

MARMORE BULLETIN

H1, 2019 | Issue No. 29

THE HURRAY MOMENT

P10

GCC INCLUSION IN J.P. MORGAN'S
EM BOND INDEX

HOW MUCH WOULD KSA & KUWAIT MARKETS ATTRACT FOLLOWING INDEX INCLUSION?

P18

GCC's Best Capital Allocators

P24

GCC Outlook 2019

P04

DEEP LEARNING AN AI ASPECT THAT IS EVEN MORE INTERESTING

P32

KNITTING DIGITAL WORLDS THROUGH APIs

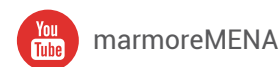
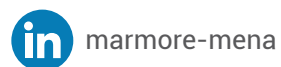
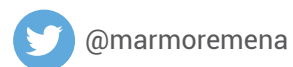
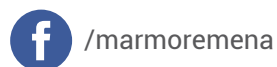
P14



Visit Our Website
www.e-marmore.com



Write us an e-mail
info@e-marmore.com



Disclaimer

The information available through this newsletter is for your general information and use is not intended to address your specific requirements. The views attributed to the interviewed experts do not necessarily reflect the view of Marmore. In particular, the information does not constitute any form of personal advice or recommendation by Marmore MENA Intelligence and is not intended to be relied upon by users in making (or refraining from making) any investment decisions. You should consider whether any advice or recommendation in the research is suitable for your particular circumstances and if relevant, appropriate independent professional advice, including tax advice should be obtained before making any such decision.

Past performance is not necessarily a guide to future performance. The data contained therein has been obtained from publically available and other sources believed to be reliable. While we aim to provide up-to-date information, we make no representations or warranties of any kind, express or implied, about the completeness, accuracy, reliability, suitability or availability with respect to the information contained in the newsletter for any purpose. Reading of the information in this newsletter is of your own free will and taking provided information is at your own risk.

This newsletter may provide the address of or contain hyperlinks to websites. Except to the extent to which the newsletter refers to website material of Marmore, Marmore have not reviewed the linked site and takes no responsibility for the content contained therein. Such address or hyperlink (including addresses or hyperlinks to Marmore's own website material) is provided solely for your convenience and information, and the content of the linked site does not in any way form part of this newsletter. Accessing such website or following such link through this newsletter or Marmore's website shall be at your own risk.

GCC Outlook 2019

04

The Hurray Moment

GCC Inclusion in J.P. Morgan's
EM Bond Index

10

CONTENTS

GCC's Best Capital Allocators

24

Foreword	03
Book Review : The Future of Capitalism	34
MARMORE Chart Pack	36
MENA Data At a Glance	40

Global Outlook Summary - 2019

06

Knitting Digital World Through APIs

14

Kuwait & KSA Market Index Inclusion

18

GCC Economic Themes 2019

20

GCC's Top 30 RODE Stocks

26

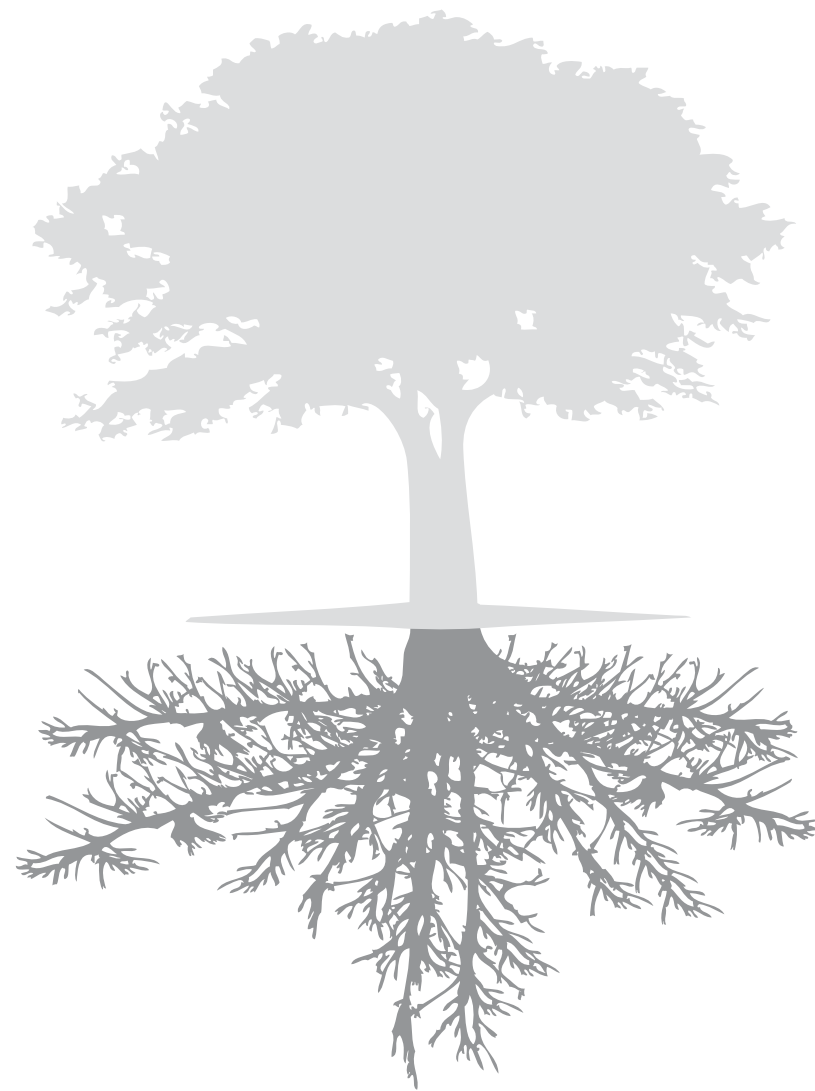
The Promise of 3D Printing

30

Deep Learning: An AI Aspect That is Even more Interesting

32

Depth Does Matter



info@markaz.com

1961 marks the birth of a modern, young, and ambitious state.

Since 1961, the State of Kuwait has pioneered the region with significant developments on the political, economical, and social level. From geo-political risks, Al-Manakh Crash, Gulf War I and Gulf War II, to the financial crisis in 2008; Kuwait has navigated through every crisis and boom the region has seen, as did Markaz. Established in 1974, it became one of the leading investment institutions in the region. Today, 50 years since independence, 20 years since liberation, more than 40 years since Markaz establishment, we are as ambitious as ever.

+965 2224 8000 | markaz.com

المرکز
MARKAZ

FOREWORD

Welcome to Q1 2019 edition of The Marmore Bulletin. At the outset, Marmore wishes every one of you a very happy new year 2019.

The year 2018 saw Kuwait take multiple steps towards streamlining its overall business environment, improve national economic competitiveness, and various capital market reforms. On the international investments front, Kuwait made key pitches around the fact that the strategic and stable location is a harbinger for emergence of Kuwait as a major international center for investments and strategic economic ventures in the entire Middle East region.

With respect to the major focus of this bulletin, the emphasis is on economic outlooks and market scenarios forecast, given that it is the first edition for the 2019 calendar year. Investors across the globe have a reason to be nervous in the context of uncertain trade wars and volatile commodity markets (especially oil). Thus, we provide snippets from our GCC Outlook 2019 report, so that investors can anticipate what economic waves are likely to wash ashore. In addition, the GCC's Best Capital Allocators report will provide readers with a dashboard of investment opportunities to keep a tab on.

Moreover, the investment scene in the GCC is likely to enjoy an optimistic mood as we progress into the initial months of 2019, even as J.P. Morgan recently indicated that the GCC countries' (excluding Oman) sovereign bonds will be added to its Emerging Market Bond Index (EMBI) from early 2019. It is a decision that can potentially bring up to USD 60 billion of active and passive inflows.

With respect to macro level economic themes, it is critical that Kuwait and the rest of the GCC increasingly respond to the opportunities and challenges of the global digital economy. Even



MR RAGHU
Managing Director
Marmore MENA Intelligence

as conventional methods of producing and consuming goods and services are undergoing transformation with novel technologies and social media usage patterns, there are many emerging themes associated with regulating and shaping the digital economy (e.g., Deep Learning concept). It is important to understand the key underpinning factors that enable digital global market places in order to frame effective responses.

In this edition of the Marmore Bulletin, we have also included a book review that attempts to gaze at the crystal ball in order to divine what the future of global capitalism could be. As multiple global developments confuse and fragment the economic landscape for many countries around the world, it may be time to remember the real ideational roots of capitalism and reframe it for the modern era.

There are many other interesting and insightful items for you to read and understand in this opening edition for the year. We hope you enjoy the inaugural edition of this year's Marmore Bulletin series. As always, we are ever eager to listen to your feedback and your experiences in terms of the Marmore Bulletin. Thank you.

GCC STOCK MARKET OUTLOOK 2019

WHAT TO EXPECT IN 2019?

Amidst muted growth expectations in global markets, economic outlook for the GCC region as a whole remains positive. It is expected that the surge in oil revenues and fiscal reforms of yesteryears will provide the necessary cushion for GCC countries to support economic growth through capital expenditure.

Marmore has analyzed the performance of GCC stock markets in 2018 and provided an outlook for 2019 based on a four-force framework that includes economic outlook, corporate earnings potential, valuation attraction, and market liquidity, for individual country.

Although the recovery in Oil prices was slight and did not last the entirety of the year, GCC economies witnessed a considerable increase in oil revenues. Their fiscal and external balances started to recover after three lackluster years with only Bahrain and Oman running twin deficits in 2018. With the exception of Bahrain that showed weakness in government finances, economic factors remain largely favorable.

Growth in corporate earnings is expected to witness an uptick in the GCC during 2019 with the exception of Bahrain and Saudi Arabia. Banks will be the primary growth drivers, as the sector is expected to see a rise

in profitability and credit growth due to tailwinds such as rising interest rates and new infrastructure projects. Commodity related companies are likely to see their earnings drop due to the fall in oil prices while the construction sector is expected to mildly rebound after years of underperformance.

