of build-to-suit opportunities confirming our interest in this sector".

JLL's Capital Markets team has seen interest from a number of other regional and international groups, which is likley to drive down yields over time.

Reasons for investing in education as a business:

1. Long term revenue generation

Education is regarded as a lucrative business opportunity. A recent report by the Abu Dhabi Education Council (ADEC), showed private schools in Abu Dhabi earned close to AED 3 billion in profit over the past 4 years. Investment in private schools reached AED 2.3 billion, with 45 new private schools added between 2010 and 2015.

2. Negative working capital

Given that tuition fees are paid ahead of the academic year, investing in education is more favourable than other alternative assets which earn their income after the service provision.

3. Diversification benefits

Besides healthy returns, investing in the education sector can diversify an investor's portfolio through exposure to a defensive sector resilient in the face of difficult economic conditions.

Reasons for investing in education real estate:

1. Minimal asset management required

Most if not all of the leases are "triple-net" whereby the tenant is responsible for paying all operating expenses and tax charges relating to the property. This allows investors to enjoy hassle free investment options.

2. Long-term single let asset

Unlike traditional asset classes, education property is typically leased on a long-term basis, thereby reducing uncertainty with future cash flows. Leases for private schools can vary from 15 up to 50 years.

3. Diversification benefits

Besides healthy returns, investing in an education asset can diversify an investors overall portfolio and provide exposure to a stable income generating asset in a defensive sector that is relatively resilient to economic cycles.

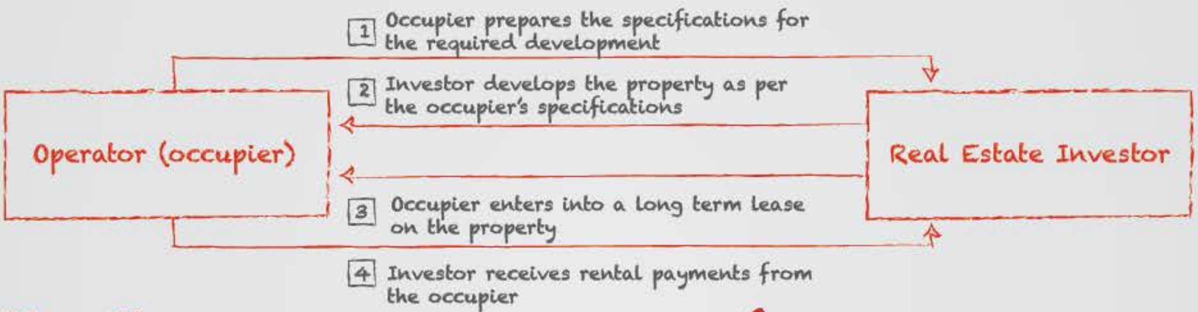
Real estate investment structures

There are two basic structures that can be used to purchase schools:

1- New Assets (build-to-suit):

- Greenfield; development of a new real estate asset for an operator
- Development cost is fully funded by a third party real estate investor
- Asset developed as per the operator's requirements
- Pre-agreed lease terms dictated by occupier
- Example: Global Indian International School (GIIS) in Bani Yas, Abu Dhabi

Figure 7. Build-to-suit structure

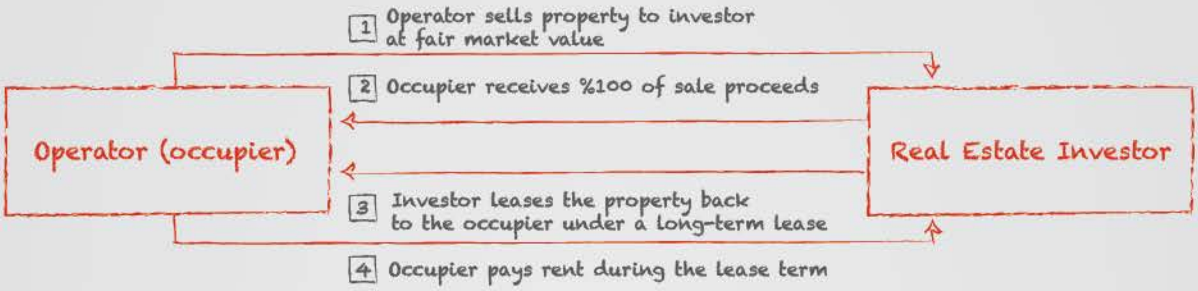


X Source: JLL

2- Existing assets (Sale & lease back):

- For built real estate assets that are owned by the operator
- Seller (operator) agrees to a long term lease for the asset
- Enables monetization of real estate assets on the balance sheet while maintaining full operational control of assets
- Lease terms dictated by seller (operator)
- Example: GEMS education has sold properties to asset managers and leased them back. Transactions were executed in 2013 with Pinebridge Investments and Emirates REIT

Figure 8. Sale & lease back structure



X Source: JLL

Stakeholder comment: Emirates NBD Asset Management

“As with many real estate investment managers in the Middle East, Emirates NBD Asset Management views education and other alternative asset classes as an exciting opportunity for our investors. We are considering options that could see education specifically occupying as much as 15-20% percent of our real estate fund's total assets under management within the next 3 years. Demographics and the maturing environment for education in this region suggest that it is likely to provide stable and growing returns for real estate investors over the next decade”.

DEVELOPER'S PERSPECTIVE ON EDUCATION

As with investors, developers have two alternative approaches to participate in the education sector. In the first scenario, the developer establishes an operating company and becomes the education provider (acting both as the landlord and operating entity). In the second scenario, the developer is the infrastructure provider to the education provider (acting solely as the landlord and collecting rent from a third party education provider).

Examples of developers involvement with private schools:

SCHOOL	DEVELOPER
Raffles School, Dubai	Emaar*
Jebel Ali School, Dubai	DAMAC Properties
Deira International School, Dubai	Al Futtaim Group
Cranleigh, Saadiyat Island, Abu Dhabi	Tourism Development & Investment Company (TDIC)
The World Academy, King Abdullah Economic City (KAEC)	Emaar, The Economic City (EEC)
American International School, Riyadh	Olayan Development Company
American International School, New Cairo	Al Futtaim Group
British International School Cairo, 6th October	SODIC

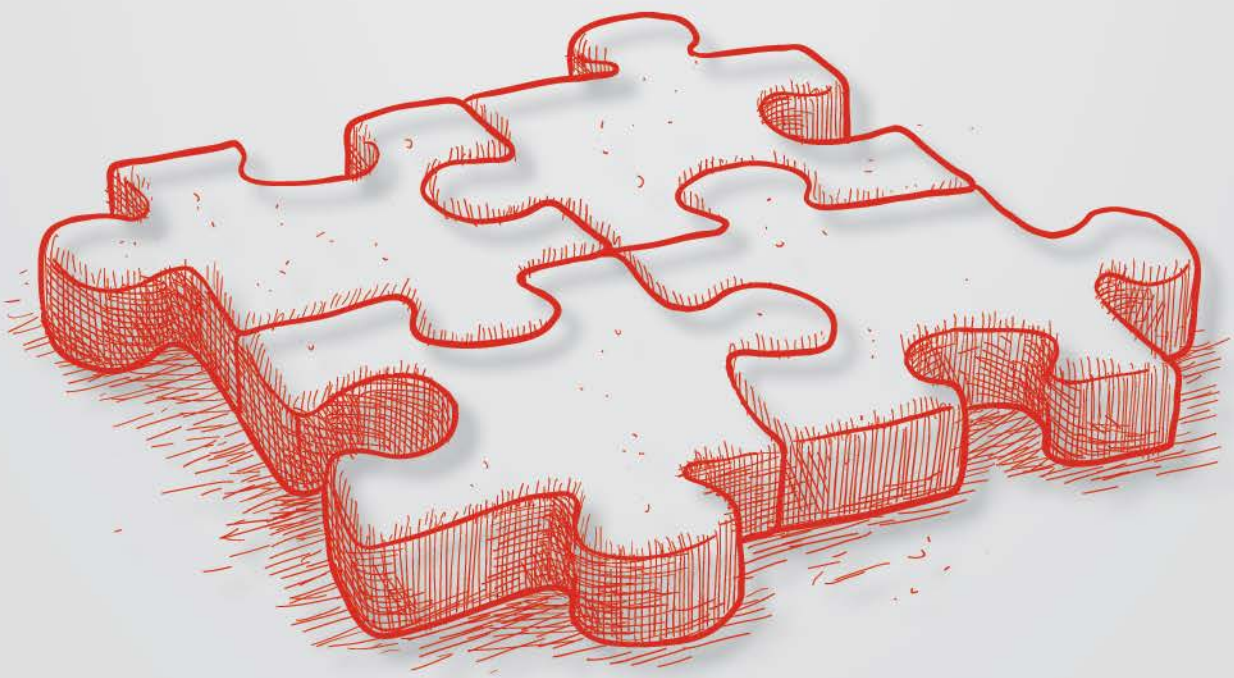
*Raffles School, was bought by Emaar Education in September 2006. Since 2012, Innoventures Educational Investments has operated Emaar Schools.

