Going Global 3

Middle East and North Africa research: Report on trends and developments

The Illuminate Consulting Group

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Major changes and trends in the region

The opportunity landscape

Case studies

- Qatar Education City
- KAUST

FACTOR ONE: OIL PRICE



2008 rise and decline – but the run-up since 2002 is more important

Notes: Cushing, OK Crude Oil Future Contract 1 (USD per Barrel) from 4 January 2000 to 25 November 2008. Source: Energy Information Administration, U.S. Government.

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FACTOR TWO: EXCHANGE RATES



Strong USD appreciation pulls pegged regional currencies up

Notes: AED, GBP, and USD interbank exchange rates from 1 January to 26 November 2008. Source: Oanda Corporation.

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FACTOR THREE: STOCK MARKETS



The impact of the economic downturn has hit regional exchanges as well

Notes: Dow Jones Industrial Average (left axis) and Kuwait Composite Index (right axis) from 1 January to 26 November 2008. Data are normalized for calendar year.

Source: Dow Jones. ICG © 2008

- The recent global economic downturn, stock market declines, currency fluctuations, and credit crisis have begun to lead to a reassessment of the immediate future of international education
- The relative impact of these dynamics is highly differentiated between countries/Emirates, with some effectively unaffected (e.g.; Abu Dhabi), and others coming under pressure (e.g.; Dubai)
- It is unlikely that the long-term focus onto educational capacity creation will be negatively affected. Key drivers (demographics, employability, international competition, etc.) are not subject to short-term upheaval

The long-term trend of sustained educational demand will not change

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- In the past, boom times did not result in sustainable, diversified, and expertise-driven development. A number of countries and Emirates are now employing a much more rational and well managed approach
- Rather than just largely focusing on out-going students, current approaches are highly diversified, including local teaching and research capacity creation as well as in-bound recruiting
- The level of policy and fiscal commitments towards building out and sustaining (quality) educational capacity is a departure from the past
- A gradual awakening of the private sector, partial instances of civil society paradigms taking hold, and the gradually changing role of women in some countries have contributed to what appears to be major changes

Changes in the region should not be misunderstood as westernization

- Demographics: Supply pressure
- Educational participation: More for more
- Economic diversification: Away from oil and gas (maybe)
- Domestic social upheaval: Progress challenges old orders
- Technology: Love mobile phones, resent the Internet
- Traditional competitors: The US is recovering (pending further notice)
- New competitors: Australia and Canada as educational destinations
- New partners: China and India as suppliers of talent and products

The region is rapidly becoming more complex on multiple levels

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OPPORTUNITY AND ENGAGEMENT TARGET COUNTRIES / EMIRATES

High Potential	Medium Potential	Limited Potential
• Dubai	Abu Dhabi	Algeria
• Egypt	Bahrain	• Lebanon ⁽³⁾
• Jordan	Kuwait	Morocco
• Libya	• Qatar	• Oman ⁽⁴⁾
	• Saudi-Arabia ⁽¹⁾	Palestine Territories
	• Other UAE ⁽²⁾	• Syria
		 Tunisia

Notes

- (1) Saudi-Arabia's continued, substantial, and increasingly more diversified investments into higher education is tempered by the unique challenges of engaging in-country.
- (2) Specifically Sharjah and Ras al Khaimah.
- (3) The Lebanon offers good student recruiting opportunities and is home to some of the leading regional institutions. However, political instability poses a significant challenge.
- (4) Oman appears to have chosen a methodical approach which may allow it to move up in terms of potential.

Strong(er) Opportunities

- UK in-bound recruiting
- Capacity creation
 - Basic quality level
 - Medium quality level
- Applied research
- High quality labor market upskilling (vocational plus)⁽¹⁾
- Advisory / management services⁽²⁾
- English language training⁽³⁾

Weak(er) Opportunities

- UK out-bound exchange
- Capacity creation
 - High quality level
- Advanced research⁽⁴⁾
- Basic (entry level) research
- Regulatory / QA advisory⁽⁵⁾

Notes

- (1) Must be properly positioned.
- (2) Ranges from consulting to course development to management roles.
- (3) Can act as feeder to subsequent studies or is an integral part thereof (pre-foundation).
- (4) Very limited opportunities, largely centering in Saudi-Arabia and Qatar to date.
- (5) Typically requires coordination with other UK parties, chance to become more relevant.