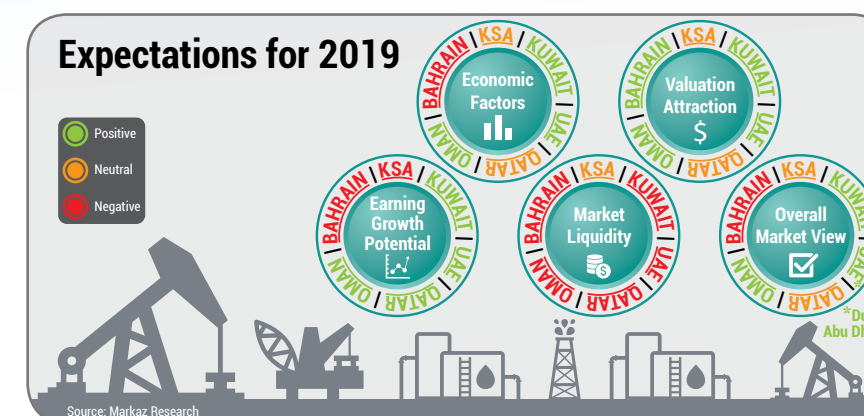
From a valuation perspective, GCC markets except Saudi Arabia and Qatar remain at attractive levels. As earnings are expected to remain flat for Saudi stocks, it becomes difficult to justify their premium valuations. Similarly, Qatar is expected to undergo consolidation in 2019 after witnessing a rally during the second half of 2018. Market liquidity remains to be a pain point for GCC equity markets as institutional and foreign investor participation continues to remain low, weighed down by geopolitical concerns.

slowed down the pace of the rise in the stock market which then had to settle with a yearly gain of 8.31%.

Kuwait continued to be a positive performer on the back of strong economic reforms and banking fundamentals. Due to the positive reforms undertaken by Boursa Kuwait, Kuwait was upgraded to emerging market status by FTSE Russell's index. The index inclusion is expected to create a fund inflow of close to USD 3-6 billion into the economy. This has created a positive sentiment for the country among its investors who have helped push the yearly gains of Kuwait to 7.8% for 2018.

The **UAE** was a mixed bag, with Abu Dhabi and Dubai moving in opposite directions. The Dubai financial market was the worst performing GCC market for the

year 2018, with an YTD loss of 24.93%. On the other hand, the Abu Dhabi Securities Exchange was the second best performer in the GCC market with a yearly gain of 11.75%. Rise in Oil prices and government support supplemented the growth of Abu Dhabi while the slowdown of economic growth and the weakness in real estate market weighed in on Dubai.



LOOKING BACK AT 2018

GCC markets stood tall in a year that was characterized by a rout on the global equities. At the start of 2018, we were neutral on Saudi Arabia, UAE and Kuwait, while remaining negative on Qatar.

Saudi Arabia was in line with our expectations, gaining 8.3% during the year. The Tadawul index started on a strong note as the largest market in the GCC region was upgraded to 'Emerging Market' status by both index providers, FTSE Russell and MSCI. But the market soon lost ground as a sharp fall seen in oil prices coupled with political uncertainties significantly

Qatar markets performed contrary to our expectations, bouncing back by 20.8% in 2018, as the country successfully overcame the effects of the diplomatic standoff, which was initially expected to have a bearing on the country's economy. Most of the sectors had a positive year with Banks and Financial Services and Consumer Goods and Services registering the highest growth of 43% and 36% respectively. Qatar's banking sector remains healthy overall, reflecting high asset quality and strong capitalization. Quick establishment of alternate trade routes and the support lent to the banking system through the injection of government deposits helped the economy to stage a turnaround.

PS: Pl check our website www.emarmore.com for a more detailed report on the topic.

Global Outlook Summary

Optimism is expected to re-enter equity markets as they would likely be the preferred asset class of global investors moving into 2019. Expectations of a global slowdown in growth have resulted in an excessive beat-down on equities across several markets, setting up the stage for a turnaround in 2019. However, volatility is expected to persist in the equity markets as global and regional risks could sharply derail the upward momentum. Although headwinds such as escalation of trade war, abrupt increase in U.S. interest rates, political risk in European economies, and the end of U.S. growth cycle continue to fluster investor sentiment, the overall outlook on equities remains positive.

2019 S&P 500 forecast

Brokerage	Target	Upside Potential*	EPS (\$)
Credit Suisse	3,350	21.4%	174
Deutsche Bank	3,250	17.7%	175
UBS	3,200	15.9%	175
BMO	3,150	14.1%	174
JP Morgan	3,100	12.3%	178
Citi Group	3,100	12.3%	172
Barclays	3,000	8.7%	176
Goldman Sachs	3,000	8.7%	173
CFRA	2,975	7.8%	170
Wells Fargo	2,960	7.2%	177
Bank of America	2,900	5.1%	170
RBC	2,900	5.1%	171
Evercore ISI	2,900	5.1%	170
Morgan Stanley	2,750	-0.4%	171
Average	3,038	10.1%	173

Source: Respective Outlook Reports

*% change from 2760.17 level to projected target in 2019

How did the forecasts for 2018 play out?

Forecast for stocks in 2018 remained in a narrow band, ranging between moderately bearish to moderately bullish. The performance of S&P 500 in the first nine months of the year were in line with expectations, gaining 9% for the year at the end of September 2018. However, by the end of year, the gains accumulated during the year diminished, as new events took center stage. Escalating U.S.-China trade tensions, monetary tightening measures, geopolitical events and the fading impact of tax cuts on earnings had a negative impact on the markets.

Earlier Forecasts for S&P 500

Firm	S&P 500 Target	Return Expectations
Yardeni Research	3,100	15.9%
J.P Morgan	3,000	12.2%
Credit Suisse	3,000	12.2%
Bank of America	3,000	12.2%
BMO Capital Markets	2,950	10.3%
Deutsche Bank	2,850	6.6%
Goldman Sachs	2,850	6.6%
Morgan Stanley	2,750	2.8%
S&P 500, (2018, Close)	2,507	-6.2% (realized return)

Note: S&P 500 started the year 2018 at a value of 2,674.

REASONS TO BE
OPTIMISTIC

STOCK MARKET OUTLOOK

Eye on emerging markets

As we look ahead in 2019, emerging markets will look attractive than their developed counterparts as their valuations appear cheap while taking their macroeconomic and corporate fundamentals into consideration. China is the preferred pick among emerging markets as the impetus provided by government support is expected to revive a sharply corrected market. The U.S. and Japan are the developed markets that warrant a positive outlook as political risks are expected to plague Europe's fortunes in 2019.

The US market witnessed its worst decline since 2011, ending downwards in 2018. Analysts expect S&P 500 to increase by 10% on average in 2019 with volatility staying similar to the levels witnessed in 2018. If a favorable agreement is reached between the U.S. and China during the year, investor sentiment is expected to be positive, supporting high valuations.

In Eurozone, with the political risks surrounding Brexit and Italy coupled with withdrawal of liquidity by central banks, a majority of strategists are wary of the regional markets. However, there are also expectations that European earnings will grow by 10% in 2019, similar to the rest of the developed world.

In 2019, the Japanese stock prices are expected to rise, as attractive valuations will tempt investors into buying undervalued stocks. The VAT hike will put pressure on earnings particularly in the fourth quarter of the year. On the other hand, large-scale fiscal stimulus package, comprising of spending on public works is expected to be announced in 2019 to support the economy. Though positive momentum is expected in the equities market, stability in the global economy will play a crucial role in determining the extent of the upside potential.

There is significant upside potential for Chinese equities taking the cheap valuation of Chinese companies into account. Despite concerns over slowdown in global and regional economy, China's monetary and fiscal stimulus are expected to kick in and support the growth of domestic companies. Another key positive driver would be the expected double digit corporate earnings growth for 2019.

The outlook for Indian equity remains neutral as the year 2019 is expected to see the revival of fortunes for emerging market equities. Robust economic growth, driven by populist measures on account of impending election, is expected to aid the revival of earnings growth, which has been lagging behind for several years. Although valuations have not been very compelling for Indian equity, strong domestic fund inflows, economic growth and drop in crude prices fare well for Indian markets.

FIXED INCOME OUTLOOK

U.S. Fed is expected to raise interest rates twice in 2019, which could push federal funds rate to 2.75% to 3.00% range. However, the professed action by the central bank would be largely guided by economic data points that subsequently emerge. Globally, other central banks (European Central Bank, Bank of Japan and Bank of England) are also expected to gradually tighten their monetary policies. Considering the limited upside potential in the environment of increasing rates, it would be prudent to reduce credit risk and shift to quality issues (developed markets, sovereigns, blue chips).

ALTERNATIVES OUTLOOK

Commodities, in general, underperformed other asset classes in 2018 on back of rising trade war tensions and concerns of hard landing in China. In case of currencies, the U.S dollar strength is expected to wane, alternatively, it could lead to strengthening of Yen & Euro in the coming year. EM currencies could be back in favor among investors. Relaxation in trade tension could act as a tailwind. Within the real estate market, the aging economic cycle and an environment of rising long-term interest rates is expected to act as pain points.

PS: Pl check our website www.emarmore.com for a more detailed report on the topic.



National Aviation Services
A powerful pioneer in emerging markets

- ▶▶ RAMP SERVICES
- ▶▶ PASSENGER SERVICES
- ▶▶ LOUNGE SERVICES
- ▶▶ MEET & ASSIST
- ▶▶ CARGO MANAGEMENT
- ▶▶ ENGINEERING SERVICES
- ▶▶ LINE MAINTENANCE
- ▶▶ FBO
- ▶▶ AIRPORT TECHNOLOGIES
- ▶▶ TRAVEL SOLUTIONS
- ▶▶ AVIATION SECURITY
- ▶▶ AVIATION TRAINING

16 countries
30+ airports
8,000+ employees

www.nas.aero

GCC Inclusion in J.P. Morgan's EM Bond Index

J.P. Morgan has recently said that Saudi Arabia, UAE, Bahrain, Kuwait and Qatar sovereign bonds would be added to its Emerging Market Bond Index (EMBI) from January 2019, a decision that can potentially bring up to USD 60 billion of active and passive inflows, according to analysts. In order to qualify for index membership, the maturity of the debt should be greater than one year with a minimum face value of USD 500 million.