Many of the attractions to the developer are the same as those to the investor and there is often a degree of overlap, with the same group acting as both investor and developer. The specific attractions of schools from the development perspective include:

1. Adding value to the overall community

For a developer of large mixed use communities, the inclusion of a private school enhances the value of the overall development. Brand association with reputed schools not only provides an opportunity to charge a premium but also leads to increased absorption levels across residential projects, allowing developers to achieve their return on investment in a shorter time frame. Across Saudi Arabia, almost all compounds including private schools are able to achieve a substantial premium on residential rents compared to surrounding projects.

Developers have recognized that including schools within large master planned communities is a significant attraction for expatriate families and is a big differentiator in the price of residential units. Examples of projects where schools have played a major part in the success of residential communities can be found across all the cities covered in this report.



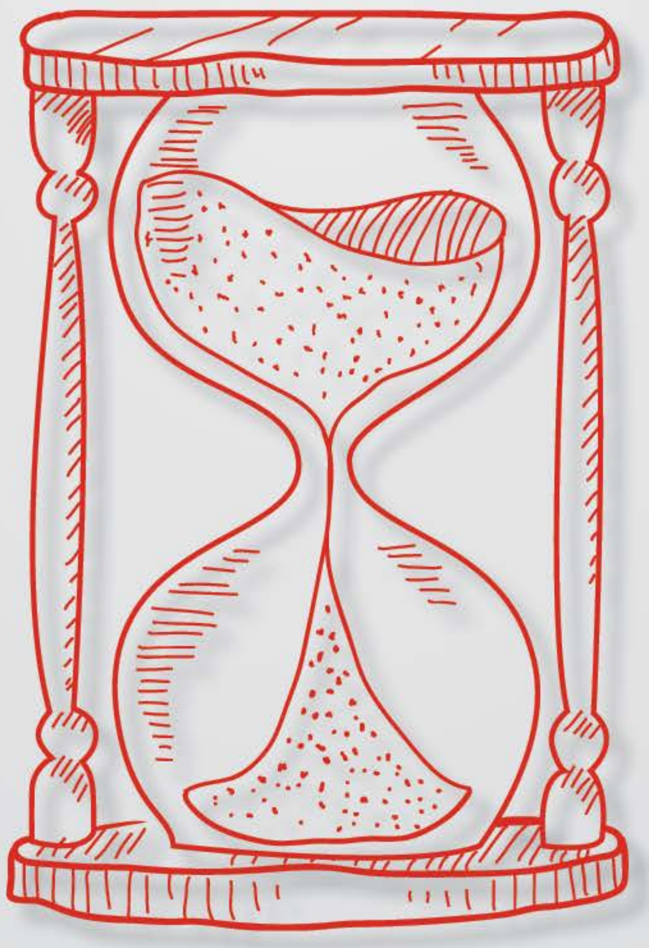
2. May improve overall Internal Rate of Return (IRR) for the master plan

The inclusion of education property within a mixed-use master plan may improve the performance of other components, driving up overall project IRR's.

3. Defensive sector offering stable long term income

JLL has worked with many real estate developers on education projects and we have found that the education sector is relatively stable, providing real estate developers with potential yields of up to 8% pa over a long term basis (up to 25 years).

The emphasis that governments across the region are placing on education as a means of diversifying and growing their economies in the post oil period makes this sector extremely attractive. While more traditional sectors are closely tied to economic cycles and many are currently facing over supply conditions, the education sector is deemed steady and relatively "safe". The safe haven nature of this sector is further enhanced by the governments' control of future supply of land for schools in most markets, which effectively regulates competition.

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BUILDER'S PERSPECTIVE ON EDUCATION

CONSTRUCT

MANAGE RISKS

- Well-defined contract
- Task ownership
- Clear timeline

DESIGN

School designs should comply with the Country's building code, civil defense, Urban planning commission

SPACE PROGRAM APPROVAL

- Appropriate standards for students
- Required facilities
- Number of students per sqm

Plan

Establish the school As a legal company

ACADEMIC PLAN

- Applicant's background
- Targeted area
- Proposed date of opening
- Genders grades to be catered for
- Proposed curriculum
- Management of school

FINANCIAL PLAN

- Type of ownership
- Land procurement
- Start up budget
- Operational budget
- Construction budget

INITIATE

MARKET ASSESSMENT

- Demand and supply study
- Targeted area

CATCHMENT AREA

- Target audience

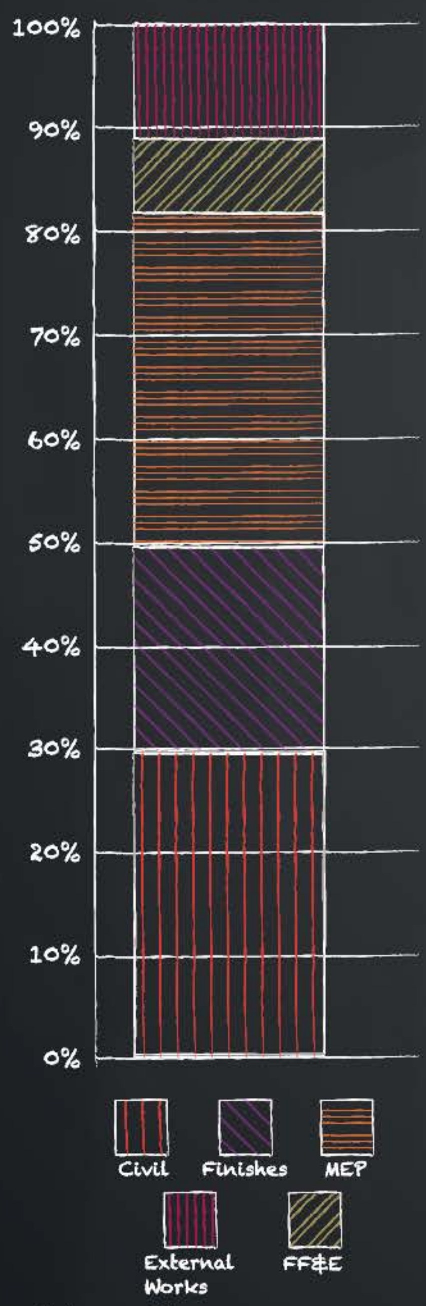

MANAGE COSTS
Fixed price lump sum
Inflation contingency
Invest in quality to minimize
Future maintenance cost
$
BUILD
Manage permitting process
Manage substantial completion process
Manage testing and commissioning
CONCEPT DESIGN APPROVAL
Defined site plan
Program of spaces
Mep requirements
Final design approval granted
Establish the school
As a legal company
QUALITY ASSURANCE PLAN
School policies
Performance evaluation plan
Qualified staff
Review policy
Teaching learning assessment
Some lands are
Specific to pre-defined
Curriculums to cater
For the community's needs
EDUCATIONAL NEEDS
Age segregation
Urban trend
Benchmark analysis
MISSION AND RATIONALE
Type of school
Distinctive character

BUILDER'S PERSPECTIVE ON EDUCATION

Mechanical, electrical and plumbing costs (MEP) are generally the highest elemental costs in all built assets. For schools specifically, their contribution is higher at approximately 30% of total costs due to:

- Schools having a high density of population which requires greater cooling and power requirements
- A higher level of ELV requirements i.e. a high level of interactive equipment & AV equipment
- Additional equipment for labs
- Commercial kitchens which require a higher level of MEP requirements
- Additional amenities i.e. flood lit external areas and swimming pools