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CASE STUDIES HAVE BEEN CHOOSEN TO DEMONSTRATE CUTTING EDGE OR RELEVANT INITIATIVES

KAUST

The King Abdullah University of Science and Technology (KAUST) is a multi-facetted initiative focused on creating leading research capacity and limited high quality graduate teaching backed by "unlimited" resources and facilitated through partnerships with the world's leading research institutions

Qatar Education City (QEC)

Qatar Education City (QEC) is about further building out leading – albeit focused – teaching capacity created and delivered by top US universities. QEC is co-located with Qatar Science and Technology Park (QSTP) and the Qatar Foundation (QF), both of which contribute to QEC acting as a learning and research hub

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- In 1995 Sheikh Hamad bin Khalifa Al-Thani set up the Qatar Foundation with a multibillion-dollar endowment to fund universities which agreed to open branches in what has become known as Qatar Education City (QEC)
- Qatar has adopted a multi billion dollar pick-and-mix approach by persuading highly respected universities to open programs in the QEC complex which stretches over 14 million square meters
- Education City's approach has attracted top US universities:
 - Virginia Commonwealth University School of the Arts in Qatar (1998)
 - Weill Cornell Medical College in Qatar (2002)
 - Texas A&M University at Qatar (2003)
 - Carnegie Mellon University in Qatar (2004)
 - Georgetown University School of Foreign Service in Qatar (2005)
 - Northwestern University in Qatar (2008)
- Current enrollment stands at ~2,500 students, of which 49% are Qatari

Source: Qatar Foundation.

UNIQUE ASPECTS OF QEC

- Qatar Foundation offers universities an attractive funding package to set up their operations in QEC:
 - All costs, including construction and salaries, are borne by the Foundation
 - Student fees can be remitted and reinvested back at the home campus
 - Universities have complete control over their annually submitted budget
- Standard-setting facilities: QEC is networked by one of the most advanced IT infrastructure systems in the region
- Qatar Science & Technology Park (QSTP) has invested USD 300 million in its first phase of providing excellent laboratories specifically designed for technology-based companies
- QSTP is a development hub in the region and Qatar's first free trade zone

QEC is structurally well provided for

Source: Qatar Foundation.

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Opportunities

- Strong political support
- Few financial constraints
- Elite partner universities on-site drive quality paradigm
- Attractive and proven US curricula
- QSTP's USD 300 million investment into research facilities should produce spillover effects
- 2008 marked the beginning of the construction of SIDRA which is endowed with USD 7.9 billion

Challenges

- Limited pool of high-caliber Qatari students who do not go abroad
- The lack of QEC research focus makes recruiting top faculty challenging
- Accreditation (e.g.; Cornell)
- The multi-university structure provides little coordination or synergies
- A growing reputation as an artificial Disneyland in the desert

QEC offers the highest quality undergraduate education in the region

- Established links between Qatar and the UK include:
 - January 2008: Qatar University and Durham University signed a Memorandum of Understanding to strengthen academic links
 - June 2008: Imperial College announced a ten-year research partnership with Qatar Petroleum, QSTP and Shell, worth USD 70 million
 - November 2008: QSTP launched a medical robotics facility in cooperation with Imperial College Qatar and Hamad Medical Corporation
- Qatar is keen on establishing a (European) law program
- Research collaboration: The Qatar National Research Fund launched the second cycle of its National Priorities Research Program in June 2008. Representatives from the QNRF visited UK universities in July 2008, including Nottingham, Imperial and Oxford

Qatar offers select, quality-focused opportunities for UK universities

OUTLOOK FOR QEC

- The region's traditional centers of education Baghdad, Beirut, Cairo, and Damascus have been degraded by war, poverty, and political strife
- Qatar Education City seems to be structurally capable to become the region's first choice for undergraduate education
- Yet recruiting local/regional students at the quality level stipulated will remain a challenge for some time to come
- Relatedly, it is an open question whether the eventual student/faculty headcount can generate a vibrant, intellectually self-sustaining institution
- However, the multi-universities approach, once solidified, could serve as a model for similar projects in the region

QEC's focus on quality is both blessing and curse

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AN INTRODUCTION TO THE KING ABDULLAH UNIVERSITY OF SCIENCE AND TECHNOLOGY (KAUST)

- KAUST is an international, co-educational, graduate-level research university which is set to open its doors in September 2009
- KAUST is governed by a Board of Trustees. Professor Choon Fong Shih (outgoing President of NUS) serves as the President Designate
- KAUST's core campus is located on the Red Sea near Rabigh and will occupy more than 36 million square meters
- King Abdullah has provided a multi-billion dollar endowment, making it the sixth wealthiest university in the world
- 300-500 students pursuing graduate degrees will commence in late 2009
- KAUST is driven by four strategic research areas:
 - Resources, Energy and Environment
 - Biosciences and Engineering
 - Materials Science and Engineering
 - Applied Mathematics and Computational Science