Low Correlation of GCC Bonds seen with JPM EMBI

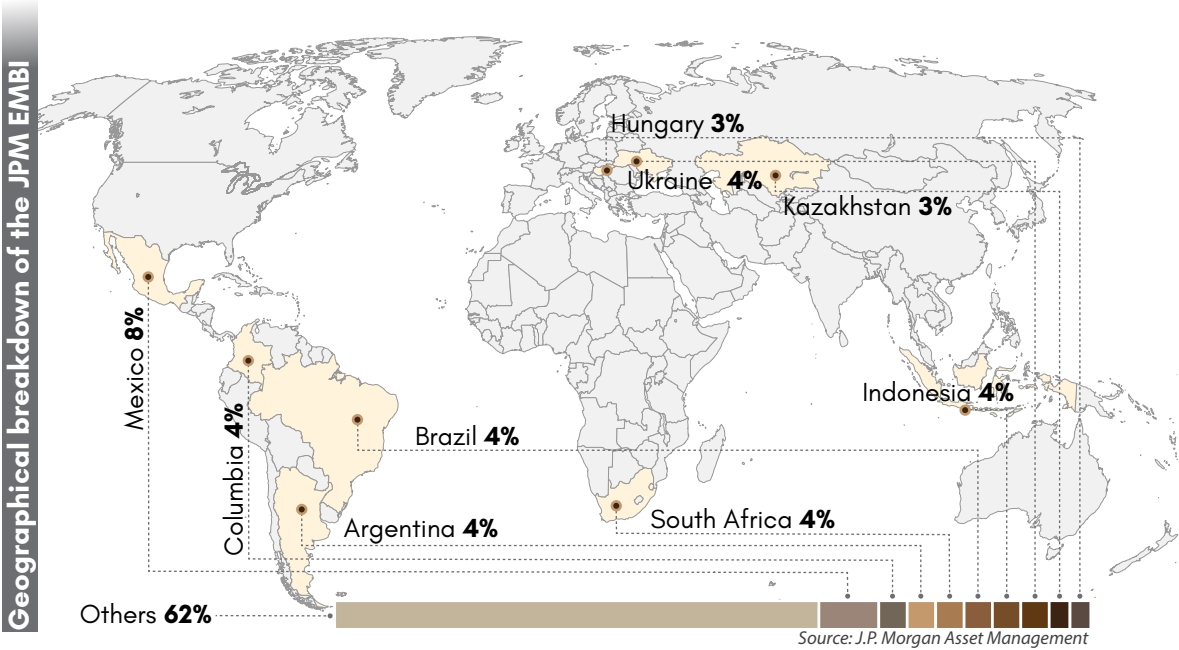
Asset Class / Index	S&P GCC Bond	S&P 500	MSCI World	MSCI EM	Gold	Commodity Index	JPM EMBI ETF	US 10yr Treasury
S&P GCC Bond	1.00	0.87	0.76	0.25	0.05	-0.48	0.38	0.36
S&P 500		1.00	0.97	0.56	0.13	-0.22	0.19	-0.09
MSCI World			1.00	0.74	0.21	-0.02	0.24	-0.26
MSCI EM				1.00	0.50	0.54	0.40	-0.53
Gold					1.00	0.49	0.49	-0.09
Commodity Index						1.00	0.23	-0.63
JPM EMBI ETF							1.00	0.36
US 10yr Treasury								1.00

Source: Reuters, S&P

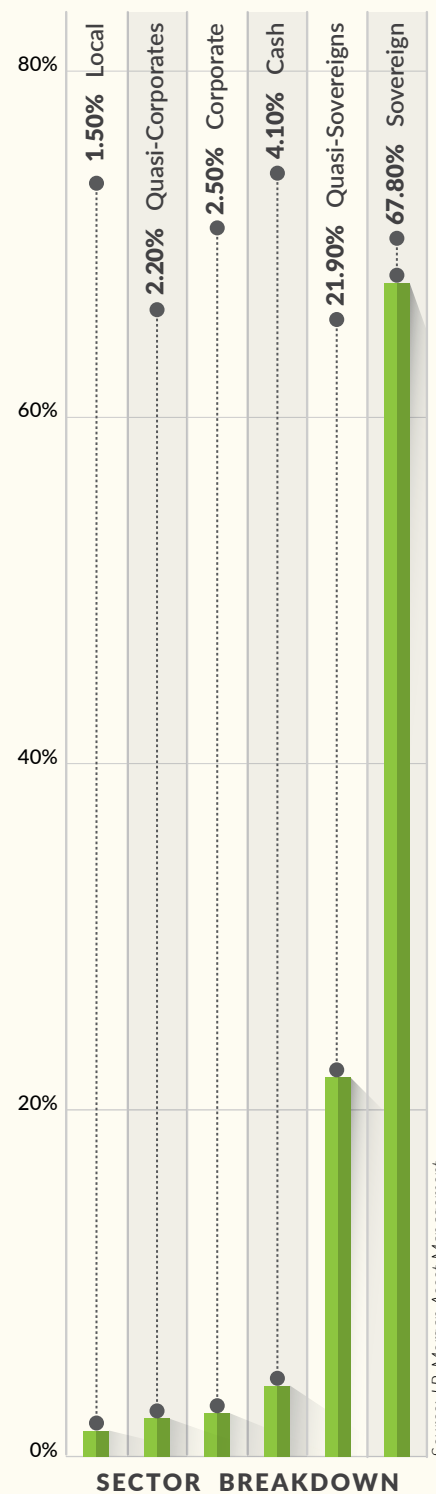
The correlation of the S&P GCC Bond Index with that of the JPM EMBI ETF is only 0.38. This suggests that if the GCC countries are added to the JPM EMBI, the overall risk of the index would go down providing a higher risk reward ratio to the investors.

The new countries, which will be included in EMBI Global Diversified (EMBIGD), EMBI Global as well as the EURO-EMBIG series, will represent around 11.2 per cent weightage on the index, with Saudi Arabia taking the maximum of 3.1 per cent, while the UAE will get

2.6 per cent weightage. Qatar, Bahrain and Kuwait will get 2.6 per cent, 2.1 per cent and 0.8 per cent weightage, respectively, according to a document put out by J.P. Morgan. Oman was previously included in the index with a weight of 2.6% on May 31, 2018.



The Hurray Moment



The eligible new bonds will be included into the index in a phased manner ending on September 30, 2019, with a proportion of the total exposure included at each month-end. Not only conventional bonds but also Sukuk (Islamic bonds) from the region will be included in the index provided they are rated. Inclusion in the index will increase the demand for GCC bonds and Sukuk and this bid will assist in spread tightening in the near future.

GCC countries combined have issued a quarter of all new debt sold by emerging markets in each of the last three years. Currently, they account for approximately 14 per cent of total outstanding EM debt stock. The total domestic and USD-denominated debt outstanding from GCC issuers is about USD 317bn. Dollar denominated debt accounts for 68%. While the USD debt issuance from the Middle East has received widespread attention, the local currency market has been growing too.

Saudi Arabia has been the leader in developing a domestic debt market, having reduced its reliance on USD funding to just over 30 per cent of its dollar-denominated debt as percentage of total bonds issued. The UAE, on the other hand, has relied solely on USD issuance. Kuwait's domestic currency bond market

is worth watching, given that only 54 per cent of its funding comes from USD issuance.

WHAT LED TO THE INCLUSION?

J.P. Morgan's decision follows a surge in debt issuance from the Gulf Arab region in the past few years, as low oil prices force most countries to fund part of their state spending in the international debt markets.

GCC index inclusion is a timely recognition of the fact that issuance from the region represents over 14 per cent of the stock of emerging market debt, and provides important diversification benefits. The tailwind resulting from the inclusion headline, coupled with pegged currencies, strong oil prices, relative immunity from trade wars and high credit quality, leads us to the view that the GCC has better value than the rest of the emerging markets.

While the GCC region has, in the past, traded at a tighter credit spread relative to other emerging market peers, the sharp correction in oil prices in 2015 has reversed that relationship, with the GCC region trading with a higher risk premium versus the broader peer group. Current trading levels seem attractive, particularly so given the recovery in energy prices.

HOW WILL IT BENEFIT THE GCC COUNTRIES?

Including GCC sovereign debt could prove to be a major boost to the region, supporting overall debt issuance. It might also lower funding costs for Gulf-based companies and ultimately lead to higher regional growth. Besides, the inclusion will allow sovereigns to issue debt to a new audience of EM credit-focused investors, which should increase primary demand.

GCC bonds are likely to become more visible to international investors and the inclusion is expected to significantly increase the size of the investible emerging-market universe and allow investors to consider GCC bonds when they want to reduce risk in a flight to quality, potentially reducing the volatility of emerging market bond portfolio flows.

Kuwait and Bahrain should benefit from the EMBI diversified weighting approach, which reduces the weight of the largest issuers relative to their amount outstanding. Flows could reach around 50 per cent of Kuwait's outstanding external bonds. Flows into large issuers such as Saudi Arabia and Qatar will be smaller in percentage-of-debt outstanding terms.

Bahrain will emerge as the biggest beneficiary out of EMBI inclusion. This will provide not only large flows as a percent of debt outstanding, but is also likely to be crucial for future external financing needs. One of the clear benefits of being a member of a major benchmark is that investors generally have at least some exposure to each country to avoid deviating too much from the benchmark.

