Islamic Finance
Monthly Bulletin

May 2011

Islamic Stock Markets
GCC Region 2
Far East Region 3
MENA Region 4
Rest of the World 5
Sukuk Market 6
Commodities 7
Recent Developments 8
Shariah compliant indices exclude industries whose lines of business incorporate forbidden goods or where debts/assets ratios exceed 33%. The increasing popularity of Islamic finance has led to the establishment of Shariah compliant stock indices in many stock markets across the world, even where local Muslim populations are relatively small, such as in China and Japan.

It has been a positive period for most countries in the region. UAE, Qatar, Saudi Arabia and Oman markets rose by 6.6%, 6.3%, 2.4% and 1.7% respectively. The notable exception was Bahrain, where the stock market fell by 2.6%, owing to the internal political unrest which brought the closure of its market. Kuwait also continued to decline by 1.4%.

Kuwait, once again remains the most risky market, with a VaR at -6.3% and a volatility of 1.5%. UAE and Bahrain had VaRs at -1.2% and -1.4% and volatilities of 1% each respectively. This was closely followed by Saudi Arabia, Qatar, and Oman with VaRs at -0.9%, -0.7% and -0.4% and volatilities of 0.5%, 0.8% and 0.4% respectively.

Volatility is a measure of trading activity. Higher volatility is observed during periods of financial crisis. Higher volatility is also associated with speculative trading. Value at Risk (VaR) estimates the worst possible return that can happen tomorrow with a given confidence (here 95%). Source: Datastream.
The markets in this region showed positive returns in general except for Malaysia, where the market declined by 1.5%. Taiwan showed the greatest hike, moving up by 4.5%. This was closely followed by the Philippines and Indonesian markets where there were positive returns of 3.8% and 2.7%. Singapore and Thailand also moved up considerably by 2.3% and 2%.

On the risk side, the Philippines and Thailand market was the most risky with VaR at -1.6% and volatilities of 1.1% and 0.9%. Singapore, Indonesia and Malaysia were at the same level of VaR with a value of -0.8% and their respective volatilities were 0.7%, 0.7% and 0.5%. Taiwan had a VaR at -1.1% and volatility of 1.2%.
Middle East and North Africa (MENA) region markets are less developed than GCC and some Far Eastern markets. Nevertheless, good investment opportunities do exist, particularly for investors willing to take extra risk.

Contrary to the previous month of recovery in the region, this period has been one of massive downfalls in many markets. Morocco dipped by a huge 9.6%. Egypt and Tunisia also declined by 3.4% and 1.3%. Jordan and Lebanon were the only markets which showed slight positive returns of 2.7% and 1%.

Morocco was the most risky market with VaR at -6.2% and volatility at 2.5%. Jordan and Egypt had VaRs at -2.9% and -2.5% and volatilities at 1.9% and 1.5%. Tunisia and Lebanon closely followed with VaRs at -1.4% and -0.9% and volatilities at 0.9% and 0.6% respectively.

Figure 3: MENA Region Stock Markets, April 2011. Egypt: MSCI Egypt Islamic; Tunisia: S&P Tunisia Shariah; Morocco: S&P Morocco Shariah; Lebanon: S&P Lebanon Shariah; Jordan: S&P Jordan Shariah. Source: Datastream
Elsewhere in the world, most markets showed positive returns. South Korea, South Africa and India showed positive returns of 1.7%, 0.9%, and 0.2%. Japan and China markets dipped by 0.5% and 0.4%. Hong Kong showed 0% returns. The two worldwide Islamic indices showed gains of 3.8%.

South Africa had the highest risk with VaR at -2.5% and volatility of 1.2%. India, China and Japan had VaRs at -1.3%, -1.4% and -1.2% and volatilities of 0.8%, 1.1%, and 0.9%. South Korea and Hong Kong had VaRs at -0.9% and -0.7% and volatilities were 1.2% and 0.6%.

