

MENA: Counting the costs, and benefits

It has been two and a half months since the revolution in Tunisia set off a wave of unrest and political change throughout the Middle East and North Africa (MENA) region. As the unrest continues to spread, we take stock of the economic costs and benefits of political instability and transition to democracy. We find that the near-term aggregate negative implications for non-oil producers are proving the highest, while ramped up fiscal spending in some producers will support economies already receiving the benefits of higher oil prices. Nonetheless, fiscal surpluses will not be as high as otherwise expected. Over the longer-term, economic and commercial opportunities should resurface in post revolutionary countries, but the road to recovery may be long.

The following piece looks at a series of transmission channels through which political instability and transition to more democratic institutions is affecting MENA economies. In sum, the implications are mixed, due in large part to differing effects from oil price rises and varied amounts of fiscal space for support measures. Because much of the regional growth improvement, where it exists, is expected to come from oil and fiscal stimulus, countries are not likely to make any significant headway in the important structural shift that is needed—increasing non-oil, private sector output. Moving toward economic diversification and increased private sector activity are key elements in helping to create longer-term sustainable employment opportunities for the large youth populations in many MENA countries.

We expect foreign direct investment to decline across the region, while tourism revenues look vulnerable in many popular destinations, aside from Dubai. Nonetheless, many regional investors will continue to focus on longer-term opportunities, particularly arising from the dividends of a new democratic environment. These should include increased transparency and accountability, as well as a more leveled playing field, though admittedly the road to reaching those improvements could prove long.

Near-term economic performance will diverge across the region

Not surprisingly, our economic forecasts for countries in the region have been shifting in recent weeks. We significantly downgraded our growth forecast for Egypt for this year (to 1.2%), and have increased the projected size of both the current account and fiscal deficits (to 3.2% and 10.4% of GDP, respectively). In the Gulf, we have actually upgraded our

29 MARCH 2011

Fixed Income Research

Contributing Analyst

Ann Wyman
+44 20 7102 9287
ann.wyman@nomura.com

Icaro Rebolledo
+44 20 7102 1590
icaro.rebolledo@nomura.com

This report can be accessed electronically via:
www.nomura.com/research or on Bloomberg (NOMR)

Figure 1. Saudi Arabia economic forecast

	2009	2010	2011	2012
Real GDP % y-o-y	0.2	4.0	6.0	4.5
Hydrocarbon % y-o-y	-8.7	2.4	5.5	2.9
Nonhydrocarbon % y-o-y	3.0	3.7	3.5	3.2
Nominal GDP, USDbn	370.1	443.7	492.5	524.0
CPI % y-o-y *	5.0	5.4	5.6	5.0
Budget balance % GDP	0.9	4.5	2.0	3.5
Current account % GDP	6.0	11.5	20.4	15.0
External debt, USDbn	101.0	105.3	110.0	120.4
External debt, % GDP	27.3	23.7	22.9	23.6
Short-term interest rates %	0.70	2.00	2.00	2.50
USDSAR*	3.75	3.75	3.75	3.75

*End of period, **Period average, Bold is actual data

Source: Nomura Global Economics.

Figure 2. Egypt economic forecast

	2009	2010	2011	2012
Real GDP % y-o-y	4.8	5.3	1.2	3.1
Nominal GDP, USDbn	187.4	212.0	239.6	269.8
CPI % y-o-y *	13.3	10.3	12.1	9.5
Budget balance % GDP**	-6.9	-8.3	-10.4	-8.9
Public sector debt, % GDP	70.5	73.9	78.1	79.8
Current account % GDP	-3.0	-2.5	-3.2	-2.7
FX reserves, gross USD bn	30.0	35.1	29.0	31.0
External debt % GDP	17.1	16.3	17.7	18.2
Policy rate %*	8.25	8.25	8.25	9.00

*End of period, **Fiscal year ending June, Bold is actual data

Source: Nomura Global Economics.

forecasts for 2011 economic growth in Saudi Arabia, UAE and Qatar (to 6.0%, 4.8% and 20.2%, respectively). These upward revisions come on the back of higher oil and gas prices. Moreover, in Saudi Arabia, increased oil production (to compensate for lost Libyan output) and two large fiscal stimulus packages are all expected to have beneficial effects on growth, while an improved outlook for domestic demand could boost activity in the UAE (see Figures 1- 3). Nonetheless, even underperformers such as Tunisia, Egypt, and even Libya, have the potential to become outperformers over the following years if and when political stability returns.