Saudi Arabia now has more than USD 68 billion in local currency sovereign bonds outstanding and is among the last sizeable market not to have been added to major fixed income indices. A number of recent developments have improved access to capital markets. With the listing of bonds on Tadawul, prices have become more readily available for about 40 per cent of the Saudi government Sukuk and a quarter of all government debt issued in Saudi Arabian riyal (SAR).

This has increased market transparency and would allow investors to fairly value their bond investments should they wish to invest in domestic local currency bonds. The government also recently announced the appointment of five financial institutions to be the primary dealers in local government securities, which should help improve the liquidity and trading of domestic government bonds.

At a time when market sentiment is turning more cautious, expanding the universe of investible debt markets to higher-rated GCC countries should not only benefit the GCC states looking to deepen and diversify their capital markets, but should also open up new opportunities for global investors. Most investors are aware of the debt issuance from the region, but the demand story may soon be picking up as well.

Some of the sovereign bonds are currently trading at relatively wider spreads compared to their similar-rated peers, on the back of the high level of issuances in recent years and geopolitical risks.

However, the ultimate flow may be lower since many EMBI funds appear to already hold off-benchmark GCC sovereigns in their portfolios. Using a sample of funds suggests an average allocation of nearly 3 per cent already, so flows could be closer to USD 30 billion.

Knitting Digital Worlds through APIs



Imagine that you are riding an Uber or Didi Ride back home. In the middle of the ride, you realized that there is nothing cooked for dinner at home and time is short as you are already late. You quickly place an order for some fancy food with a newly discovered app and pay for it through Paypal or VISA. When you reach your destination, you pay Uber by Paypal and a few minutes later, Mint app pops up a message notifying that you have overspent for this month and getting chauffeured too much!

The interconnectivity of applications and network infrastructure is made possible by **Application Programming Interface (API)s**, which allows apps and systems to talk to each other, a kind of advanced technological loop. API is the simplest form of standardized protocol for computer programs to talk to each other and is integral to modern software development (Banking Tech Website). An API, specifies the connection mechanism, the data, and functionality that are made available and what rules other pieces of software need to follow to interact with this data

and functionality. An organization can use API to allow third parties to access their data or services in a controlled environment. Using an API is like using a particular desired part of the software and not the entire one, which remains protected. An example would be a Facebook “like” on third party website. Additionally Google, Facebook and Apple have created their own digital ecosystems using public APIs and by allowing third parties to add functionality to their core services, these companies become for third party innovation.

The API Universe



PRIVATE APIs

Private APIs are closed APIs, and therefore exclusively accessible by parties within the boundaries of the organization.

MEMBER APIs

This type of API is open to everyone who is a formal member of a community with a well-defined set of membership rules. When becoming member of such a community the API provider allows access to the community members who comply with community membership rules and regulations.

ACQUAINTANCE APIs

This type of Open APIs is inclusive, as they are open to every- one complying with a predefined set of requirements. Merchant access to point-of-sale (POS) APIs is an example in this category.

PARTNER APIs

APIs that are open to selected partners based on bilateral agreements. Like Private APIs, Partner APIs are exclusively accessible at the discretion of the provider of the APIs. Bilateral agreements on specific data exchanges between for instance a bank and an enterprise resource (ERP) software provider is an example of a Partner API.

PUBLIC APIs

Public APIs are inclusive and can thus be accessed by anyone, typically with some form of registration for identification and authentication purposes. As software continues its march to transform all industries, lack of connectivity increasingly equates to being broken. If software developers are the new rock stars, then APIs are the instruments (Banking Tech Website).

The year 2014 saw the advent of a secure and convenient way to pay at stores using an iPhone 6 or 6+ with Near Field Communication (NFC) and finger-print Touch ID. Apple has provided APIs and SDKs to third party developers to allow them to integrate Apple Pay in their apps. This has seen Apple Pay integrated in a number of payment systems, especially in the case of in-app purchases. More and more banks have been able to integrate Apple Pay thanks to the APIs.

”

Source: MEDICI, Fintech Enabler Website

Life and Apps Intertwined



● Ordering Food Online and Paying

Could be using Paypal API or VISA API linked to Citi Bank account.

● Paying for Uber or Didi

Using API MasterCard API or any other Credit Card.

● Mint Notification

Citi Bank's API linked to Mint app.

Source: Marmore Research

However, open data sharing by institutions, data collection and analysis is not risk proof altogether. Issues like consumer consent, data-protection, data-safety, limits to sharing with third parties, validation and ever-rising threat of massive data-breaches, data-hacks and data-compromise will shore up. Financial institutions may rightly be worried about allowing third-party vendors, some without any prior

business relationship, to access data that leads back to their systems of record. And to make this work, banks need to begin where they feel comfortable, such as by creating APIs that support their internal development (Open Legacy and Open Innovation website). This is the area where regulations and regulatory bodies sweep in attempting to redress consumer and their data concerns.

ADOPTION IN THE GCC ICT ECOSYSTEM

In pursuit of having stronger digital partnerships, Kuwait Based Zain telecom, launched its APIs (with Google Cloud acting as API platform provider) in a bid to connect its operating companies across the region onto a single enablement platform (CommsMEA website). The primary objective of launching APIs across the region is to achieve greater agility and consider new market opportunities.

According to Strategy& and Siemens 2017 survey, only 3% of surveyed companies (306 companies from Qatar and UAE) are at the advanced stage of digital transformation, and only 18% of these companies use cloud computing (Strategy& Siemens Survey website). The pace of digitization is sluggish in many parts of the region, both in public and private sectors. There is a huge potential for digitization in sectors such as transportation sector (including airports, airlines, and public transportation companies) (Strategy & PwC Report 2017).

Slow pace of digitization implies less spending on IT infrastructure and thereby low advancement of process of digitization. But at the macro level, Information and communication technology spending across the MENA region

recorded growth of 2.7% on year-on-year basis, reaching more than USD 230bn (International Data Corporation 2018). As the pace of digitization picks up in the future, more and more APIs will be launched. APIs generally help bring customers to a single entry point across platforms and regions. However, with the growth in APIs to unify multiple digital platforms and services, the question of how to effectively protect data integrity and privacy will keep growing.

Some international developments offer a leading indicator of what to potentially expect as trends for the future. For e.g., new compliance requirements, such as the Payment Services Directive version 2 (PSD2) and the European General Data Protection Regulation (GDPR) are handing more power back to the consumer, giving them more control over how and who they transact with and what happens to their personal data.

GDPR, for example, will give European consumers more control over their personal data and the information organizations can collect on them, while also setting out regulations to enforce better protection of such information. GDPR specifically stipulates that when it comes to organizations gathering or sharing information on consumers, “opt out” measures are no longer sufficient. Instead, consumers will have to “opt in” to

share their information or receive communications, and they will be able to express whether their data could be shared with third parties.

PAYMENT SERVICES DIRECTIVE 2

will fundamentally change how consumers access their financial data as well as how, and with whom, they transact. At the moment, consumers holding accounts at multiple institutions need to log into each account via that institution's digital interface, whether this is via a mobile app or an online portal. But to promote competition in financial services and improve ease of use for consumers, PSD2 makes provision for data aggregators, which allow for a single view of accounts at multiple providers (insurance companies, payments services, credit card issuers, mortgage lenders, etc.). All account information, all financial products, and all transactions will be visible on a single dashboard. To make this possible, PSD2 will require banks and other financial service providers to open their data and payment initiation capabilities to third parties.

In conclusion, it can be said with confidence that financial services entities in the GCC will increasingly join forces with FinTech companies through open APIs. How regulators cope with this development will be an interesting space to watch.



HOW MUCH WOULD **KUWAIT & KSA MARKETS** **ATTRACT** FOLLOWING INDEX INCLUSION?

MSCI Inc. announced the inclusion of Saudi Arabia Index in the Morgan Stanley Capital International Emerging Markets (MSCI EM) Index, recognising the nation's efforts to modernize its stock markets and attract investments.

To attract foreign investment into the country, foreign ownership limits have been raised from 20 percent to 49 percent since September 2016. To further align Saudi Arabia's capital markets with international standards and to increase transparency and liquidity, the country transitioned to a T+2 settlement cycle, from T+0, for all listed securities and also introduced securities borrowing and lending and covered short selling in a series of reforms aimed at improving the attractiveness of its capital market. Moreover, the government is also planning to sell shares in the state-owned Saudi Aramco, which is expected to stage an initial public offering in Riyadh that could be the biggest in the world.

With this reclassification, Saudi Arabia will now join countries including China, Brazil, India, Turkey and South Africa by the beginning of June 2019. Saudi Arabia will have a weighting of approximately 2.6 percent in the emerging markets index with 32 securities, following a two-step

inclusion process in May and August next year.

Based on Marmore's analysis, MSCI's decision on Saudi Arabia will lead to approximately USD 15-35 billion dollars from passive investors all over the world, which will help improve the liquidity of the biggest stock market in the MENA region.

MSCI also announced a potential reclassification of the MSCI Kuwait Index from Frontier Markets to Emerging Markets status. Boursa Kuwait, controlling the Kuwait stock exchange since 2016, introduced reforms such as relaxing listing rules, delisting companies seen unfit for public investment and segmenting the market with different disclosure requirements.

Index provider FTSE Russell has already incorporated 12 Kuwaiti stocks into its emerging market index with its two-phase implementation completing on

December 2018. This will result in a weighting of just over 0.5 percent in its FTSE Emerging All Cap index.

Marmore estimates the weightage that Kuwait might be assigned by comparing the market capitalization of its GCC peers, like UAE and Qatar, and the weightage they have been assigned by MSCI. Qatar and UAE have a weightage of 1.34% and 1.04% respectively in the FTSE EM index and a weightage of 0.47% and 0.58% in the MSCI EM index. Taking into consideration that FTSE EM index recently included Kuwait with a weightage of 0.5%, we estimate that Kuwait can end up with a weightage of approximately 0.30% in the MSCI EM index. This can lead to an estimated fund flow of USD 2-5 billion from passive investors into the country.