Figure 4: Rest of the World Indices, April 2011. Korea: SPGI BMI Republic of Korea Shariah; Japan: S&P Japan 500 Shariah; South Africa: FTSE South Africa Shariah; Hong Kong: SPGI Hong Kong Shariah; India: FTSE Shariah India; Global: DJ Islamic Average; FTSE Shariah All World. Source: Datastream
The Dow Jones Citigroup Sukuk Index (DJCSI) index, which was launched in 2006, measures the performance of global bonds that comply with Islamic investment guidelines. The index is made up of investment-grade, US dollar-denominated Islamic bonds (Sukuk). Created as a benchmark for investors seeking exposure to Shariah-compliant fixed-income investments, the index shares design criteria and calculation assumptions with broader Citigroup fixed-income indexes, and screens for Shariah compliance consistent with the Dow Jones Islamic Market (DJIM) Indexes. Bond issues within the index must comply with Shariah Law and the Bahrain-based Auditing & Accounting Organization of Islamic Financial Institutions (AAOIFI) standards for tradable Sukuk. Bond issues must also have a minimum maturity of one year, a minimum issue size of $200 million, and an explicit or implicit rating of at least BBB-/Baa3 by leading agencies. The Dow Jones Citigroup Sukuk Index closed at 128.642 showing a surge in performance over the previous months’ close of 127.57. Only dollar-denominated Sukuk which are rated investment grade can be included in this index. Components include the General Electric (GE) Capital Sukuk Ltd. and the Islamic Development Bank (IDB) Trust Services Ltd and other GCC based companies as well.

Despite the uncertain regional political risks in the region, the Sukuk index rose on the back of rising oil prices, and buoyant equity bourses. Most of the constituents of the DJSCI which are listed on the GCC and the US equity markets posted healthy results.

Figure 5: The Dow Jones Citigroup Sukuk Index (DJCSI) measures the performance of sukuk bonds around the world. Source: Djindexes
Oil prices have continued to rise, with Brent reaching 126.11 USD per barrel by the end of April which is an increase on the month of 7.9%. The ongoing unrest in North Africa and the Middle East, the tax hike on oil the North Sea oil and the earthquake in Japan have all contributed to the price increase. Further to this, there are serious concerns on inflation, especially in the Euro zone. Also, by the rate at which oil prices are soaring, there are worries in the emerging markets of Asia, like India, where stocks have been underperforming and the economy looks vulnerable.

Natural Gas prices have also risen to an extent where the US President has requested Arab nations to boost their output. In the UK, the annual budget delivered an increase on energy taxes which had a major role in the price hike.

Gold prices have hit a fresh high following a debt warning on the US Government’s triple A rating by the Standard & Poors. The news added to growing concerns over falling currency values in the US and elsewhere, which have been a driving force in bullish gold prices.

The copper price has fallen for the third month in a row due to falling imports by China, its largest user, which announced that it is more profitable to produce locally than to import.

Palm oil prices in April remained steady compared to the previous month. Forecasts of increased production by the end of 2011 still hold true.

Raw cane sugar prices dipped considerably after Malaysia, the second largest producer after Brazil, announced that its shipments would rise above forecasts.
Kerala to rely on Shariah-based funds to develop roads

The Kerala government is planning to utilise Shariah based funds from Islamic countries to develop its roads throughout the entire state. The budget for 2011-12 earmarked 40,000 Indian rupees (Rs) for the road development project for the next 10 years. Out of the total amount, 1,000 (Rs) is to be generated from the Shariah based funds. This amount is to be raised from the Shariah based Islamic non-banking financial institute, Al Barakh Financial Services Limited.