External financial assistance important for supporting activity

Assistance from external donors and multilateral lenders will likely play an important role in supporting economic activity in post-revolutionary MENA economies during their transition to democracy. Offers of assistance have already come from the US and the EU, including proposals to form both Egyptian-American and Tunisian-American Enterprise Funds worth US\$60mn and US\$20mn, respectively. Moreover, the EU has announced the immediate release of EUR17m in emergency aid for Tunisia and the extension of EUR258mn by 2013. The European Investment Bank, which last year lent around EUR900mn and EUR560mn to Egypt and Tunisia, respectively, has announced investments of EUR1.87bn in Tunisia. These will focus on sanitation, energy and road infrastructure, as well as support for small and medium enterprises, with the aim of encouraging job creation. The EU has also urged the European Bank for Reconstruction and Development (EBRD) to increase its involvement in region's transition to democracy. The EBRD has expressed its willingness to invest EUR1bn a year in Egypt subject to the approval of Egypt's request to be included in the bank's list of countries in which it can invest. The African Development Bank has also indicated that it may earmark US\$0.5-1.0bn in credits to help Tunisia address what it sees as some of the most important structural issues including youth unemployment.

High oil prices: a mixed blessing

Within the Middle East and North Africa, there has always been a clear economic divide between net oil exporters and importers, and the effects that oil prices can have on their respective economies. Oil exporters such as Saudi Arabia, UAE or Qatar will naturally reap benefits from the recent increase in prices, with GDP increases as discussed above. On the other hand, Tunisia and Egypt stand to be negatively affected, with consequences for inflation, current account and fiscal balances. Under the current conditions of growing political unrest, this divide between oil importers and exporters also has important implications for the amount of fiscal space available to governments as they face increasing pressure to be proactive in improving living conditions and minimizing economic and social complaints.

Figure 3. Qatar economic forecast

	2009	2010	2011	2012
Real GDP, % y-o-y	9.6	16.5	20.2	14.0
Hydrocarbon % y-o-y	13.2	25.0	18.1	12.7
Nominal GDP, USDbn	93.3	114.7	132.0	150.4
CPI % y-o-y **	0.5	1.5	3.6	3.5
Budget balance % GDP	12.2	10.0	12.0	10.0
Current account, USDbn	9.6	22.8	34.0	36.0
Current account % GDP	10.3	19.9	27.9	23.9
External debt, USDbn	76.5	90.1	93.1	95.5
External debt, % GDP	82.0	78.5	70.6	63.5
Short-term interest rates %	2.00	1.50	1.50	2.00
USDAED*	3.67	3.67	3.67	3.67

*End of period, **Period average, Bold is actual data

Source: Nomura Global Economics.

Figure 4. Sensitivity to a 10% increase in oil prices

	GDP (pp growth)	Current Account (pp of GDP)	Budget balance (pp of GDP)
Egypt	-0.1	-0.1	-0.3
Kuwait	2.2	4.0	3.6
Qatar	2.1	3.9	4.1
Saudi Arabia	0.8	4.9	4.3
UAE	0.6	2.5	2.3
<u>Other EEMEA</u>			
<i>Russia</i>	<i>0.4</i>	<i>2.4</i>	<i>1.1</i>
<i>Turkey</i>	<i>0.0</i>	<i>-0.3</i>	<i>-0.3</i>

Source: Nomura Global Economics.

Looking at some of the economic variables in detail, we estimate that for every 10% increase in oil prices, Saudi Arabia's growth will be 0.8 pp higher, while the implications for Qatar and Kuwait are even more notable, with growth rising more than 2pp in each. External accounts for oil exporters are also likely to register higher surpluses (all the more so in Saudi Arabia where production has increased by almost 700k bpd in recent weeks). We see the current account surpluses in Qatar and the UAE widening by an additional 2pp of GDP and by almost 5pp of GDP in Saudi Arabia as a result of the recent increase in prices, which we expect will remain underpinned for the remainder of the year (Figure 4).