PS: Pl check our website www.emarmore.com for a more detailed report on the topic.



GCC Economic and Investment Themes 2019

In 2018, all GCC economies barring Bahrain grew at a brisker pace than what was seen in 2017, primarily due to the uptick in Oil prices during the year. Introduction of VAT, rise in fuel prices and other consolidation measures have had an inflationary effect on consumer prices in Saudi Arabia and the UAE during 2018. Inflation is expected to ease in 2019 for both Saudi Arabia and the UAE, down to 2.0% and 1.9% from a higher level of 2.6% and 3.5% respectively seen in 2018. The fiscal position of GCC countries in 2018 turned out to be far better than what was predicted a year ago. Saudi Arabia's fiscal deficit has been narrowing down since 2016, where its deficit was at 17.2% of GDP. The trend is expected to continue with its deficit lowering to 1.7% in 2019. Kuwait and Qatar are in the strongest positions among GCC economies, with fiscal surpluses of 12.0% and 10.5% of their respective GDPs for 2019. Bahrain remains the weakest among GCC economies, posting a deficit of 8.9% of the GDP in 2018 in spite of the rise in oil prices. Nevertheless, it's fiscal deficit is expected to be much higher than other GCC economies at 8.2% of the country's GDP in 2019.

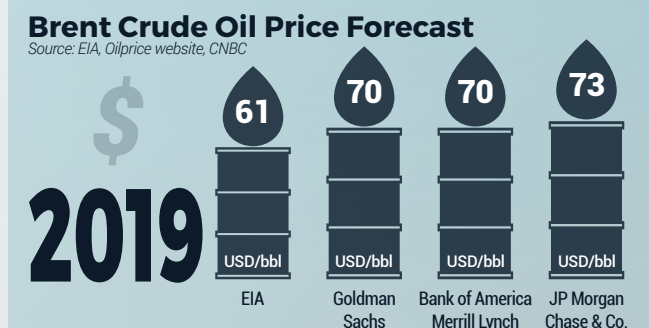
Marmore has identified the following themes to be reshaping the economic landscape of the GCC region in 2019.

These are:

1. Oil Prices
2. GCC Banking M&A Wave
3. Gulf Bonds Inclusion in EMBI
4. GCC Economy Competitiveness

OIL PRICES

Since October 2018, the oil price has plummeted by over 30% breaching USD 60 per barrel mark. Growing inventories in the US and forecast of continued higher output also contributed to the oil price remaining low. U.S continued to boost its oil production with its production in 2018 averaging 1.5 MMbbl/d above 2017 levels. Further, OPEC which has been a dominant player in the oil market seems to be losing its grip in determining oil price.



OPEC forecasts global oil supply to increase by 1 million b/d in 2019 after accounting for expected production cut by OPEC by 1.2 million b/d in 2019. Global consumption on the other hand is expected to increase by 1.29 million b/d in 2019, with growth largely coming from China, the United States, and India. In December 2018, OPEC agreed to cut 1.2 million barrels per day. Various investment banks have forecasted their expectation on oil price in 2019 varying between USD 61 to 73 bbl. Although extension of production cut may ease the pressure on oil price in short-term, any possibility of upward movement in oil prices beyond USD 80 bbl remain bleak.

GCC BANKING M&A WAVE

For banking industry, M&A is a cost effective way to restructure the banking system by eliminating institutions that are perceived as inefficient and without adequate liquidity and strong asset bases. The merger between First Gulf Bank and National Bank of Abu Dhabi has triggered a series of announcements regarding mergers within the industry across GCC countries. In Saudi Arabia, Saudi British Bank and Alawwal Bank finalized a merger agreement in May 2018 to create the country's third-largest bank by assets. International Bank of Qatar and Barwa Bank announced the signing of a merger agreement to combine both entities to form a Sharia compliant financial institution. Another high-profile likely merger in the region is between Kuwait Finance House and Ahli United Bank. Following the merger of First Abu Dhabi bank, Abu Dhabi Commercial Bank (ADCB) is exploring the possibility of a merger with its local counterparts Union National Bank (UNB) and the Sharia-compliant lender Al Hilal Bank. The consolidation of these three lenders would create an entity with total assets worth USD 113bn, making it the fifth biggest bank in the GCC region. The environment for consolidation is stronger now than a decade ago. The fall in oil prices may be a significant trigger as more than 80 per cent of the Gulf's top 50 banks by assets are part owned by arms of GCC states.



GULF BONDS INCLUSION IN EMBI

J.P. Morgan announced the inclusion of Saudi Arabia, UAE, Kuwait, Bahrain and Qatar sovereign bonds in its Emerging Market Bond Index (EMBI) from January 2019. Also, the move to include the GCC countries in the EMBI-GD will add USD 150bn to the index. Overall, EMBI-GD index could lead to a significant increase in demand for GCC sovereign bond issues with the new countries, which will be included in EMBI Global Diversified (EMBIGD), EMBI Global as well as the EURO-EMBIG series, will represent around 11.2 per cent weightage on the index, with Saudi Arabia taking the maximum of 3.1 per cent, while the UAE will get 2.6 per cent weightage. Qatar, Bahrain and Kuwait will get 2.6 per cent, 2.1 per cent and 0.8 per cent weightage, respectively, according to J.P. Morgan. Oman is already included in the index with a weight of 2.6% on May 31, 2018. The JPMorgan's emerging market bond index inclusion will widen the investor base and could lead to increased liquidity of GCC bonds and Sukuk.

GCC ECONOMY COMPETITIVENESS

The GCC region is home to some of the world's most competitive economies. UAE, Qatar, and Saudi Arabia, ranks 17, 25, and 30 respectively out of 137 countries on the Global competitive index (GCI) developed by The World Bank. Of the 12 pillars of the GCI, infrastructure and technological readiness are the areas where the Gulf region has made the most significant progress over the past decade, a result of heavy investments in transport and information and communication technologies (ICT). Investments in infrastructure and connectivity were particularly notable as the total value of infrastructure projects in the planning or delivery stage amounted to USD 2.7tn in 2017.

“DOING BUSINESS RANKING” OF WORLD ECONOMIES



	Global Rank	Starting Business	Dealing with Construction Permits	Getting Electricity	Registering Property	Getting Credit	Protecting Minority Investors	Paying Taxes	Trading across Borders	Enforcing Contracts	Resolving Insolvency
USA	8	53	26	54	38	3	50	37	36	16	3
UK	9	19	17	7	42	32	15	23	30	32	14
UAE	11	25	5	1	7	44	15	2	98	9	75
Japan	39	93	44	22	48	85	64	97	56	52	1
China	46	28	121	14	27	73	64	114	65	6	61
Bahrain	62	66	57	82	26	112	38	5	77	128	93
India	77	137	52	24	166	22	7	121	80	163	108
Oman	78	37	66	66	52	134	125	12	72	73	100
Qatar	83	84	20	69	20	124	178	2	97	122	120
KSA	92	141	36	64	24	112	7	78	158	59	168
Kuwait	97	133	131	95	69	134	72	7	159	77	115
Brazil	109	140	175	40	137	99	48	184	106	48	77
Egypt	120	109	68	96	125	60	72	159	171	160	101

Source: World Bank, Marmore research | Rank <30 (Green); between 30-80 (Yellow); >80 (Red)

The Institute of International Finance (IIF) estimates growth in the GCC to be 2.9% in 2019 owing to implementation of public investment projects, including those consistent with the five-year development plan in Kuwait, infrastructure investment projects ahead of the FIFA 2022 World Cup in Qatar, and ongoing preparations for Expo 2020 in the UAE. Reforms such as streamlining customs process, strengthening Public private partnership (PPP) etc. are being implemented to improve the business

environment and enhance private sector growth. To further improve the business environment, GCC countries need to ease access to finance. In this context, developing domestic capital markets as an alternative and complementary source of funding could prove beneficial.

PS: Pl check our website www.emarmore.com for a more detailed report on the topic.

GCC's BEST CAPITAL ALLOCATORS

Analysis based on ROIC and ROIIC

In today's competing environment the question regarding where to invest money is as important as how to invest it. The efficient allocation decision is the primary factor responsible for a firm's growth and in building a long term value addition to the shareholders. Across globe, investors show faith in those companies who put money to the best possible use, and the Gulf region is no different. The primary objective of any company is to allocate capital to the best possible project so as to earn a return on capital that is in excess of the cost of capital. One of the most efficient ways to measure this objective is by evaluating the Return on Invested Capital (ROIC) during the period of consideration.

Analysing the country wise ROIC data, we could see a downtrend in last few

years in all GCC countries except UAE as the invested capital for the companies at aggregate level kept on rising with income rising at a much slower pace largely affected by economic slowdown in the region. The decline in operating income particularly in Oman, Kuwait and Qatar dragged down the overall ROIC for GCC countries.

In our analysis, we have ranked top 30 companies (out of 428 in the GCC) based on their efficient capital allocation over the 7 years period (2011-2017) as measured by ROIC metric. The GCC top 30 capital allocators list consists primarily of large cap stocks and is diversified in terms of sectors. The portfolio consists of 7 consumer staples and materials companies, followed by six consumer discretionary, three energy

and telecom companies each. Based on our analysis, majority of the top 30 companies by ROIC showed a positive correlation with price returns. Most of these companies have yielded healthy returns to shareholders with few companies such as Mouwasat Medical Services Co, Abdullah Al Othaim Markets Co giving returns by over 3 times. We have also analysed the ROIIC (Return on Incremental Invested Capital) to better understand the relationship between shareholder's return and incremental investments.

Further, increasing financial leverage worked against both the ROIC and the stock market returns. For example, Bahrain Telecommunications Company's debt to capital ratio rose significantly from 3.5% in 2012 to 34% in 2017, while reducing shareholders wealth by 40% during the same period. Stock market does reward the proper capital allocators, but performance also depends on several other market based factors which can temporarily result in deviation in stock price as opposed to that suggested by ROIC.