Figure 9. Elemental cost breakdown for schools

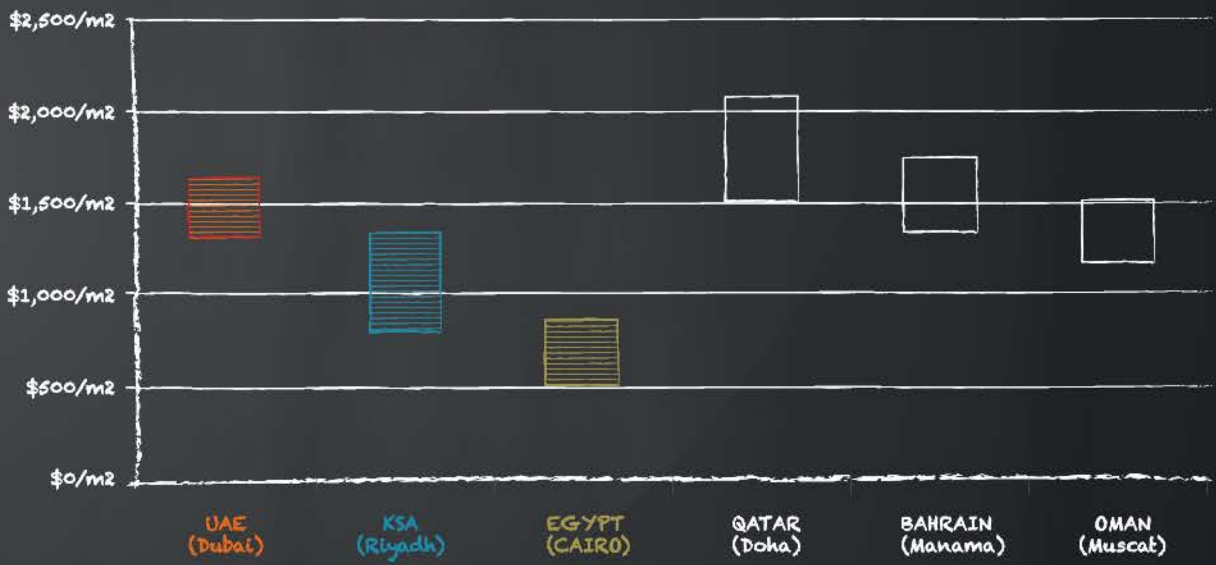


X Source: JLL

Construction costs are correlated to the macroeconomic profile of individual countries in the region. Labour and raw materials are the two most important elements of input prices. While raw material prices do not vary greatly between markets, there is significant variation in labour cost both between cities and over time, as contractors adjust their pricing to reflect the strength of market conditions.

- **In the UAE,** the cost of living is expensive which leads to higher wage and salary costs compared to KSA and Egypt
- **In KSA,** the implementation of the Nitaqat Program translates to increased labour costs as the recourse of expatriate labour becomes more difficult and nationals (with higher wages) substitute for the gap
- **Egypt** has the lowest labour costs across the region given the lower wage rates and less reliance upon expatriate labour in the construction sector

Figure 10. Cost of constructing schools



X Source: JLL

* This excludes cost of land

CASE STUDY:

GLOBAL INDIAN INTERNATIONAL SCHOOL, ABU DHABI

2011 — INITIATE

- Initiated a market study on a GCC level in 2011 due to the large presence of the expatriate community

- Decided to focus more closely on UAE, Qatar, Kuwait given the size of opportunity and ease of regulations relative to other GCC markets

2012 — PLAN

- During the first half of 2012, the Global Schools Foundation (GSF) set up a free-zone office in Dubai to manage the company's Middle Eastern operations

- Participated in the RFP launched by ADEC in 2012

- This entailed all stakeholders, from ADEC, to the funding bank, legal advisors, and sub-contractors; all receiving the required input for the implementation of the project

- GSF planned for a green-field approach with a 30 year lease period

- Land was provided by ADEC

- Since 2010 till 2015, the Abu Dhabi Education Council (ADEC) has closed villa-type schools since they are not custom built

- This is when GIIS in 2012 came in and decided on Abu Dhabi as a location

13

DESIGN

- Design stage started in October 2013 till April 2014

- 30th April JLL was appointed as project manager

- JLL managed the development process by executing a strategy that allowed the collaboration of all stakeholders

- The purpose was to create synergy within the execution team, mitigate risks and collate a set of lessons learned

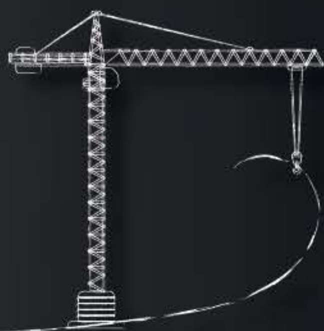
- The client remained informed on a regular basis

2014

- September 2014 construction started

- Late 2014/Early 2015 the school started preparing for its academic year by recruiting staff

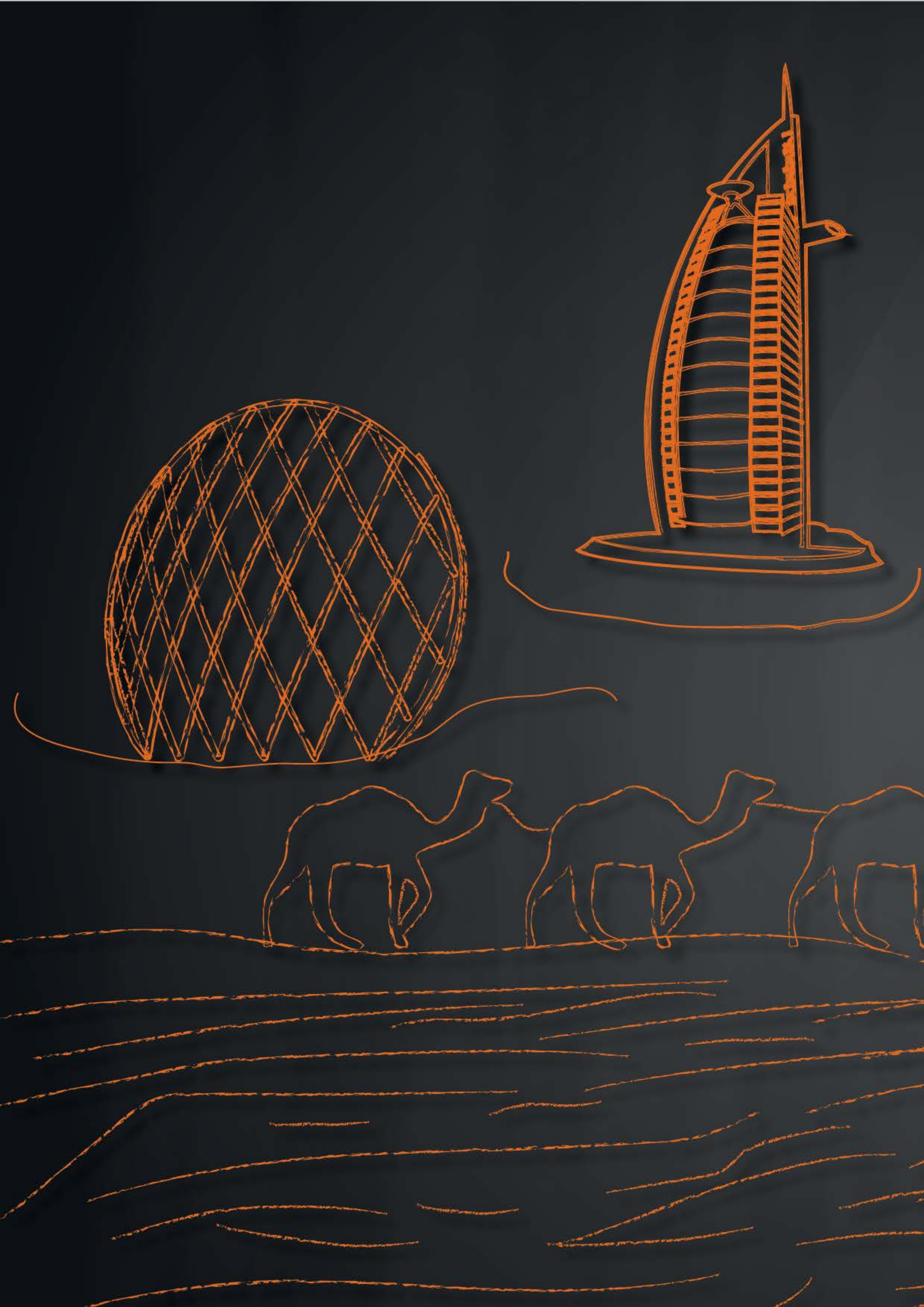
2015



CONSTRUCT

- The project was complete on time, slightly below budget, entirely to the satisfaction of the client

- The school commenced its operations in Sept 2015



UNITED ARAB EMIRATES

UNITED ARAB EMIRATES

Government vision for education

In its 2021 vision, the UAE government emphasizes the significance of education. Following the safety of its people, knowledge is addressed early in the vision summary, indicating the weight it holds.

UAE Vision 2021

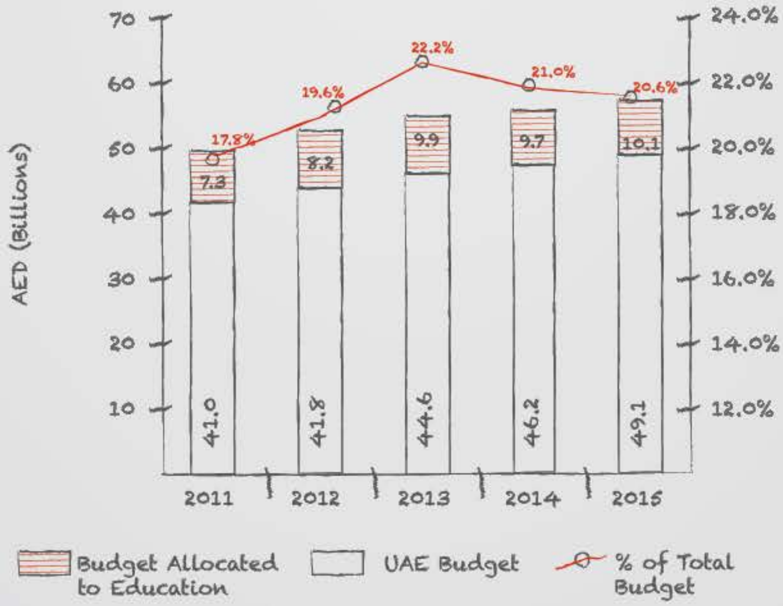
"In a strong and safe union, knowledgeable and innovative Emiratis will confidently build a competitive and resilient economy. They will thrive as a cohesive society bonded to its identity, and enjoy the highest standards of living within a nurturing and sustainable environment."