Governments react to political stress with economic measures

Governments across the MENA region have sought to alleviate growing political and social pressures through a series of announced spending packages. The most dramatic in terms of size have been the two announced by Saudi Arabia, including a US\$36bn package targeting lower-income citizens, followed by a further US\$93bn stimulus package creating 60,000 new security jobs as well as enhancing unemployment insurance and other social benefits. Some US\$63bn of this amount is expected to support new housing projects and could take place over the next several years. Other countries in the region have also sought to ease economic stress on their populations through spending measures. For example, in Oman, the Sultan announced the mandatory creation of 50,000 new jobs (both public and private sector), as well as the increase of the minimum wage and of the unemployment insurance. In Egypt, public sector wages have been increased, and similar measures have been implemented in other countries across the region, including Jordan and Yemen.

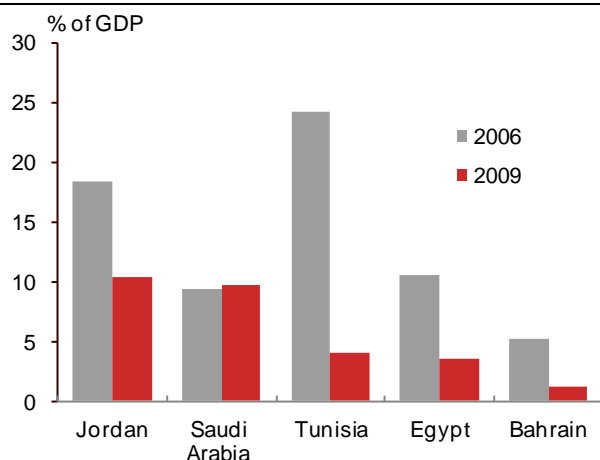
The affordability of such measures differs by country given the varied state of government finances. For oil producers the increase in government spending is being offset in part by higher oil prices (and in the specific case of Saudi Arabia, by higher production as well). But for others like Egypt and Jordan, such measures can be costly, and put government finances under considerable strain.

FDI recovery was expected in 2011, but prospects have dimmed

As a result of the global financial crisis the majority of countries in the region saw significant decreases in the level of foreign direct investment (FDI) in 2009 compared to the peaks in 2006 (Figure 5). While most estimates pointed toward a pickup in FDI last year, it was hoped that further increases in 2011 could help in making progress in tackling growing infrastructure needs in some cases, and important structural reforms in others. But since political crises have swept the region, expectations for FDI in 2011 have diminished substantially, given the increased uncertainty in the region.

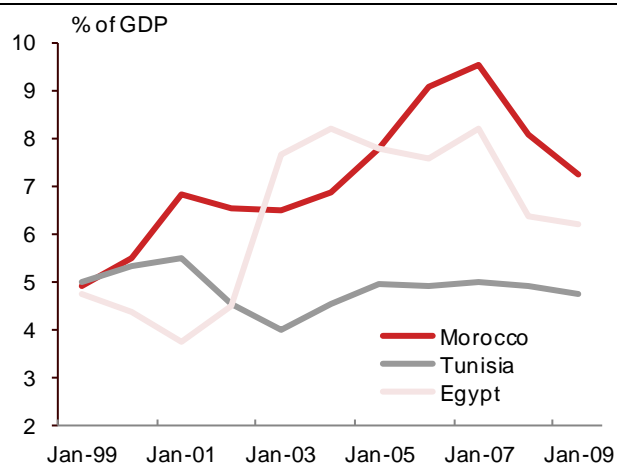
The likely decrease in FDI will hit hardest those countries needing to finance large current account deficits. Within MENA, Lebanon stands out having a current account deficit of around 15% of GDP, with FDI accounting for more than 7.5% of GDP. Despite the relatively

Figure 5. Foreign direct investment in 2006 and 2009



Source: CEIC, Nomura Global Economics.

Figure 6. Tourism in MENA



Source: CEIC, Nomura Global Economics.

strong foreign reserve levels and generally solid banking system, political stability continues to be crucial for the region to continue attracting FDI. Jordan, Tunisia, Morocco and Egypt also show current account deficits although at levels below 5% of GDP. Yet, the financing of the current account deficit will not only be affected by decreased FDI, but also by the decreased foreign currency revenues from an expected slowdown in tourism.