Top 10 Companies in GCC with Highest ROIC

Company	Market Cap	Country	Sector	2017	Dollar Return*
Jarir Marketing Co	Large	Saudi Arabia	Consumer Discretionary	45.0%	2.2
National Petroleum Services Company	Small	Kuwait	Energy	36.2%	4.1
Saudia Dairy and Foodstuff Co	Mid	Saudi Arabia	Consumer Staples	24.7%	3.1
Shell Oman Marketing Co	Small	Oman	Energy	22.9%	0.8
Majan College University College	Small	Oman	Consumer Discretionary	18.7%	1.6
Oman Refreshment Co	Small	Oman	Consumer Staples	18.5%	4.1
Mouwasat Medical Services Co	Large	Saudi Arabia	Health Care	18.3%	4.2
Hotels Management International Co	Large	Oman	Consumer Discretionary	18.3%	1.0
Abdullah Al Othaim Markets Co	Large	Saudi Arabia	Consumer Staples	17.9%	3.6

Source: Reuters, Marmore Research

*2017 year end value of \$1 invested at the beginning of 2011

PS: Pl check our website www.emarmore.com for a more detailed report on the topic.

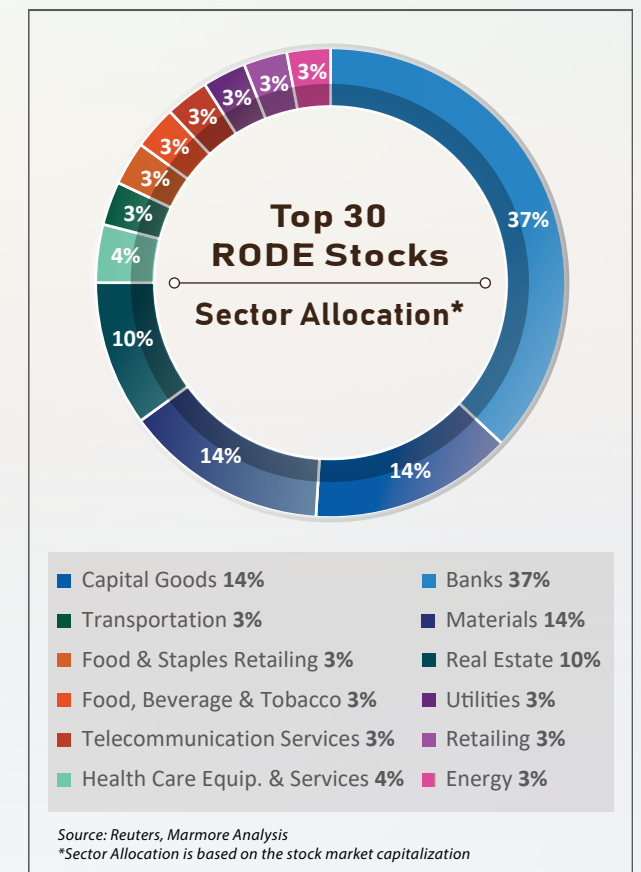
GCC's TOP 30 RODE STOCKS

Marmore analyses top 30 stocks identified using metrics such as ROIC (Return on Invested Capital) or ROE (Return on Equity), Dividend yield and Earning yield (RODE). These factors reflect the fundamental value of a company most appropriately irrespective of the stock market sway. Good businesses efficiently utilize their capital to consistently generate a healthy free cash flow which is measured by the financial metric ROIC for non-banking stocks and through ROE for banking stocks. The companies that have consistently achieved ROIC/ROE over their righted average cost of capital are considered as they add economic value.

Saudi Arabia and Qatari companies constituted 30% each (based on market capitalization) of the top

30 RODE stocks followed by UAE at 23%. Kuwait, Bahrain and Oman account for the rest in that order. Going by the distribution of the portfolio, the large cap companies have an outsized share accounting for 64% of the portfolio. Saudi Arabia and Qatar has the joint largest number of companies in the top 30 RODE list with nine companies each followed by UAE and Kuwait featuring seven and three companies respectively. Interestingly all UAE companies were large cap. UAE thus featured highest number of large-cap companies (7) in the top 30 RODE stocks portfolio followed by Saudi Arabia and Qatar with four large-cap companies each.

The GCC top 30 RODE portfolio consists primarily of large cap stocks and is well diversified in terms



Top 10 RODE Stocks by Market Capitalization

Company Name	Country	Sector	Market Cap (USD Mn)	Annualized Total Returns (2013-2017)
Qatar National Bank	Qatar	Banks	38,219.5	8.4%
First Abu Dhabi Bank	UAE	Banks	37,090.7	9.6%
Al Rajhi Banking & Investment Corporation	KSA	Banks	36,831.4	5.0%
Samba Financial Group	KSA	Banks	15,732.5	6.6%
National Bank of Kuwait	Kuwait	Banks	15,268.1	3.4%
Riyad Bank	KSA	Banks	12,015.4	6.1%
Emaar Properties	UAE	Real Estate	10,702.8	20.5%
Masraf Al Rayan	Qatar	Banks	7,316.6	13.5%
Dubai Islamic Bank	UAE	Banks	7,293.7	36.0%
Qatar Islamic Bank	Qatar	Banks	6,962.2	10.2%

Source: Marmore Research

of sectors. Among the top 30 RODE companies in the portfolio (based on market cap), the banking sector accounts for 37% of the portfolio followed by Materials and Capital Goods companies, which accounts for 14% each of the portfolio.

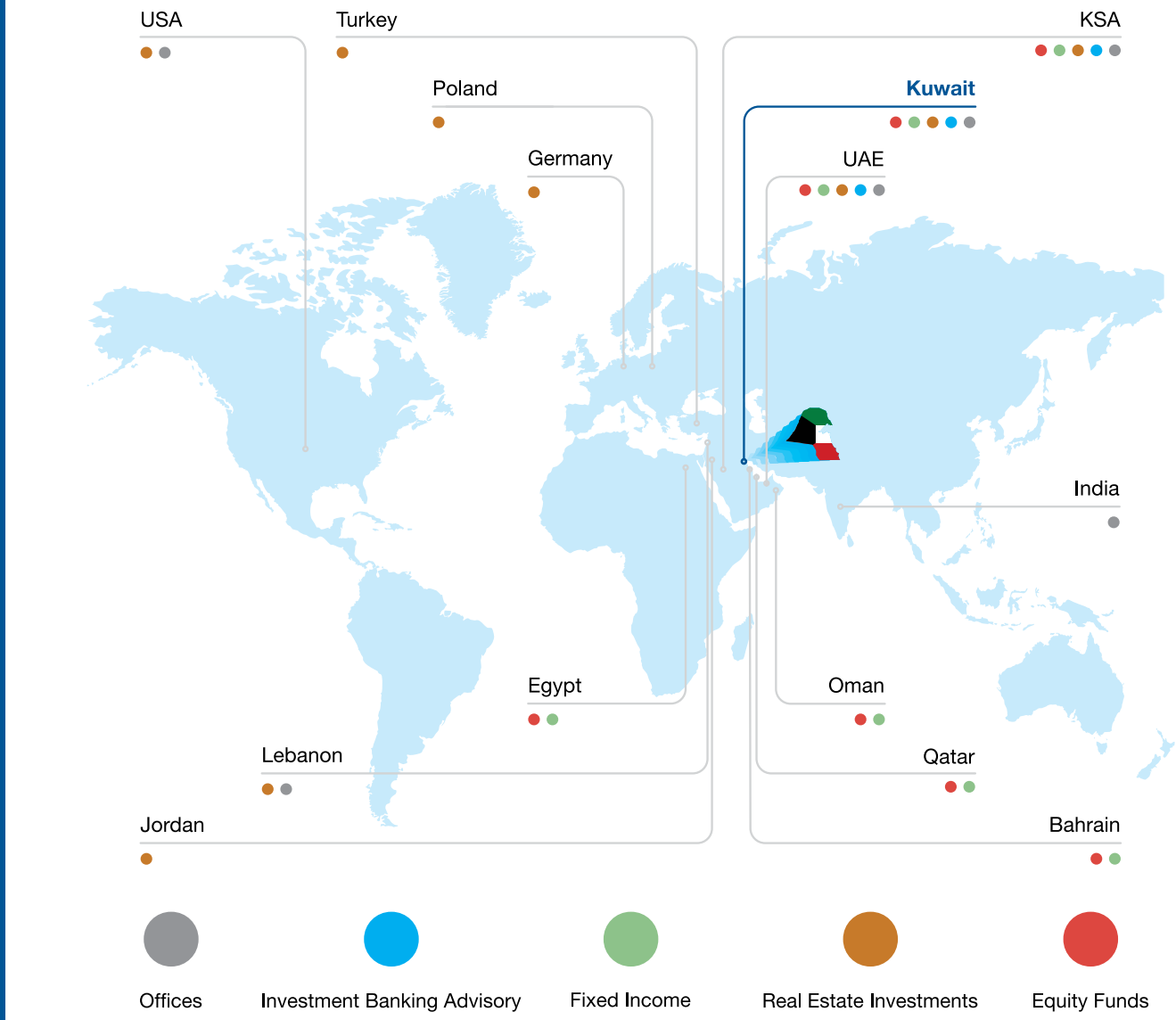
Dubai Islamic Bank is a notable example. It has continued to increase in price since 2013 and the positive stock performance has largely been influenced by the improvement in operating profits over the years. In the energy sector, Qatar Fuel QSC, primarily engaged in sale and distribution of refined petroleum products manufactured by Qatar Petroleum increased net income from 242.6mn in 2016 to 263.4mn in 2017, while the revenue increased to 4.7bn (2017) from 3.8bn in 2016. In real estate sector, Dubai Investments was at the second spot amongst the top performing stocks in the last five years (2013-17) achieving

annualized returns of 33%. Dubai investments stock performance was largely supported by the positive real estate trend that has prevailed in the Dubai economy in the past five years.