Budget

The Federal Government is playing an increasingly active role in the provision of education facilities across the UAE. Education expenditure by the Federal government reached AED 10.1 billion in 2015, growing at a CAGR of 8% between 2011 and 2015. Education expenditure represented 21% of the total budget in 2015, compared to 18% in 2011.

In addition to this spending by the Federal Government, each of the separate Emirates has a policy of supporting the education sector, with significant government revenue allocated in the major population centres of Abu Dhabi and Dubai.

Figure 11. Education expenditure as a % of total UAE budget



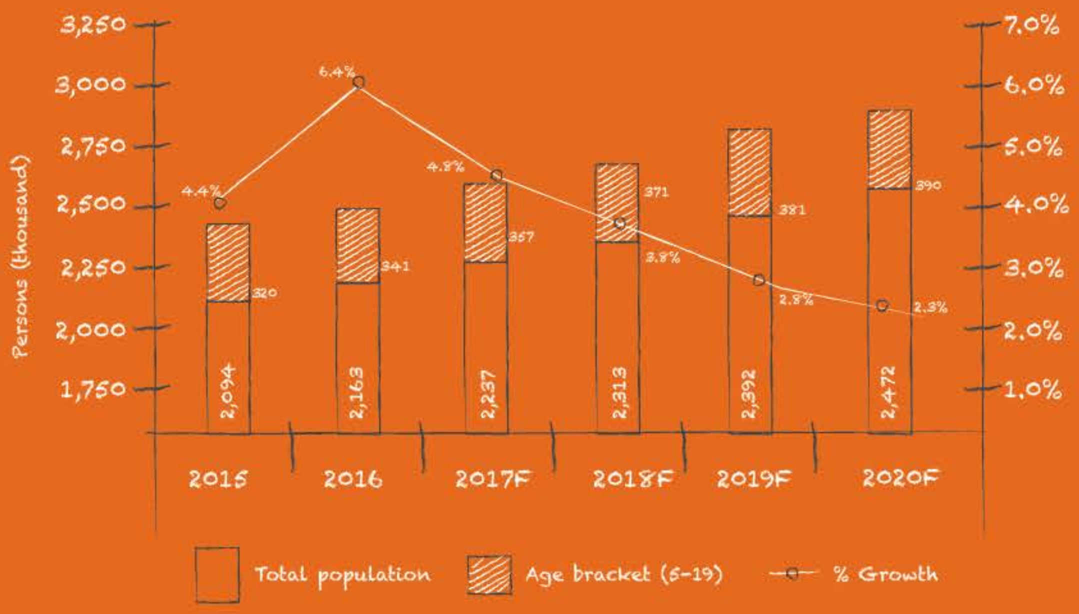
X Sources: Ministry of Finance, Federal National Council (FNC)

Demand drivers

Dubai has one of the fastest population growth rates in the region. According to Oxford Economics, Dubai's population is forecast to grow from 2.41 million in 2016 to 2.86 million by 2020, representing a CAGR of 3.5% pa. This continuing population growth is a key driver behind the increasing demand for schools in Dubai.

Dubai's population is young, with over 65% of the population below 40 in 2015. This translates to a wide population base of young parents and children attending school. The school age population (5-19 years old) accounted for 13.2% of the total population in 2015 and is forecast to reach 13.6% by the year 2020. The demographic structure means the growth of school age children is increasing ahead of that of the overall population, placing pressure on the education sector.

Figure 12. School age population in Dubai



X Source: Oxford Economics / August 2016

In 2015, the school age population stood at around 320,100 persons and is expected to increase by 69,500 over the next 5 years to reach 389,600.

While there is no official breakdown from the Dubai Statistics Centre, JLL estimates that expatriates accounted for around 87% of the total population of Dubai in 2015. We have assumed the same ratio in respect of the school age population and have kept this ratio constant in our calculation of demand to 2020, which we believe to be a conservative assumption that may underestimate the demand for private schools.

Supply drivers

There were 244 schools in total across Dubai in June 2015. Private schools represented 68% of this total (169 schools). The percentage of private schools has been growing over the past few years and we expect the trend to continue given the ongoing growth of the expat population in Dubai.

Private schools in Dubai are regulated by the Knowledge and Human Development Authority (KHDA). KHDA through the Dubai Schools Inspections Bureau regularly inspects the quality of teaching and learning at all schools across Dubai. In its efforts to become innovative in this domain, the KHDA has created a functional team called ForwardEDubai which helps support investors, operators and other stakeholders interested in the education landscape.

Data from the KHDA shows the number of private schools reached 173 in the academic year 2015-16, an increase of 7 schools from the previous academic year. Some of the leading private schools in Dubai according to the Dubai School Inspection Bureau are:

1. Gems Wellington International school offering a UK and IB curriculum, with a capacity of 2,408 students (as of 2015)

2. The Indian High School, with a total capacity of 5,896 students during the same time period

Figure 13. Number of schools in Dubai

X Source: UAE FCSA

ABU DHABI

Demand drivers

The population of the Abu Dhabi region (excluding the Western and Al Ain regions) stood at 1.72 million people in 2015. It is estimated that the population will grow at a CAGR of 2.9% between 2016 and 2020 to reach 1.99 million people. Abu Dhabi has a relatively young population with 70% below the age of 40 years.

As of 2015, the school age group stood at 227,900 persons or 13.3% of the total population. Going forward, this segment is expected to continue growing to reach approximately 270,000 by 2020, an increase of 42,100 persons.

Figure 14. School age population in Abu Dhabi

X Source: Oxford Economics

The expatriate community represents around 82% of the total population of the Abu Dhabi region. The picture is similar to that in Dubai, with a growing requirement for more private schools to cater for the large demand which is driven by the wide range of nationalities, each seeking a unique and defined curriculum based system.

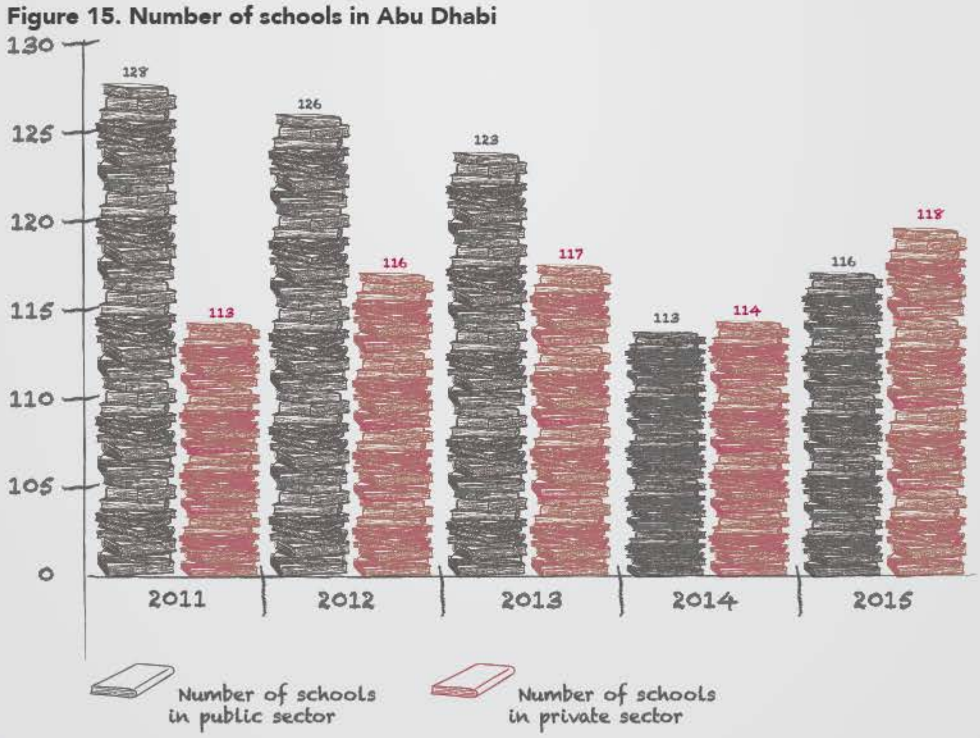
Supply drivers

According to the Statistics Centre of Abu Dhabi, there were 234 schools in total in 2015; 118 in the private sector and the remaining 116 falling in the public category. While public education in Abu Dhabi is fully funded by the government for all UAE citizens, there has been an increasing trend amongst local families to enroll their children in international curriculum private schools. Over the last 5 years, the mix of schools has changed. In 2010, public schools dominated the market in Abu Dhabi, while private schools are now the largest sector.