Tourism also likely to suffer, for now

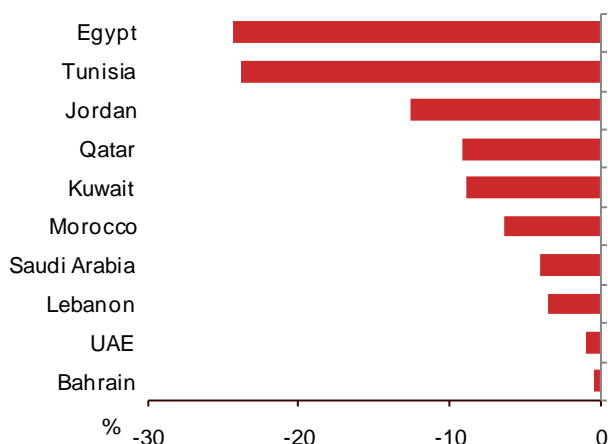
Many MENA countries, especially those in North Africa, depend on the tourism industry as an source of growth, employment and foreign currency. Tourism receipts were close to 10% of GDP in Morocco and around 8% of GDP in Egypt prior to the global financial crisis (Figure 6). Moreover, a booming tourism industry in Lebanon has been a key component of this country's recovery with a 53% increase in visitors in the 12 months up to July 2010 compared to the same period in 2008. Nevertheless, tourism will likely be hit hard as a result of the unrest and the longer uncertainty dominates MENA headlines the longer it will take for tourism to recover.

In the case of Egypt for instance, looking at past exogenous shocks to the tourist sector like the Luxor attacks in 1997, tourist visits declined by 45% y-o-y in the three months following, resulting in a decline in revenues of approximately 20% in that fiscal year. Applying a similar drop to the current environment would leave arrivals lower by over 3 million people in the next 12 months (compared to the same period last year) and probably result in a loss of at least US\$3bn in revenues. On the other hand, while it is perhaps too early to say, the tourist industry in Dubai could get a lift from the rest of the regional unrest, given its reputation as a regional safe haven. As tourists shun North Africa, Dubai is an alternative destination, and indeed, volumes of passenger traffic at the Dubai International Airport were up more than 5% in February.

Financial and currency markets off, but implications limited

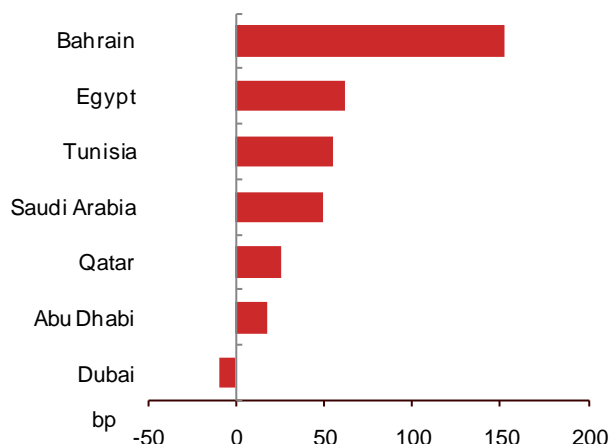
Regional equity markets have declined notably since the start of the crisis, with Egypt and Tunisia not surprisingly being the most affected, down around 24% (Figure 7). In the (sovereign) fixed income space, the greatest impact has been felt in external debt and CDS markets, given that these are the most widely traded instruments (see Figure 8). The most dramatic sell off has been seen in Bahrain, where spreads have widened 152bp since the mid-January. In local debt markets, the impact has mostly been felt in Egypt, where treasury bill auctions have seen yields continue to climb upwards. The central bank has just announced the details of its new repo facility that it hopes will alleviate some upward pressure on interest rates, though at this stage is it unclear whether this approach will be effective.

Figure 7. Equity markets performance since January 14



Source: Bloomberg, Nomura Global Economics.

Figure 8. CDS performance since January 14



Source: Bloomberg, Nomura Global Economics.