Out of the top 30 RODE stocks, 28 companies registered positive annualized returns during period 2013-17. Qatar Fuel Co (Large cap Qatari company) and Qassim cement company (mid cap) from Saudi Arabia, were the only exception to this trend and registered a negative stock return of -3% and -4% respectively during 2013-17. Upon analysis, low performing stocks in the portfolio were mainly from material and energy while banks displayed mixed contribution.

PS: Pl check our website www.emarmore.com for a more detailed report on the topic.

Sustainability and Innovation win us Trust.



Since its creation in 1974, Markaz has successfully weathered market turbulence by always meeting its responsibilities to its investors and corporate clients, employees, shareholders and the society at large.

Our asset management business thrives on product innovation, fundamental analysis and geographic diversification. Our investment banking business delivers transaction experience, industry expertise and structuring excellence.

At Markaz, innovation drives long term sustainable growth with our client's trust always coming first.

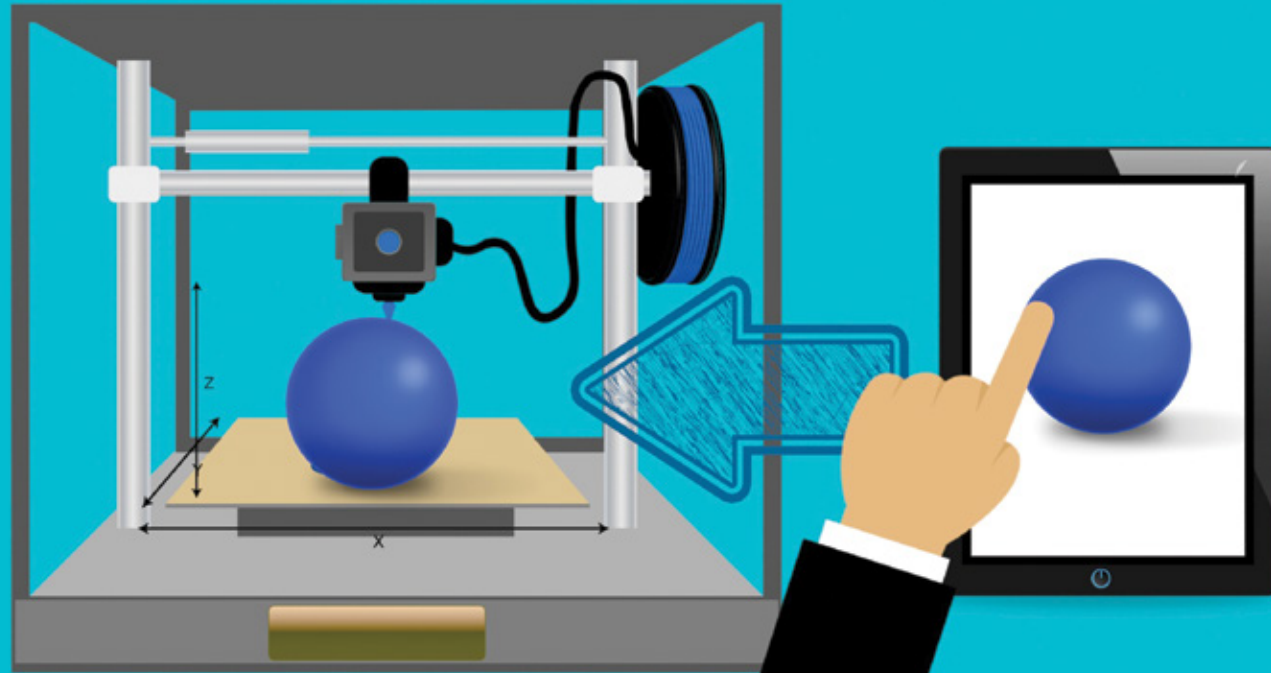
+965 2224 8000 | markaz.com

[in](#) Kuwait Financial Centre - Markaz [@markaztweets](#) [f](#) Kuwait Financial Centre "Markaz" [@markazkuwait](#)

Kuwait Financial Centre K.P.S.C. | [Asset Management](#) | [Investment Banking](#)



This document has been prepared and issued by Kuwait Financial Centre K.P.S.C. ("Markaz"), which is regulated by the Capital Markets Authority and the Central Bank of Kuwait. This document is intended only to provide general information about Markaz; is not intended to be and does not constitute an offer to buy or sell or a solicitation of an offer to buy or sell any financial securities or to participate in any particular investment or business strategy in any jurisdiction.



The Promise of 3D Printing



A residential house that is in the shape of rotor with contemporary style with wooden flooring, furnished with appliances from Samsung, constructed within 24 hours. Imagine making an own range of jewellery, trinkets or tiny add-ons for daily lives. Can we craft sculptures or showpieces smaller than human hair? A custom prosthetic device such as a hearing aid or artificial human limbs and manufacture them at very affordable prices, which benefits the healthcare industry? A 400 square metre two- story villa with walls of thickness 250 mm, capable of withstanding a level eight earthquake on the Richter scale was built in 45 days.

Well, if you are thinking these structures are created by employing huge workforce, then you are wrong. These are the wonders created by 3D printing.

WHAT IS 3D PRINTING?

3D printing is a method of creating a three dimensional object from a digital file. It is a part of additive manufacturing (AM), where the materials are layered several times until the desired object is created.

HOW DOES 3D PRINTING WORK?

It starts with creation of blueprint of the desired object, using various 3D modelling softwares like Blenders or websites like Shapeways, Thingiverse that have objects created by other users. The finished design is then sent to a 3D printer. The 3D printer then reads the file blueprint to lay down into thin layers of material to create the desired 3D object.

Top five advantages of the technology

- Ease of Customization
- Time efficiency
- Cost reduction
- Risk reduction
- Sustainability

3D PRINTING IN THE GCC

3D printing technology is gaining momentum across a wide range of industries including healthcare, construction, automotive and arts due to its ease of customisation and efficiency in comparison to the traditional methods.

In 2016, His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of UAE and Ruler of Dubai, has launched the 'Dubai 3D Printing Strategy', a unique global initiative that aims to exploit technology for the service of humanity and promote the status of the UAE and Dubai as a leading hub of 3D printing technology by the year 2030. The strategy aims of 3D printing 25% of Dubai's buildings by 2030 (Dubai Future Foundation).

According to recent blog by Marmore on 3D printing and housing crisis in the GCC, this technology will ease the major challenges faced by the construction industry (labour and cost). 'Office of the Future', the first 3D printed office in the world was unveiled in Dubai within few months of the launch of 3D strategy. It took only 17 days to complete this structure.

3DPME (Threedp), founded by Abdullah Alhussainan in Kuwait in late 2014, provides 3D printing services to companies, sells 3D printers and provides training on the technology. Recently Alhussainan launched an app called INDX, which is a directory to find the makers and designers in 3D printing in Kuwait. The app is sponsored by Ministry of Youth Affairs.

3D printing is one of the promising technology with huge benefits in comparison to the traditional manufacturing. The adoption of the technology will inject growth in almost all sectors of industries. It has huge potential in creation of job force by introducing new professions like product designers, printer operators or related to production of 3D printers in the GCC market.

DEEP LEARNING

AN AI ASPECT THAT IS
EVEN MORE INTERESTING

If Artificial Intelligence (AI) attempts at imitating human intelligence and machine learning (ML) identifies patterns, deep learning comes at the intersection of these two. Deep learning is the subset of machine learning that uses artificial neural networks having layers of learning capacities and algorithms to process large amounts of data. The network starts by learning something simple at the initial level and sends this information to the next level. This is combined with a slightly more complex bit and is transferred to the third level. This process continues with each level creating something more complex from the input it received from the previous level.

Data is the fundamental resource that makes deep learning possible as its algorithm requires multiple layers of complex data to learn. The amount of data that is generated every day is currently estimated at 2.6 quintillion bytes. Higher computing power and the widespread use of Artificial Intelligence as a service has given smaller organizations access to artificial intelligence and AI algorithm without a large initial investment.

Deep learning models are applied to big data for knowledge discovery, knowledge application, and knowledge-based prediction, making it a powerful engine for producing effective and actionable results. It has the potential to learn from unlabelled or unstructured data.

A few of the real world applications of deep learning are as follows:

- *Personalizing customer experience*
- *Improving automatic translations of texts*
- *Adding colour to images*
- *Autonomous vehicles*
- *Image classification, object detection, and image restoration*
- *News aggregation based on sentiment*
- *Medical sciences and pharmaceuticals*

Accenture reports that Capital markets are poised to be transformed by AI. However, until now, most firms have focused on using these technologies to cut costs, but AI has the potential to create value across the organization in entirely new ways. Deterministic technologies that mimic human behaviors are being superseded by intelligent systems that not only perform at or beyond human capacity, but evolve and develop new capabilities like people too. That's creating new opportunities for capital markets firms to not only cut costs, but to add value for clients, employees and other stakeholders across the organization.

AI technologies are increasingly being applied in the banking industry, mainly toward knowledge management, identity authentication, market analysis, customer relationship management, anti-money laundering, and risk control. Artificial Neural Networks (ANN) have been tested in credit risk analysis. The tests have been to assess whether stochastic neural

networks can improve the credit rating accuracy of conventional deterministic system. Demographic and biographic information, in addition to traditional financial and economic credit scoring information, is also used as inputs to the ANN classifier in order to determine if the ability and accuracy of predicting credit default can be increased.

In Insurance Industry, from the first interaction when determining what coverage is best to ongoing customer service, machines are continuing to play an increasing role in customer service in the insurance industry. As a highly regulated industry, the insurance industry processes thousands of claims and responds to thousands of customer queries. AI is being used to improve this process and move claims through the system from initial report to communicating with the customer.