Some of the leading private schools in Abu Dhabi include:

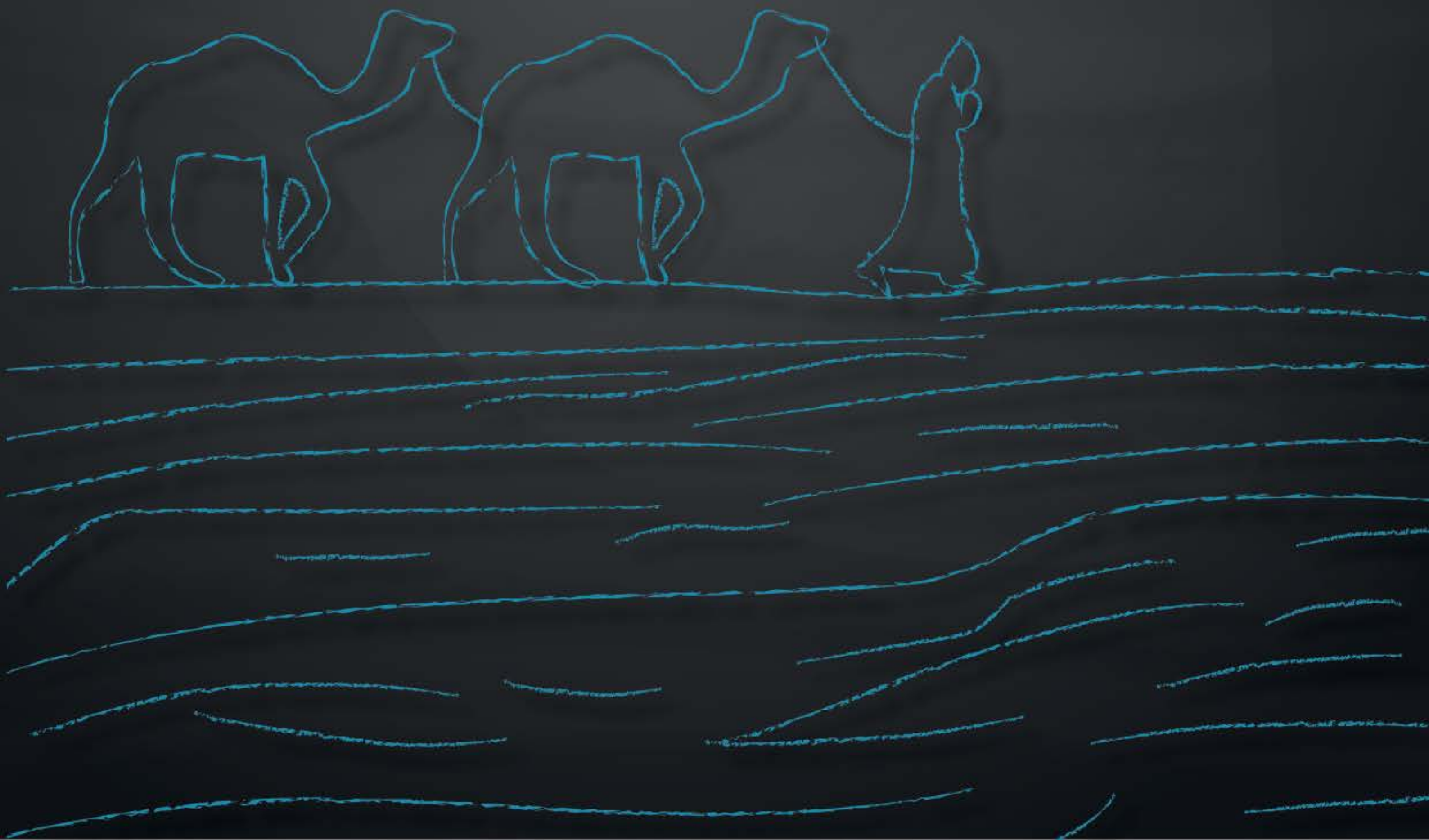
1. Ajyal International School, operating the English National curriculum and the ADEC approved Arabic curriculum
2. The International School of Choueifat; part of the SABIS education network, with a current capacity of 3,600 students

Figure 15. Number of schools in Abu Dhabi



X Source: SCAD

SAUDI ARABIA

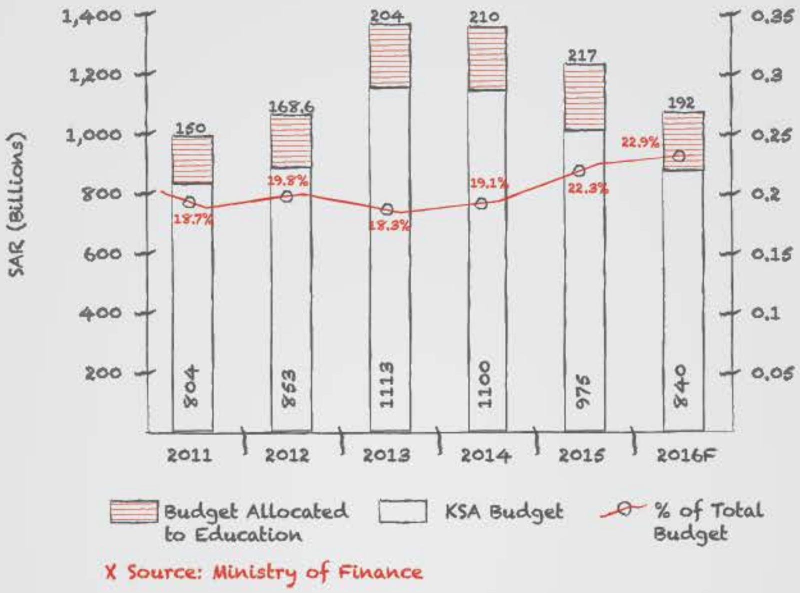


SAUDI ARABIA

Government vision for education

Recognising the need to improve the quality of public education in KSA, the government allocated an average of 23% of the national budget to building new schools and improving existing schools over the past ten years.

Figure 16. Education expenditure as a % of total budget



Supply drivers

Saudi's increasing population of school age children, coupled with the lower standard of public education, has resulted in more families opting to pay for private education. This provides an opportunity for growth in the number of private schools and opportunities for real estate stakeholders in this sector of the market.

Since 2010 the number of private schools in the Kingdom has increased by almost 300 to reach over 2,900 schools. However, this number remains quite low (representing only 11.5% of all schools in the Kingdom) compared to the number of public schools which stands at almost 25,300.

On a national level, it is no surprise that public schools dominate the picture. The diverse geographic spread of the Kingdom encompasses rural areas where government facilities are prominent and the population mix is largely skewed towards nationals. Looking closer at the capital Riyadh and the city of Jeddah, the picture differs as most expatriates tend to reside in these cities. Although in both cases the number of public schools is still greater, the gap between public and private is narrower than elsewhere in the Kingdom.

RIYADH

Demand drivers

As of 2015, expatriates accounted for 42% of Riyadh's population. This percentage is below the level recorded for Jeddah and the segment is expected to grow by just 0.1% pa over the next 5 years to reach 42.8%.

The school age population in Riyadh currently stands at 1.9 million students. This number is expected to grow by average 2.4% pa to reach 2.2 million students by the year 2020, representing 32% of the total population.

Figure 17. School age population in Riyadh

X Source: Oxford Economics, CDSI

Supply drivers

At the end of 2015, there were 3,100 schools in total across Riyadh. Public schools accounted for the majority (61%), with a total of 1,900 schools. As the Kingdom implements its 2030 Vision (which includes the attraction of more foreigners), and with Riyadh being the financial and political hub, the demand for private schools is expected to increase over the long term.