Source: The Milli Gazette

Dubai to increase Islamic finance products to Germany

Dubai Exports, an agency of the Dubai Department of Economic Development (DED), Government of Dubai, has led an Islamic Financial Services Trade Mission to Germany. The mission was organized in partnership with the German Emirati Joint Council for Industry and Commerce (AHK) and sought to assist firms from the UAE to enter the largest economy in Europe. The mission was accompanied by leading firms in the sector based in the UAE with the principle aim of showcasing the high level of expertise in the area in Dubai as well as to connect the participants with potential opportunities in Germany. Germany has the largest Muslim population in Europe of 4 million with an estimated wealth in excess of €35 billion ($31.3 billion). The German potential is huge for the Islamic finance world because the population is young and its growth rate is high. Three quarters of the Muslim population in Germany is below the age of 49. In addition, estimates show that the Muslim population has a saving ratio of 18 per cent as compared to 10 per cent for the country as a whole. More importantly, a survey in 2010 showed that 72 per cent of Muslims are interested in Islamic financial products. The survey found that if such products were offered in Germany, 60 per cent of respondents would consider an investment. An amazing 94 per cent stated they would purchase such products if offered by an Islamic financial institution. The Islamic insurance sector alone is estimated to be worth more than €1 billion ($1.4 billion). Studies show not only that the retail component lucrative but so is the corporate sector. Muslim entrepreneurs generated more than €50 billion ($69.9 billion) in profits last year and this is an ideal market for the launch of Shariah-compliant corporate products.

Source: www.cpifinancial.com

US paves the way for Halal food index

The formal announcement of the SAMI (Socially Acceptable Market Investments) Halal Foods Index by Thomson Reuters and Ideal Ratings was made in Malaysia. The index tracks Halal food companies in 15 Muslim markets.

Ideal Ratings is a San Francisco-based company that provides an equity screening service to Islamic funds around the world. Rushdi Siddiq, head of Islamic Finance at Thomson Reuters, played a vital role in the development of this index because he described Islamic finance and Halal industries, as “twins separated at birth”. To date, the SAMI index has outperformed several leading global food indexes from March 2010 to March 2011 by 20%, according to Ideal Ratings.
CapAsia invests in Kazakhstan electricity utility

CapAsia, a private equity fund managed jointly by the CIMB Group and Standard Bank Group, which specialises in mid-cap infrastructure investments in Southeast Asia and Central Asia, will provide $50 million in equity capital to Central Asian Power and Energy Company (CAPEC) in Kazakhstan.

CapAsia entered into the agreement via its Islamic Infrastructure Fund (IIF), a $262 mn private equity infrastructure fund that is jointly sponsored by the Islamic Development Bank and the Asian Development Bank. The proceeds of IIF’s equity investment will be used to support CAPEC’s multi-year capital improvement programme aimed at improving the company’s heat and power generation and distribution facilities.

Source: Zawya

BAHRAIN and UAE

Bahrain Bourse Lists $530.4 million Government Ijarah Sukuk

The Central Bank of Bahrain on behalf of the Government of the Kingdom of Bahrain issued Government Ijarah Sukuk. The face value of the Sukuk is BHD 10,000 ($26,500) will mature in five years. The Sukuk pays an annual fixed interest of 5.5 per cent payable every six months. With this listing, the number of conventional bonds and Sukuk on the bourse reached 13 issues with an approximate total value of $4.69 billion.

Source: CPI financial

Dubai’s Nakheel pays $1.25 bn to trade creditors

Nakheel, the real estate arm of debt-laden conglomerate Dubai World has paid AED 4.6bn ($1.25bn) in overdue payments to its trade creditors. The developer, which is seeking to delay repayment of some $10.5bn of debt, expects to secure the agreement of trade creditors representing 95 percent of the debt by the end of the first half. Nakheel has to date made payments of AED 4.6bn ($1.25bn) to its trade creditors. Nakheel is expecting to finalise its restructuring before the end of first half of 2011. Nakheel, which has been in negotiations with both trade creditors and banks to repay its debt obligations, said it will soon issue restructuring agreements, including a term sheet for an Islamic bond offering, to trade creditors that have signed on to its restructuring plan. Under Nakheel’s restructuring proposal, trade creditors will receive repayment through 40 percent cash and 60 percent in form of sukuk. Nakheel’s statement follows an announcement from parent Dubai World that it has signed a final agreement with its 80 creditors to restructure $24.9bn in debt. Nakheel was at the centre of Dubai’s real estate boom with projects such as islands in the shape of palms and a map of the world. The developer’s inability to meet its debt obligations, in the wake of a property collapse and the global credit crunch, helped trigger Dubai’s debt crisis in 2009.