- Talent acquisition: Admission to KAUST includes a full fellowship and no tuition, plus a fellowship that covers students' final undergraduate year
- Standard-setting facilities: E.g. the planned KAUST/IBM Center for Deep Computing Research, ranking sixth in the world in terms of performance
- Elite partners
 - Academic Excellence Alliances: Berkeley, Cambridge, Imperial, Stanford, UT
 - Global Research Partnership Centers: Cornell, <u>Oxford</u>, Stanford, Texas A&M
 - Global Research Partnership Centers-in-Development: King Fahd University, National Taiwan University, Utrecht
 - Academic Research Partnerships: Woods, Institut Francais du Petrole, NUS, HKUST, AU Cairo, TU Munich, King Fahd University, UCSD
 - Investigators: Caltech, <u>Cambridge</u>, MIT, <u>Oxford</u>, others

No other educational venture has scaled quality this broadly or quickly

Source: KAUST.

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Saudi-Arabia is committed to acquiring faculty talent

Notes: Worldbank PPP (USD).

Source: Boston College, CIHE. International Comparison of Academic Salaries: An Explanatory Study. October 2008.

Opportunities

- No monetary constraints whatsoever
- Strong royal/political support
- High-quality student and faculty member body from scratch
- Attractive, competitive, and up-todate curricula through the Academic Excellence Alliances
- Elite network of research partner universities through the Global Research Partnership Program

Challenges

- Recruitment and retention of top faculty into one of the most socially conservative countries in the world
- Artificial and isolated nature of KAUST within Saudi-Arabia and within the community of scholars
- Structural and thematic overreach driven by ambitious timelines
- KAUST being both a beacon as well as a target

KAUST is full of unique promise, but also reaches very high

- Established links between KAUST and UK institutions include
 - The University of Oxford serves as a Global Research Partnership Centre partner
 - Imperial College London is engaged in joint research and curriculum development as part of the Academic Excellence Alliance
 - University of Cambridge: Peter Markowich, Professor of Applied Mathematics, was awarded USD 8 million through the GRP program
- Partnering with KAUST offers access to considerable funds. However, no illusion should exist that funds will not have to be earned
- KAUST's interest in recruiting and/or collaborating with top-flight faculty makes the UK a natural research partner as well as recruiting target

Going forward, KAUST offers select opportunities for UK universities

- The overall management structure, operational involvement of ARAMACO, and key hires are very promising. It remains to be seen if KAUST can establish an innovative institutional culture
- Broad, multi-facetted linkages with leading institutions in conjunction with generous funding schemes will provide KAUST with a scientific jump start
- The cultural divide between Saudi and non-Saudi staff and students will be an issue. Wedge issues (gender, religious tolerance) are quite likely to affect KAUST in one way or another
- KAUST has the definite potential to become a respected research institution in the short term. However, KAUST is not likely to become a global top 10 research institution within the next 10 or even 20 years

In balance: Tremendous potential, a good start – and open questions

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UK INSTITUTIONS INTERESTED IN ENGAGING WITH THE REGION SHOULD CONSIDER THE FOLLOWING PERSPECTIVES

- There is no one-size-fits-all engagement model. Instead, granularity by country, sector, business and delivery model is required
- Staffing must reflect the premium personal relationships carry
- The impact of different educational experiences and practices between the UK and the region is evident across many areas:
 - self governance vs. state control
 - social advancement vs. social control
 - discovery versus rote learning
 - individual vs. group achievement
- Cultural differences will continue to pose engagement challenges in the region and at home (e.g.; gender, religious freedom, lifestyles)

Maturation has begun – there is no (more) premium to be had

- Engaging with the region requires a soul searching on behalf of an institution. Is an engagement about
 - profit
 - development aid
 - mutually beneficially cooperation
 - competitive advantage
 - an international footprint
 - or a mixture of all of the aforementioned?
- Any engagement must be placed into an institution's overall international relationship framework. Too many initiatives have been stand-alone and thus not reaped systematic benefits
- Only a few researched engagements exhibited a comprehensive risk management approach, no evidence of any professional contingency planning has come to light

Good analytical, planning, and management practices are essential

- Education has become and will remain a topic of fundamentally conditioning importance for most but all countries in the region
- As a result, the region has developed a uniquely dynamic higher education landscape in which opportunities abound
- Yet UK institutions whishing to engage in the region should ask themselves whether they are not getting caught up in what appears to be somewhat of a bubble right now
- Indeed, many current initiatives are not performing at desired levels, and some seem adventurous at best. However, if approached from a longterm, equitable, and strategic perspective ventures can be made to work
- A key challenge for UK institutions thus is engage in a holistic manner by not just by looking at the region, but also by considering their own internal culture, capacity, and priorities

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