Some of the leading private schools in Riyadh include:

1. American International School, with a total current capacity of 1,650 students of 58 nationalities
2. Ecole Francaise Internationae de Riyad, with a current capacity of 1,200 students

Figure 18. Number of schools in Riyadh

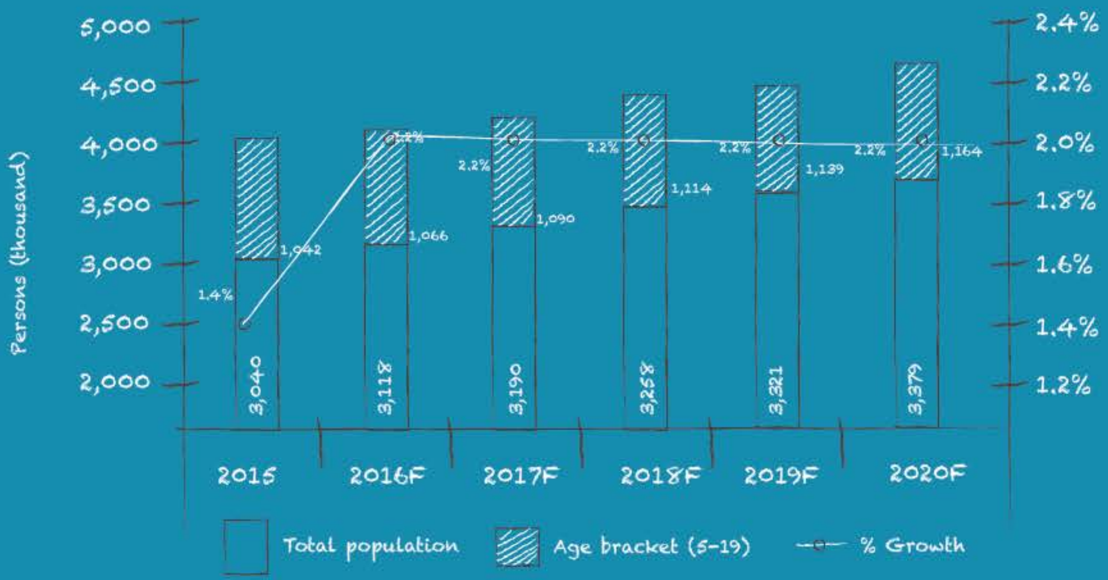
X Source: Ministry of Education

JEDDAH

Demand drivers

The school age population in Jeddah currently stands at just over one million students. This number is expected to grow by average 2.2% pa to reach 1.2 million persons by 2020. The growing school age population will add pressure on existing schools and create opportunities for the development of additional schools.

Figure 19. School age population in Jeddah



X Source: Oxford Economics

In 2015, the expatriate population of Jeddah was approximately 2 million persons, almost 50% of the total population of 4 million persons. By 2020, this segment is expected to grow by 10%, keeping its contribution to the total population relatively constant.

The expatriate population mix in Jeddah is unique. The city is home to a significant number of people who initially visited the Kingdom for pilgrimage purposes but chose to seek residence following their religious duties. Given its strategic geographical positioning relative to the Holy City of Makkah, Jeddah would be the location of choice for many Muslim families, while its position on the Red Sea Coast makes it a desirable location for other expatriates working in the Kingdom.

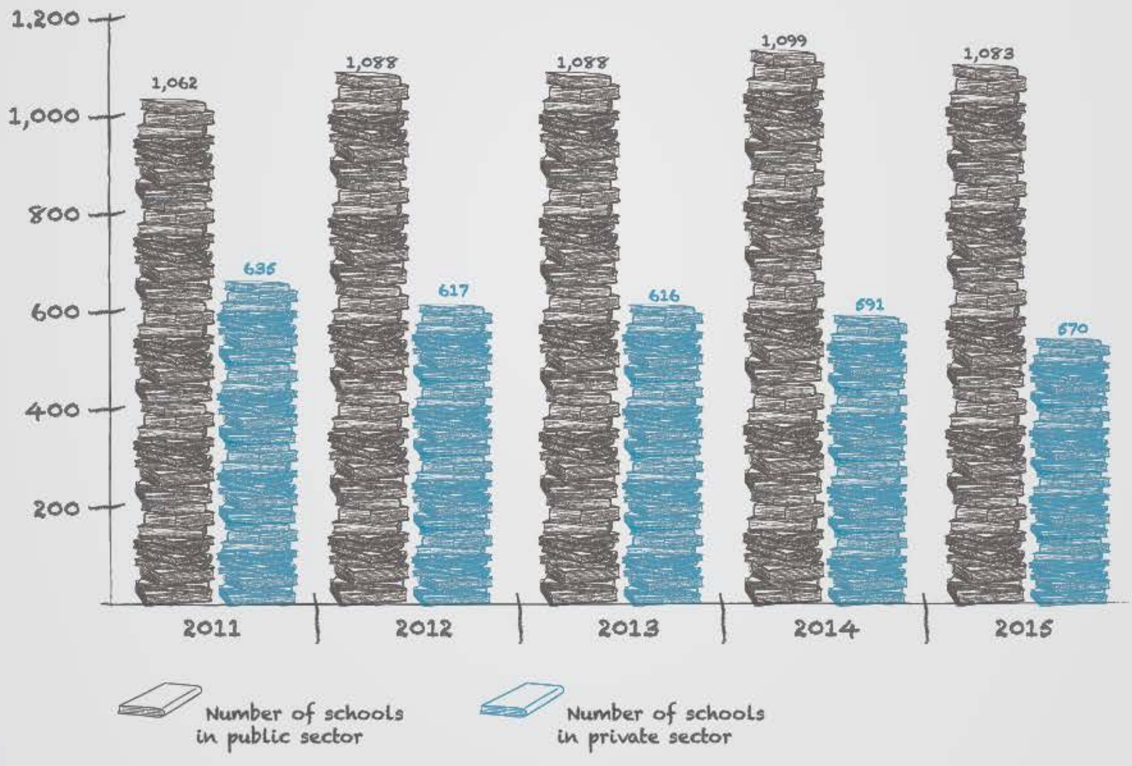
Supply drivers

At the end of 2015, there were 1,700 schools in total across Jeddah. Public schools represented 66%, recording a total of almost 1,100 schools. Historically, private international schools were restricted to foreign students but the Ministry of Education has relaxed the laws in recent years, allowing Saudi students with special permits to attend international schools.

Some of the leading private schools in Jeddah include:

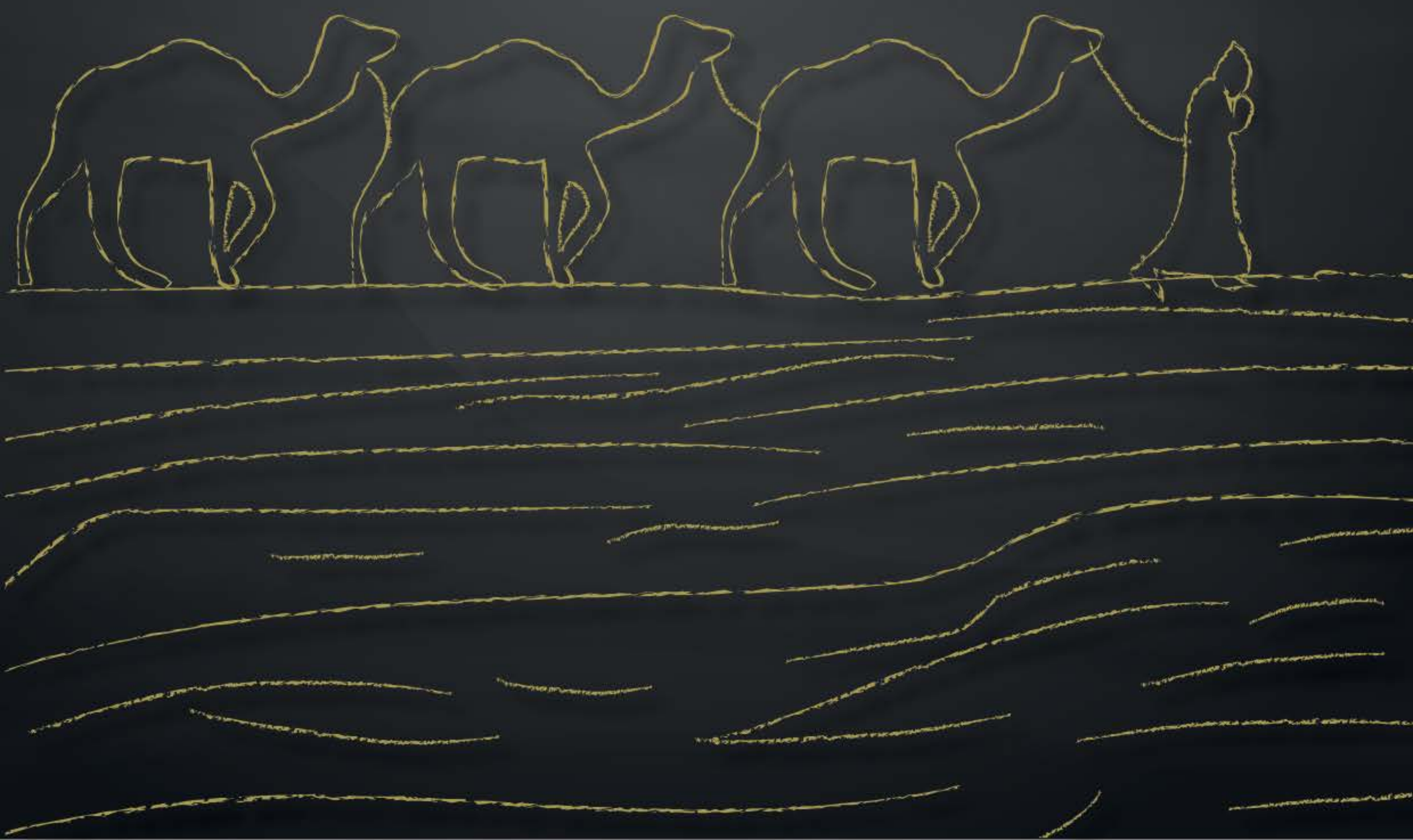
1. The British International School of Jeddah offering the IGCSE and IB curricu lums, with a current capacity of 1,500 students
2. Jeddah Knowlwdge International School offering both the American and IB diploma curriculums, with a capacity of over 1,000 students