Source: Zawya

Dubai based Mawarid Finance launches IFS

Mawarid Finance, a private joint stock company established in Dubai, launched IFS the new company within the group to be as a one-stop-shop service provider for all Islamic Banking and Takaful outsourced services. IFS will provide distinct operational banking services, business and technical consultation in the region through a combination of robust delivery
Recent Developments

Global Developments

www.lums.lancs.ac.uk/research/centres/golcer/

process, people and technology.

Source: AME Info

A boost to the Real Estate Market in UAE by Emirates Islamic bank and Abu Dhabi Islamic Bank

Emirates Islamic Bank liberalizes home mortgage policy Emirates Islamic Bank has made significant changes to its home mortgage policy to help end users enter the United Arab Emirates’ property market on competitive terms. With the new package, Emirates Islamic Bank (EIB) will be offering rates as low as 5.45 per cent p.a. on reducing balances, and open new segments such as self-employed, relaxed length of service for employees based on their salary, including buy out campaigns, special offerings for Sheikh Zayed housing programme and those involved with the Mohamed Bin Rashed housing project. EIB home finance packages are based on Shariah-compliant banking principles and tailored to suit all financial and personal needs providing customers with unique benefits and advantages.

Source: IFIS

ADIB offers 5.5 per cent profit rate at Cityscape Abu Dhabi

Abu Dhabi Islamic Bank (ADIB) is offering a range of incentives to boost the UAE real estate market through the ADIB Real Estate Solutions Centre at Cityscape Abu Dhabi 2011. ADIB offers instant approvals on a complete suite of home finance solutions that include financing from the construction of new homes, financing from developers and refinancing properties with the option of releasing equity. These solutions are offered at market leading profit rates starting at 5.5 per cent. At Cityscape, ADIB intends to create customized solutions to facilitate developer purchase, owner to owner purchase, and construction financing. It will refinance buy outs as well as cash outs for property sector investors and will be open to customizing financing options for all segments of the property sector. ADIB customers will also be able to access ADIB’s AED 15,000 free shopping offer with the ADIB Etihad Covered Card and 50,000 Etihad Guest miles.

Source: www.cpifinancial.net

AlHilal Bank rolls out $117 million to finance Emirates Steel plant expansion

Al Hilal Bank has allocated AED 430 mn ($117 mn) as part of a major AED 4.77 bn ($1.3 bn) dual tranche Islamic and conventional financing deal covering Emirates Steel Industries. The Ijarah-structured loan will partially fund Emirates Steel’s plant expansion project and partly repay the steel producer’s AED 2.6 bn ($707.8 mn) multicurrency bridge loan facility. The Islamic tranche was closed in just eight weeks against a backdrop of volatile steel prices and tight bank liquidity, with more than two times oversubscription on the commercial debt and four times on the Islamic facility.

Source: IFIS

ADIB launches Capital Protected Soft Commodity Note

Abu Dhabi Islamic Bank (ADIB) has launched its capital protected Soft Commodity note, a Murabaha-based note, the profit of which is determined by the prices performance of cotton, corn and sugar. Investors can obtain a maximum return of
up to 18% over two years with an annual payout. The minimum period of investment is two years.

These three commodities are directly relate to the growth in population and buying power of the emerging economies of China, India, Asia and Africa. Prices also depend on climate conditions and energy prices.