The effects of the financial market losses, while important for the investors in those markets, are likely to have a very limited impact on the individual economies, given the relatively limited retail investor involvement in all but a few equity markets, and generally low leverage. Moreover, the widening of external debt spreads is not likely to have meaningful cost, given that private sector external borrowing in the region remains relatively low. The most notable impact from financial market weakness in the region is coming from the increase in Egyptian t-bill yields, which are affecting local bank balance sheets as well as government finances.

High costs in Libya, frozen assets can eventually aid recovery

As the campaign of air strikes continues, and Qadaffi hangs on to power, the near-term costs of oil production stoppage, economic paralysis and destruction of infrastructure in Libya continue to mount. While recent days have seen increasing hopes of some resumption in oil production, it is still unclear how/if rebel forces will eventually be able to export, given current international sanctions as well as challenges around shipping. For now, the lost of oil export revenue is one of the main channels through which the political turmoil is translating into a significant damage to the economy. With production estimated to have been reduced by 60% and assuming constant domestic consumption at around 250,000 bbl/day, oil available for export would be 400,000 bbl/day, down from around 1.4 million bbl/day. As a result, assuming (for the sake of the exercise) a price of US\$100 per barrel this would translate into loss revenues of around US\$100 million per day. Nevertheless, Libyan frozen assets in the US and Europe amount to more than US\$55 billion and part of this could be used to off-set the cost and invest in the future, though this remains a distant possibility for now.

Disclosure Appendix A1

ANALYST CERTIFICATIONS

We, Ann Wyman and Icaro Rebolledo, hereby certify (1) that the views expressed in this report accurately reflect my personal views about any or all of the subject securities or issuers referred to in this report, (2) no part of my compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this report and (3) no part of my compensation is tied to any specific investment banking transactions performed by Nomura Securities International, Inc., Nomura International plc or any other Nomura Group company.

Online availability of research and additional conflict-of-interest disclosures:

Nomura Japanese Equity Research is available electronically for clients in the US on NOMURA.COM, REUTERS, BLOOMBERG and THOMSON ONE ANALYTICS. For clients in Europe, Japan and elsewhere in Asia it is available on NOMURA.COM, REUTERS and BLOOMBERG.

Important disclosures may be accessed through the left hand side of the Nomura Disclosure web page <http://www.nomura.com/research> or requested from Nomura Securities International, Inc., on 1-877-865-5752. If you have any difficulties with the website, please email researchportal@nomura.co.uk for technical assistance.

The analysts responsible for preparing this report have received compensation based upon various factors including the firm's total revenues, a portion of which is generated by Investment Banking activities.

DISCLAIMERS

This publication contains material that has been prepared by the Nomura entity identified on the banner at the top or the bottom of page 1 herein and, if applicable, with the contributions of one or more Nomura entities whose employees and their respective affiliations are specified on page 1 herein or elsewhere identified in the publication. Affiliates and subsidiaries of Nomura Holdings, Inc. (collectively, the 'Nomura Group'), include: Nomura Securities Co., Ltd. ('NSC') Tokyo, Japan; Nomura International plc, United Kingdom; Nomura Securities International, Inc. ('NSI'), New York, NY; Nomura International (Hong Kong) Ltd., Hong Kong; Nomura Financial Investment (Korea) Co., Ltd., Korea (Information on Nomura analysts registered with the Korea Financial Investment Association ('KOFIA') can be found on the KOFIA Intranet at <http://dis.kofia.or.kr>); Nomura Singapore Ltd., Singapore (Registration number 197201440E, regulated by the Monetary Authority of Singapore); Nomura Securities Singapore Pte Ltd., Singapore (Registration number 198702521E, regulated by the Monetary Authority of Singapore); Capital Nomura Securities Public Company Limited; Nomura Australia Ltd., Australia (ABN 48 003 032 513), regulated by the Australian Securities and Investment Commission and holder of an Australian financial services licence number 246412; P.T. Nomura Indonesia, Indonesia; Nomura Securities Malaysia Sdn. Bhd., Malaysia; Nomura International (Hong Kong) Ltd., Taipei Branch, Taiwan; Nomura Financial Advisory and Securities (India) Private Limited, Mumbai, India (Registered Address: Ceejay House, Level 11, Plot F, Shivsagar Estate, Dr. Annie Besant Road, Worli, Mumbai- 400 018, India; SEBI Registration No: BSE INB011299030, NSE INB231299034, INF231299034, INE 231299034).