Figure 20. Number of schools in Jeddah



X Source: Ministry of Education

EGYPT



EGYPT

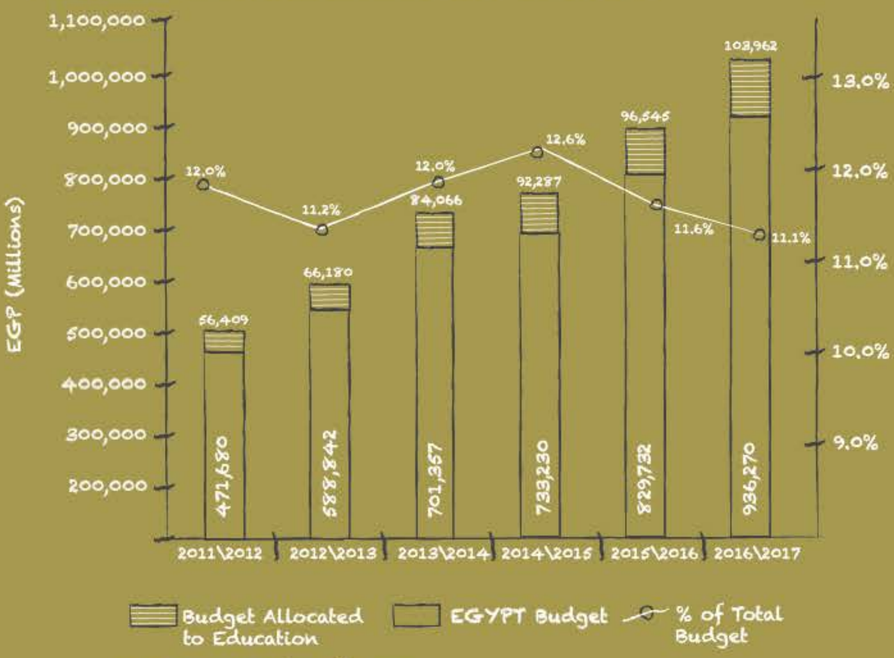
In its "2030 Egypt Vision", education and training are identified as major pillars for the future by the Egyptian government.

"A high quality education and training system available to all, without discrimination within an efficient, just, sustainable and flexible institutional framework. Providing the necessary skills to students and trainees to think creatively, and empower them technically and technologically. Contributing to the development of a proud, creative, responsible, and competitive citizen who accepts diversity and differences, and is proud of his country's history".

Public expenditure on education

The Egyptian government allocated almost EGP 104 billion to education (11% of its total public expenditure) in 2016/2017, which is an increase of EGP48 billion from 2011/2012. According to CAPMAS, pre-university education government spending accounted for 47% of spending on education, while university education expenditure represented 41% in 2016/2017.

Figure 21. Education expenditure as a % of total budget

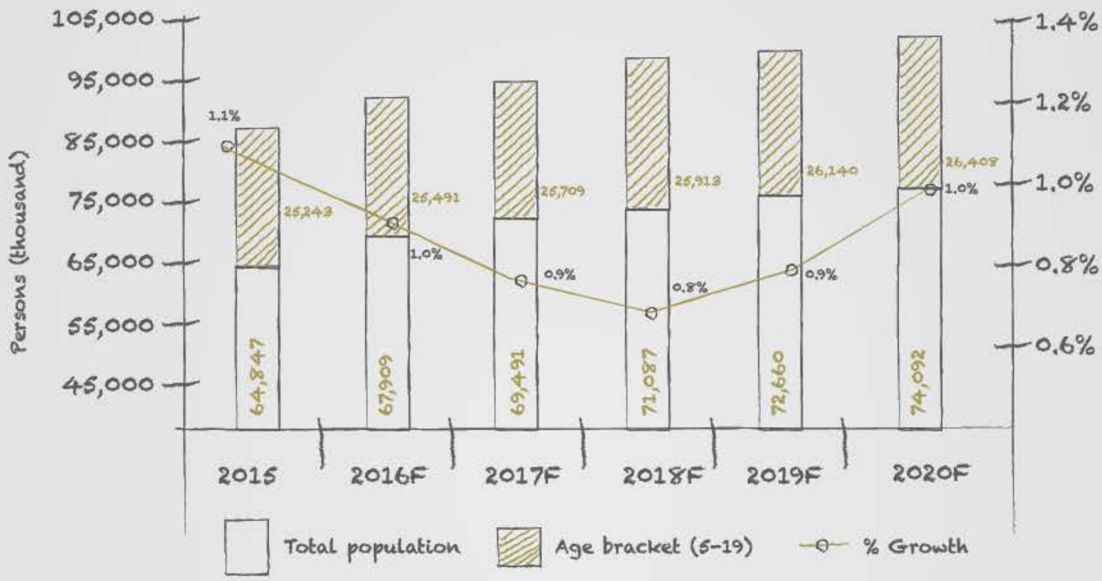


X Source: Ministry of Finance

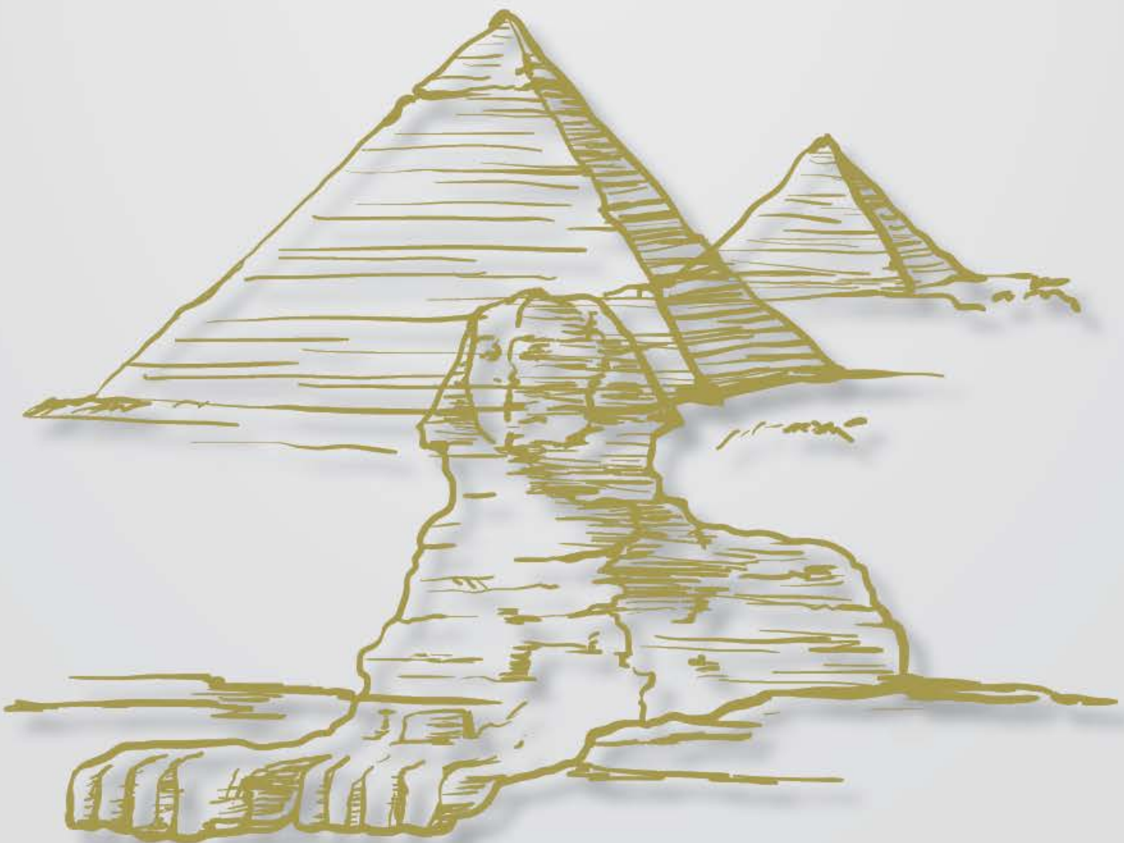
Demand drivers

The population of Egypt has increased by a CAGR of 2.5% over the period 2011-2015. With a young age profile, school age children (aged 5-19), account for approximately 28% of the total population resulting in a high demand for existing and new schools across the country.