ADIB advises that the return on the Note is expected to be higher than that expected from a time deposit. The price performance of the three commodities offered in the note has been excellent. ADIB expects this strength to continue over the next two years.

*Source: www.cpifinancial.net*

**UAE: Takaful Emarat to offer new Islamic funds**

Takaful Emarat has sealed a partnership with Reliance Asset Management (Malaysia) (RAM-MY), the Islamic asset management arm of Reliance Capital Asset Management, India, to offer its customers three new Shariah-compliant funds.

*Source: www.cpifinancial.net*

**Qatar, Saudi Arabia and Kuwait**

**QIB unveils ‘Themar’ – a new investment product**

Qatar Islamic Bank (QIB), announced a new investment plan. ‘Themar’ will allow clients to invest regularly into the sukuk market and Islamic financial institutions stocks around the globe. QIB-UK, the bank’s subsidiary based in the United Kingdom and the QIB Group centre of excellence for Asset Management, will use its extensive experience in fund management to oversee the Themar investment portfolio. Themar offers two modes of subscription for its customers, a monthly investment, and a one-off investment. The monthly investment choice: a maturity term of two or five or eight years with a minimum monthly subscription of QR 2,000. The one-off plan requires a single lump sum payment with a minimum investment of QR 40,000. Monthly investors are committed for their respective maturity terms whereas lump sum investors may liquidate their investment on a weekly basis. The investment plan will return five dividends or ‘coupons’ per year – a dividend each quarter and an annual profit bonus, usually paid in June. Themar has targeted a return of 7% per annum in the long term through a strategy aimed at building a balanced investment offering diversification and cost efficiency. Half of the Themar portfolio will be invested in Sukuk (Islamic Bonds) and the rest in Islamic Financial Institution Equities.

*Source: Gulf Times*

**Mazaya Qatar to raise Marina Mall funds through equities & Sukuk**

Mazaya Qatar, the real estate development company based in Qatar is planning to raise funds through equities and sukuk for its Qatari Riyal 1bn ($274 mn) Marina Mall project. The company entered into a 30-year build-operate-transfer (BOT) agreement with Qatar Foundation for the development and management of Marina Mall in Lusail. The cost of the project is estimated at QR1bn and is due for completion within 36 months once the detailed design is accepted. However, the QR1bn capital-based company, in which Qatar Foundation holds a 21.2% stake, is planning to finance in-house its
other two projects: Housing Complex for Qatar National Convention Centre and Sidra residential project. All three projects belong to Qatar Foundation.

*Source: Gulf Times*

**Saudi BinLadin repays USD$186 million Islamic bond**

The Saudi BinLadin Group, one of the leading contractors in the region repaid its short-term SR700 mn (S$186.6 mn) Islamic bond in full at maturity on April 12. The sukuk, settled through Tadawul, was originally issued on July 2010 and was the first short-term sukuk to be issued in the Saudi market. This short-term sukuk, which was solely led by HSBC Saudi Arabia Limited was more than 2.5 times oversubscribed. The innovative instrument balances well the short funding needs of Saudi corporate issuers while offering an attractive yield pick up to Saudi investors.

*Source: Good News 4ME*

**Saudi Arabia’s Al Rajhi Bank launches gold investment**

Al Rajhi Bank has introduced a new product, Al Rajhi Gold-i, to capture the rising demand for gold as an investment. The investment product is targeted mainly at retail and corporate customers who want to diversify their investment portfolio. Al Rajhi Gold-i comes with takaful protection, while the gold trading is based on Musawamah contract.