THIS MATERIAL IS: (I) FOR YOUR PRIVATE INFORMATION, AND WE ARE NOT SOLICITING ANY ACTION BASED UPON IT; (II) NOT TO BE CONSTRUED AS AN OFFER TO SELL OR A SOLICITATION OF AN OFFER TO BUY ANY SECURITY IN ANY JURISDICTION WHERE SUCH OFFER OR SOLICITATION WOULD BE ILLEGAL; AND (III) BASED UPON INFORMATION THAT WE CONSIDER RELIABLE. NOMURA GROUP DOES NOT WARRANT OR REPRESENT THAT THE PUBLICATION IS ACCURATE, COMPLETE, RELIABLE, FIT FOR ANY PARTICULAR PURPOSE OR MERCHANTABLE AND DOES NOT ACCEPT LIABILITY FOR ANY ACT (OR DECISION NOT TO ACT) RESULTING FROM USE OF THIS PUBLICATION AND RELATED DATA. TO THE MAXIMUM EXTENT PERMISSIBLE ALL WARRANTIES AND OTHER ASSURANCES BY NOMURA GROUP ARE HEREBY EXCLUDED AND NOMURA GROUP SHALL HAVE NO LIABILITY FOR THE USE, MISUSE, OR DISTRIBUTION OF THIS INFORMATION.

Opinions expressed are current opinions as of the original publication date appearing on this material only and the information, including the opinions contained herein, are subject to change without notice. Nomura is under no duty to update this publication. If and as applicable, NSI's investment banking relationships, investment banking and non-investment banking compensation and securities ownership (identified in this report as 'Disclosures Required in the United States'), if any, are specified in disclaimers and related disclosures in this report. In addition, other members of the Nomura Group may from time to time perform investment banking or other services (including acting as advisor, manager or lender) for, or solicit investment banking or other business from, companies mentioned herein. Furthermore, the Nomura Group, and/or its officers, directors and employees, including persons, without limitation, involved in the preparation or issuance of this material may, to the extent permitted by applicable law and/or regulation, have long or short positions in, and buy or sell, the securities (including ownership by NSI, referenced above), or derivatives (including options) thereof, of companies mentioned herein, or related securities or derivatives. For financial instruments admitted to trading on an EU regulated market, Nomura Holdings Inc's affiliate or its subsidiary companies may act as market maker or liquidity provider (in accordance with the interpretation of these definitions under FSA rules in the UK) in the financial instruments of the issuer. Where the activity of liquidity provider is carried out in accordance with the definition given to it by specific laws and regulations of other EU jurisdictions, this will be separately disclosed within this report. Furthermore, the Nomura Group may buy and sell certain of the securities of companies mentioned herein, as agent for its clients.

Investors should consider this report as only a single factor in making their investment decision and, as such, the report should not be viewed as identifying or suggesting all risks, direct or indirect, that may be associated with any investment decision. Please see the further disclaimers in the disclosure information on companies covered by Nomura analysts available at www.nomura.com/research under the 'Disclosure' tab. Nomura Group produces a number of different types of research product including, among others, fundamental analysis, quantitative analysis and short term trading ideas; recommendations contained in one type of research product may differ from recommendations contained in other types of research product, whether as a result of differing time horizons, methodologies or otherwise; it is possible that individual employees of Nomura may have different perspectives to this publication.

NSC and other non-US members of the Nomura Group (i.e. excluding NSI), their officers, directors and employees may, to the extent it relates to non-US issuers and is permitted by applicable law, have acted upon or used this material prior to, or immediately following, its publication.

Foreign-currency-denominated securities are subject to fluctuations in exchange rates that could have an adverse effect on the value or price of, or income derived from, the investment. In addition, investors in securities such as ADRs, the values of which are influenced by foreign currencies, effectively assume currency risk.