Figure 22. School age population in Egypt



X Source: CAPMAS, Oxford Economics



Supply drivers

In 2015/2016, there were approximately 43,800 schools in Egypt. Public schools constituted the majority of the schools at 84%, while private schools were in the minority at just 16% of total schools. The total number of schools in Egypt has increased by 4,500 over the past 4 academic years.

Cairo houses many of Egypt's private schools and it is widely recognized that more private schools are required to cater for growing demand in the capital.

Some of the leading private schools in Egypt include:

1. American International School in Egypt offering its students the IB curriculum
2. The British International School in Cairo offering students both the IGCSE and IB curriculums

Figure 23. Number of Schools in Egypt

X Source: Ministry of Education

CONSTRAINTS AND CHALLENGES

In order to capitalize upon the opportunities in the private education sector across MENA, key challenges need to be recognised and addressed:

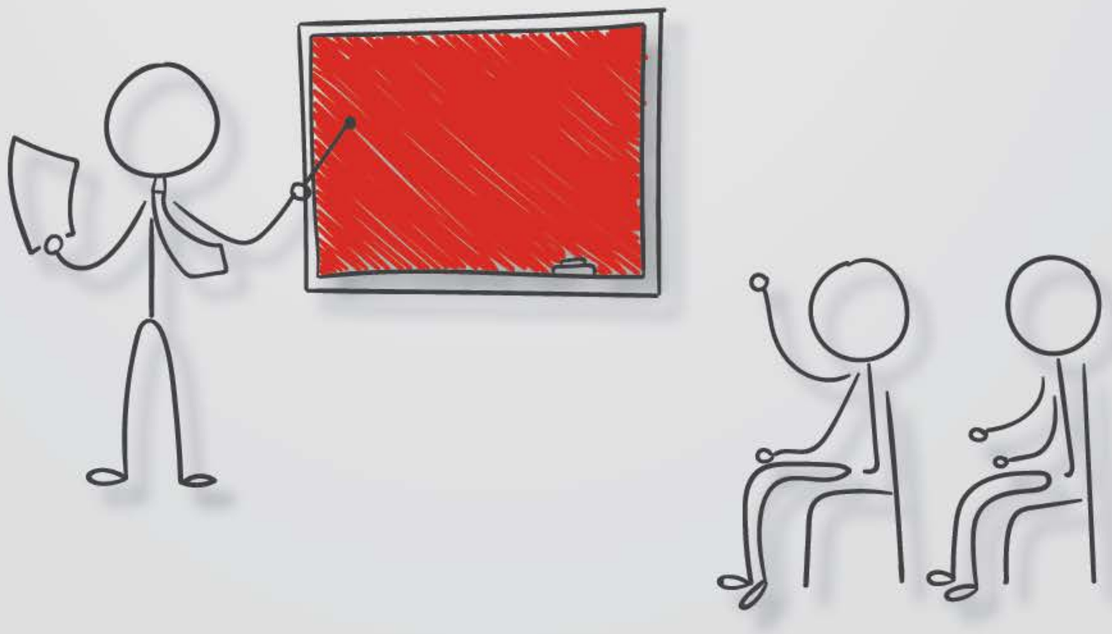
• Shortage of qualified teachers

Given the broad range of curriculums to satisfy the different nationalities, there is a continued need to attract sufficient internationally qualified teachers. Attracting and retaining teachers in a region characterised by high levels of staff turnover is probably the largest constraint facing existing schools and those looking to establish in MENA. School operators are faced with the challenge of offering teachers internationally competitive salaries. With accommodation costs and other living costs rising across the region, many schools have recognised the need to acquire or develop quality accommodation facilities close to their campus, that they can offer to teachers as part of their overall package.

According to the Egypt Strategic Plan for Pre-University Education 2014-2030, the shortage of teachers is further compounded by the fact that 30% of all existing teachers in Egypt are not educationally qualified.

Stakeholder comment: Palm Hills

"Attracting foreign teachers to Egypt has always been a challenge, and this situation has been aggravated following the two revolutions and the dollar limitation. Despite this constraint we recognize the need for more private sector schools, particularly in Cairo, and we are studying plans to add to our operations in this sector of the market".



• Availability of land

The land acquisition process varies across the MENA region, but in most countries the supply of school sites is controlled or regulated by the Government. There is general consensus that the availability of land is a more significant constraint than the cost of land in most markets, although these two factors cannot be totally disentangled.

In Dubai, there are various options and among them would be for a private school operator to source a land plot which holds both free hold and free zone status. This gives the operator the liberty to construct and operate the school without the presence of a local partner. However, the challenge is that most of the freehold and free zone areas in Dubai have already been allocated to master developers and prices are often beyond the level that is sustainable by a school operation. This leaves potential school developers / operators with two options:

Acquire or lease land from a government entity

An example would be The Knowledge Fund, a government institution which was established in 2007, has been gifted land plots that can be provided to developers for private schools on attractive commercial terms. The Knowledge Fund has conducted studies to determine which school curriculums are required in different locations.

Acquire or lease land from a private developer

A large number of land plots across the UAE are currently owned by private or government backed developers. This reduces the government's ability to provide free or subsidized land for the construction of new schools. Both Dubai and Abu Dhabi are witnessing a trend towards master planned mixed use communities. In many of these cases the master developer may decide to allocate a certain land plot for a school or other educational facility in order to enhance the overall attraction and performance of their project. In such a case, the potential school developer / operator will be required to negotiate the commercial terms for this land with the master developer.

This model is also popular in Egypt with the preferred option being the acquisition of land for schools from a major master developer or the governments New Urban Communities Authority (NUCA). Under this model, a joint venture (JV) is typically formed with the master developer being the majority owner and the school operator taking a minority holding. This approach was recently used to relocate one of Cairo's largest international schools to a new site within a master planned development in New Giza.

• Raising capital

While there are a lot of people looking to invest in education, funding remains a major constraint. The process of obtaining bank finance for an education facility could be challenging, particularly in circumstances where the developer / operator does not currently own the land.

Banks in Saudi Arabia will rarely offer loans for land plot acquisitions. The nature of debt offered is generally commercial loans for operational purposes which is granted to reputed educational operators. Hence, most private schools are developed as a joint venture between a school operator and the current land owner.

• Structuring of construction contract

The majority of construction contracts for schools in the MENA region are awarded under FIDIC Conditions of Contract. The FIDIC Red Book is used when the design is carried out by the employer and the FIDIC Yellow Book is used when the design is carried out by the contractor (design & build). These contracts tend be awarded on a fixed price lump sum basis.

In 2014, JLL managed the construction of the Global Indian International School (GIIS) in Bani Yas, Abu Dhabi. Our experience with this project (which was completed within a record timeframe) suggests that it is imperative to have a detailed scope of work and a contract binding the roles and responsibilities of the consultant, designer, and builder.

• Tuition fees and other Government regulations

There is a degree of government control and price fixing in the operation of private schools in all the major markets in MENA. While consumer protection and regulations regarding tuition fee increases and the quality of education provided are important safeguards for a consumer, they represent a potential constraint for prospective investors.

Dubai is currently the most regulated market to date, with the KHDA along with other entities such as the Dubai Statistics Center creating an 'educational cost index' that seeks to reward those schools that deliver the highest quality of education by providing them with the opportunity to increase fees above the levels that can be charged by lower performing schools.

The Ministry of Education in Saudi Arabia announced in July 2016 that it intends to cease the renewal of licenses for private international schools occupying leased properties which are not suitable or dedicated to educational purposes. This could potentially see the closure of 3,400 private and international schools, currently attended by over 700,000 students in the country. This could also lead to the increase in demand for specialised, build-to-suit educational buildings from investors and a growth in supply of better quality educational facilities in Saudi Arabia.

The Ministry of Municipal and Rural Affairs in Saudi Arabia also outlines some of the general requirements for establishing private schools. These include minimum land sizes for schools per phase and the minimum distance between established and planned schools in the same phase.

• Education is a specialised sector

Most financial investors in education will not seek any involvement with the day to day operations of the school, recognising that this is a specialist area best left to knowledgeable and experienced school operators. While there are a growing number of such operators now active across the MENA region (the largest being GEMS), the number remains relatively small, which limits the opportunities available for passive investors.

With growing demand, government support and potentially attractive returns, it is not surprising that many of the leading real estate players in the region are looking at opportunities in the private school sector, either within their existing businesses or through the creation of new companies or sector specific funds.

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