*Source: Business Times*

**Kuwait’s Liquidity Management House (LMH) completes $331.6 million debt restructuring deal for First Investment Company (FIC)**

LMH, serving as the structuring advisor on behalf of six Kuwait banking institutions, has successfully completed a KWD 92 mn ($331.6 mn) debt restructuring of FIC in February 2011. The deal, between FIC and its creditors, is a unique Sukuk Al Wakala transaction for the purpose of restructuring the debt of FIC. The transaction is the first of its kind in Kuwait in terms of utilizing Sukuk for the purpose of restructuring a company’s existing debt obligations. An initial closing in September 2010, which involved one of FIC’s major creditors, allowed the remaining creditors to join the deal. FIC is a Shariah-compliant company and its debt obligations consist of numerous unsecured bilateral Islamic financing facilities to multiple creditors in Kuwait. A key incentive for creditors joining in the Sukuk transaction is the obligation for FIC to collateralize the vast majority of its local and foreign assets to the security of creditors in various jurisdictions. In doing so, the creditors will be placed in a stronger position through a secured transaction, as opposed to unsecure bilateral obligations. In return, FIC has the opportunity to move forward with its business operations and restructure its debt in a manner intended to secure the future sustainability and success of the company.

**Turkey**

**Norton Rose advises on Turkey’s largest Islamic syndication**

Norton Rose (Middle East) LLP has advised Citibank as arranger in relation to a US$300 mn dual tranche Murabaha syndicated facility for Turkiye Finans Katilim Bankasi A.S., an Islamic bank in Turkey 60% owned by the National Commercial Bank of Saudi Arabia. It is the largest Islamic syndication in Turkey to date.

*Source: Norton Rose*
Noor Islamic Bank closes $300mn structured Murabaha Syndicated Facility for Bank Asya

Noor Islamic Bank, as the initial mandated lead arranger and book runner with ABC Islamic Bank (E.C.), National Bank of Abu Dhabi PJSC and Standard Chartered Bank, has successfully closed a $300mn dual currency Islamic structured Murabaha Syndicated Facility for Bank Asya, one of Turkey’s leading Islamic banks.

Source: AME Info

Malaysia

Malaysia propelling the growth of Takaful industry

RAM Rating Services Berhad, a Malaysian based rating agency, notes that Malaysia has successfully propelled the Takaful industry to the next level. While not as prominent as the overall Islamic banking industry, Takaful is marching ahead at its own pace, with a 20 per cent to 26 per cent year-on-year growth in terms of total assets and contributions between 2004 and 2009. Furthermore, Malaysia’s established regulatory and legal frameworks have given the country a clear edge over other jurisdictions. Takaful operations have been regulated and supervised by Bank Negara Malaysia (BNM) since 1988. According to a BNM report, as at end-February 2011, banks accounted for 89.6% of the primary subscribers in the Sukuk market, with Takaful and insurance operators contributing a mere 3.9%. The lack of long-term instruments has often been cited as the chief constraint against the industry’s growth. While various Sukuk structures exist, Takaful and insurance companies have to compete against banks that absorb most of these papers.

Source: IFIS

Kuwait Finance House (Malaysia) launches an interest free loan scheme for single mothers

Kuwait Finance House (Malaysia) Bhd (KFHMB), the country’s first foreign Islamic bank, has launched an interest free loan scheme for single mothers to start businesses in Kelantan. It has allocated RM2 mn ($0.67 mn) in funds for the scheme which will also have a flexible repayment schedule. Chief Executive Officer of KFHMB, Jamelah Jamaluddin, said the loan scheme was part of the company’s corporate social responsibility (CSR) programme.

Under the new scheme, KFHMB will offer loans to single mothers to help start their businesses and achieve financial independence. The minimum loan given will be RM3,000 ($1,000) and the maximum will be RM30,000 ($10,000).