The securities described herein may not have been registered under the US Securities Act of 1933, and, in such case, may not be offered or sold in the United States or to US persons unless they have been registered under such Act, or except in compliance with an exemption from the registration requirements of such Act. Unless governing law permits otherwise, you must contact a Nomura entity in your home jurisdiction if you want to use our services in effecting a transaction in the securities mentioned in this material.

This publication has been approved for distribution in the United Kingdom and European Union as investment research by Nomura International plc ('NIPc'), which is authorized and regulated by the UK Financial Services Authority ('FSA') and is a member of the London Stock Exchange. It does not constitute a personal recommendation, as defined by the FSA, or take into account the particular investment objectives, financial situations, or needs of individual investors. It is intended only for investors who are 'eligible counterparties' or 'professional clients' as defined by the FSA, and may not, therefore, be redistributed to retail clients as defined by the FSA. This publication may be distributed in Germany via Nomura Bank (Deutschland) GmbH, which is authorized and regulated in Germany by the Federal Financial Supervisory Authority ('BaFin'). This publication has been approved by Nomura International (Hong Kong) Ltd. ('NIHK'), which is regulated by the Hong Kong Securities and Futures Commission, for distribution in Hong Kong by NIHK. This publication has been approved for distribution in Australia by Nomura Australia Ltd, which is authorized and regulated in Australia by the Australian Securities and Investment Commission ('ASIC'). This publication has also been approved for distribution in

Malaysia by Nomura Securities Malaysia Sdn Bhd. In Singapore, this publication has been distributed by Nomura Singapore Limited ('NSL') and/or Nomura Securities Singapore Pte Ltd ('NSS'). NSL and NSS accepts legal responsibility for the content of this publication, where it concerns securities, futures and foreign exchange, issued by their foreign affiliates in respect of recipients who are not accredited, expert or institutional investors as defined by the Securities and Futures Act (Chapter 289). Recipients of this publication should contact NSL or NSS (as the case may be) in respect of matters arising from, or in connection with, this publication. Unless prohibited by the provisions of Regulation S of the U.S. Securities Act of 1933, this material is distributed in the United States, by Nomura Securities International, Inc., a US-registered broker-dealer, which accepts responsibility for its contents in accordance with the provisions of Rule 15a-6, under the US Securities Exchange Act of 1934.

This publication has not been approved for distribution in the Kingdom of Saudi Arabia or to clients other than 'professional clients' in the United Arab Emirates by Nomura Saudi Arabia, Nomura International plc or any other member of the Nomura Group, as the case may be. Neither this publication nor any copy thereof may be taken or transmitted or distributed, directly or indirectly, by any person other than those authorised to do so into the Kingdom of Saudi Arabia or in the United Arab Emirates or to any person located in the Kingdom of Saudi Arabia or to clients other than 'professional clients' in the United Arab Emirates. By accepting to receive this publication, you represent that you are not located in the Kingdom of Saudi Arabia or that you are a 'professional client' in the United Arab Emirates and agree to comply with these restrictions. Any failure to comply with these restrictions may constitute a violation of the laws of the Kingdom of Saudi Arabia or the United Arab Emirates.

No part of this material may be (i) copied, photocopied, or duplicated in any form, by any means; or (ii) redistributed without the prior written consent of the Nomura Group member identified in the banner on page 1 of this report. Further information on any of the securities mentioned herein may be obtained upon request. If this publication has been distributed by electronic transmission, such as e-mail, then such transmission cannot be guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. The sender therefore does not accept liability for any errors or omissions in the contents of this publication, which may arise as a result of electronic transmission. If verification is required, please request a hard-copy version.

Additional information available upon request

NIPIC and other Nomura Group entities manage conflicts identified through the following: their Chinese Wall, confidentiality and independence policies, maintenance of a Restricted List and a Watch List, personal account dealing rules, policies and procedures for managing conflicts of interest arising from the allocation and pricing of securities and impartial investment research and disclosure to clients via client documentation.

Disclosure information is available at the Nomura Disclosure web page:

<http://www.nomura.com/research/pages/disclosures/disclosures.aspx>

Nomura International plc.

Tel: +44 20 7521 2000

Nomura House, 1 St Martins-le-Grand, London EC1A 4NP

Caring for the environment: to receive only the electronic versions of our research, please contact your sales representative.