Source: www.halalmedia.com

Malaysia: AmIslamic offers energy-themed product

AmIslamic Bank Bhd aims to ride on the growth of energy-themed commodities while protecting investors from the high volatility and unpredictable commodity market with its latest offering, AmEnergy Islamic Negotiable Instruments of Deposit (NID-i). This is a two-year product which tracks the performance of three energy-themed commodities, namely oil, soyabean (biodiesel) and sugar (ethanol). AmEnergy NID-i, a close-ended product with a targeted size of RM100 mn (US$33 mn), is suitable for investors who want to ride on the energy-themed commodities’ growth but are risk averse and wish to protect their capi-
Recent Developments

AmEnergy NID-i, a Shariah-compliant product based on Mudharabah Muqayyadah concept, is principally protected upon maturity by virtue of underlying investment strategy. Minimum investment amount is RM70,000 (US$234,000) and subsequent investment is in multiples of RM10,000 (US$3,345). Investors’ capital is guaranteed.

Source: *Business Times*

**Indonesia: Amanah Syariah in $2.12m SME boost**

HSBC Amanah’s Indonesian unit, Amanah Syariah has allocated $2.12mn to the development of micro, small- and medium-sized enterprises in Indonesia. The program will be overseen by Permodalan Nasional Mada-ni, a government-owned finance house, through a Mudarabah agreement. HSBC is also funneling its investment through PNM.

Source: *The Islamic Globe Newspaper*

**Pakistan raises holding limit of Ijarah Sukuk**

The State Bank of Pakistan has raised the maximum holding limit of Pakistan sovereign Ijarah Sukuk by Islamic banks from 35% of the issue amount. The holding cap was previously imposed to avoid an over-concentration of assets by the banks. The new 35% limit is to be extended to domestic commercial banks that operate Islamic windows in Pakistan and will be applied on an amalgamated basis, combining any exposures that the commercial bank and its Islamic window has to the sovereign Ijarah Sukuk. Commercial banks will be limited to a maximum 25% holding in the Sukuk.

Source: *The Islamic Globe Newspaper*
The Gulf One Lancaster Centre for Economic Research (GOLCER) was established in May 2008 by Lancaster University Management School and Gulf One Investment Bank. The centre is funded by a donation from Gulf One Bank. The main purpose of the Centre is to conduct empirical research focused on key economic and financial developments in the Middle East and North Africa (MENA) region, with special emphasis on the Gulf region. This region includes Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirates, countries that form the Gulf Cooperation Council.

GOLCER’s research agenda will include, as primary topics, energy economics, Islamic banking and finance, telecommunication and infrastructure economics. Recent developments in these fields will be assessed in the light of their impact on the economy of the Gulf region. In addition to its research activities, GOLCER will provide tailored training courses in specialised areas, including quantitative methods and applications of state-of-the-art econometric and statistical software packages to economic and financial phenomena. GOLCER will also provide consultancy services.

**Professor David Peel**  
*General Director, GOLCER*  
d.peel@lancaster.ac.uk

**Dr Marwan Izzeldin**  
*Executive Director, GOLCER*  
m.izzeldin@lancaster.ac.uk

**Mr Vasileios Pappas**  
*PhD Student (GOLCER)*  
v.pappas@lancaster.ac.uk

**Ms Momna Saeed**  
*PhD Student (GOLCER)*  
saeedm@exchange.lancs.ac.uk

**Ms Rhea George**  
*PhD Student (GOLCER)*  
r.george@lancaster.ac.uk

We would like to thank Dr GR Steele for his contribution.

**DISCLAIMER**

This report was prepared by Gulf One Lancaster Centre for Economic Research (GOLCER) and is of a general nature and is not intended to provide specific advice on any matter, nor is it intended to be comprehensive or to address the circumstances of any particular individual or entity. This material is based on current public information that we consider reliable at the time of publication, but it does not provide tailored investment advice or recommendations. It has been prepared without regard to the financial circumstances and objectives of persons and/or organisations who receive it. The GOLCER and/or its members shall not be liable for any losses or damages incurred or suffered in connection with this report including, without limitation, any direct, indirect, incidental, special, or consequential damages. The views expressed in this report do not necessarily represent the views of Gulf One or Lancaster University. Redistribution, reprinting or sale of this report without the prior consent of GOLCER is strictly forbidden.