Enormous computational power is necessary for solving deep learning problems due to the iterative nature of it algorithms, with the complexity going up the hierarchy. At present, deep learning is at a very nascent stage. The current models can only perform local generalization which means that they are capable of adapting to new situations that must be similar to past data. On the contrary, human cognition is capable of extreme generalization, quickly adapting to completely unprecedented situations and planning for long-term future situations with the power of abstract modeling of hypothetical situations.

THE FUTURE OF CAPITALISM

By Paul Collier

Paul Collier, a renowned development economist at Oxford University (U.K.), writes a passionate and almost polemical book on what ails 'capitalism' as we know it. The author, thereby, attempts to sketch authentic and ethical ways of healing multiple rifts in society in the wake of the practice of capitalism (across economic, social and cultural spheres), without taking recourse to revivalist ideologies (e.g., populism).

Paul Collier emphasizes that a workable strategy for regenerating a shared identity should commence from recognizing that "anxiety, anger and despair have shredded people's political allegiances, their trust in government, even their trust in each other." This, apparently, has allowed populists to rise in many parts of the Western world, which hints to the assertion that world leaders and powerful business barons have probably detached themselves from the everyday concerns of the average citizen by identifying too closely with the notion of being a 'global citizen'.

The author adopts the line that a more shared or inclusive outlook is needed as an antidote to

the apparently excessive impact of individualism that capitalism is believed to underpin. For e.g., Collier deftly points out that the 'Golden Age of Capitalism' coincided with a shared national identity, particularly in the U.S. and the U.K, that was derived from the unity that the Second World War helped crystallize. In espousing these thoughts, the author's conservative thinking, in terms of today's multicultural societies apparently diluting a 'common identity', come to the fore.

Collier pins much of the blame with respect to societal crises on ideologies of the unfettered left (excessive trust in government's abilities) and the right (that argue for unrestricted market forces); instead calling for pragmatic 'centrist communitarianism' to take the economic policy stage. Centrist communitarianism was apparent in the years immediately after the Second World War, according to the author, when emphasis was on shared wellbeing and reciprocal obligations that deepened trust and cooperation.

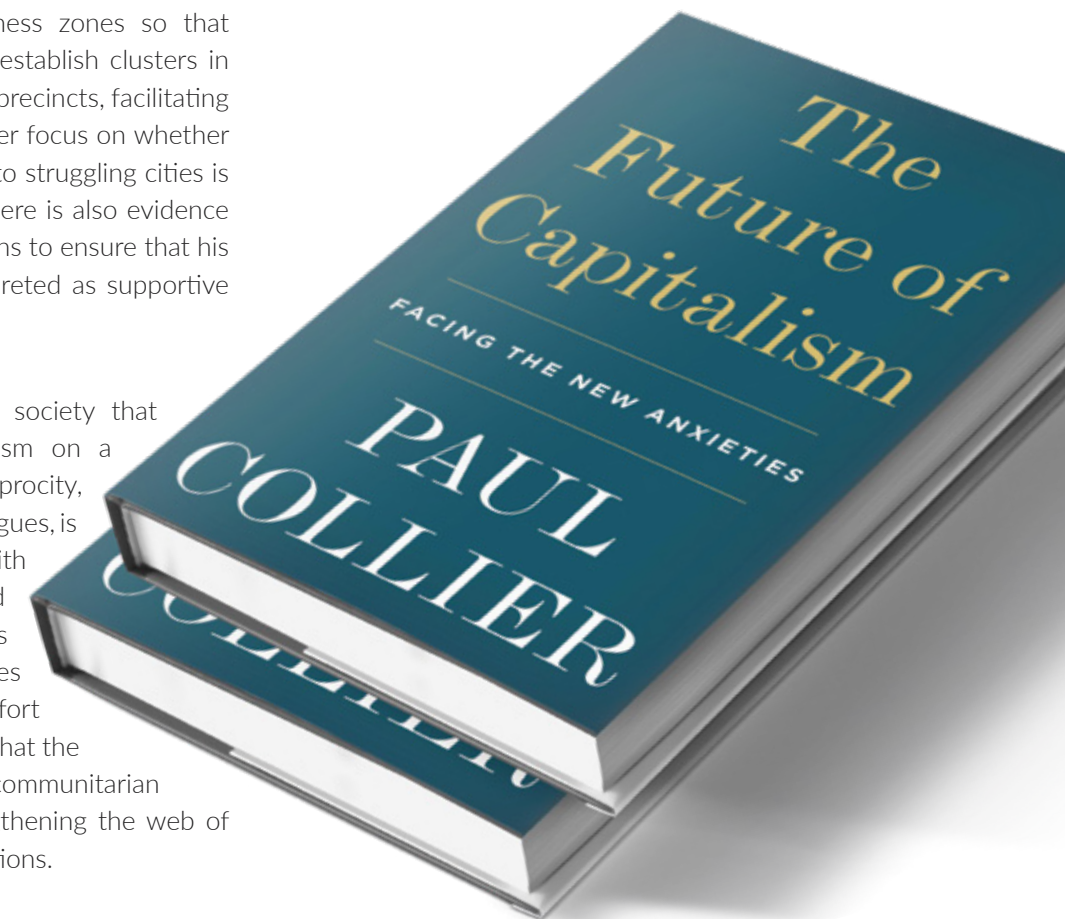
Once Paul Collier sets the stage for what ails capitalism, he launches into his primary thesis, which is that ethics and moral norms have to

hold sway in economic thinking that would allow for the rediscovery of an "ethical state" and the "ethical firm". Throughout such arguments, the author appears on a quest to advocate the case for mixed economies in terms of being more capable of responding to enlarging social fractures and deepening economic divides.

Capitalism in the form of 'shareholder capitalism' comes in for some trenchant criticism throughout the book, with Collier calling upon firms to focus more on their social impact. For e.g., struggling cities could introduce business zones so that firms know where they can establish clusters in particular areas within urban precincts, facilitating developmental banks to better focus on whether the economic rent provided to struggling cities is spent optimally. However, there is also evidence that the author has taken pains to ensure that his arguments do not get interpreted as supportive of far left ideologies.

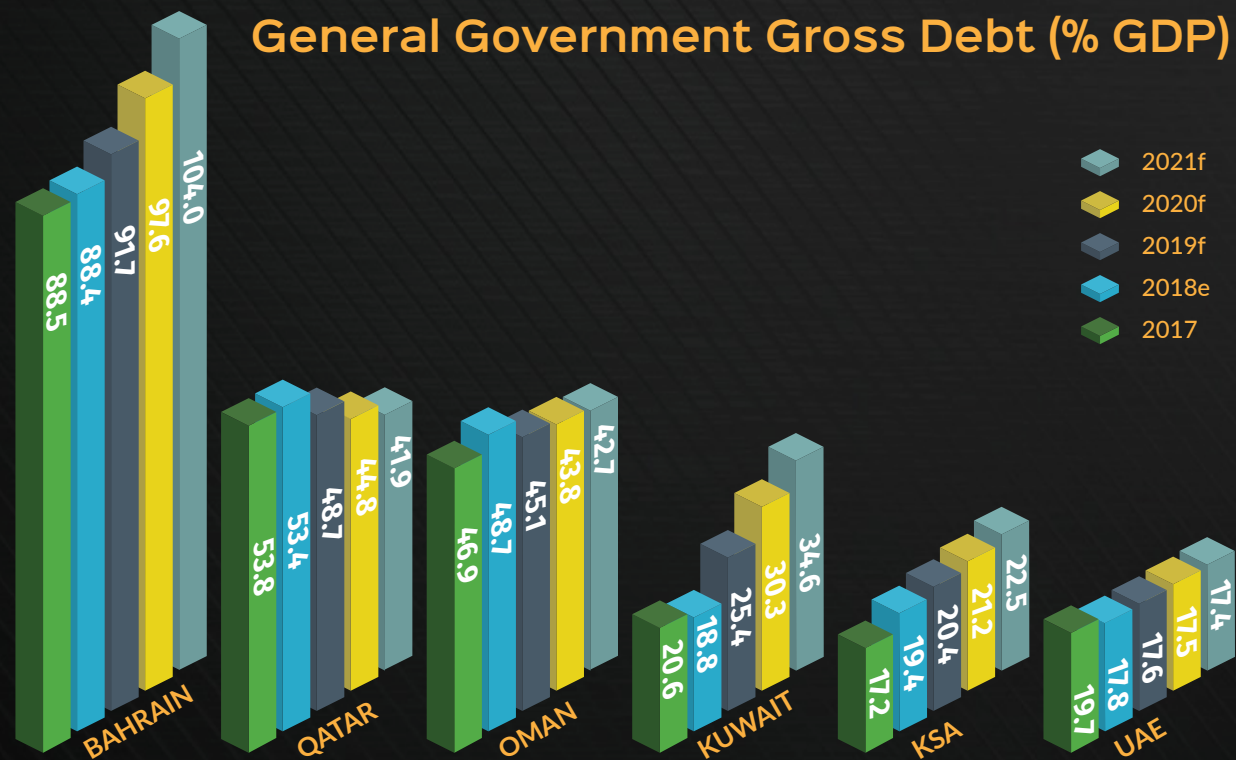
"The difference between a society that pragmatically steers capitalism on a foundation of rational reciprocity, and one run by Marxist ideologues, is that between one at peace with itself, and one that is lacerated by mounting hatreds," says Collier. Also, working families are offered words of comfort and hope with the assertion that the centre-left will rediscover its communitarian roots and will help in strengthening the web of trust-based reciprocal obligations.

The book, which attempts to propose good ideas in support of ethical capitalism, appears to slightly ebb in terms of providing granular specifics on proposed solutions. However, a book that is grand enough in scope to call for a complete reimagining of capitalism cannot be expected to fully develop in detail multiple new policy proposals. Thus, many of the ideas will require greater research that current and future researchers may help produce in terms of fleshing out the fuller details.



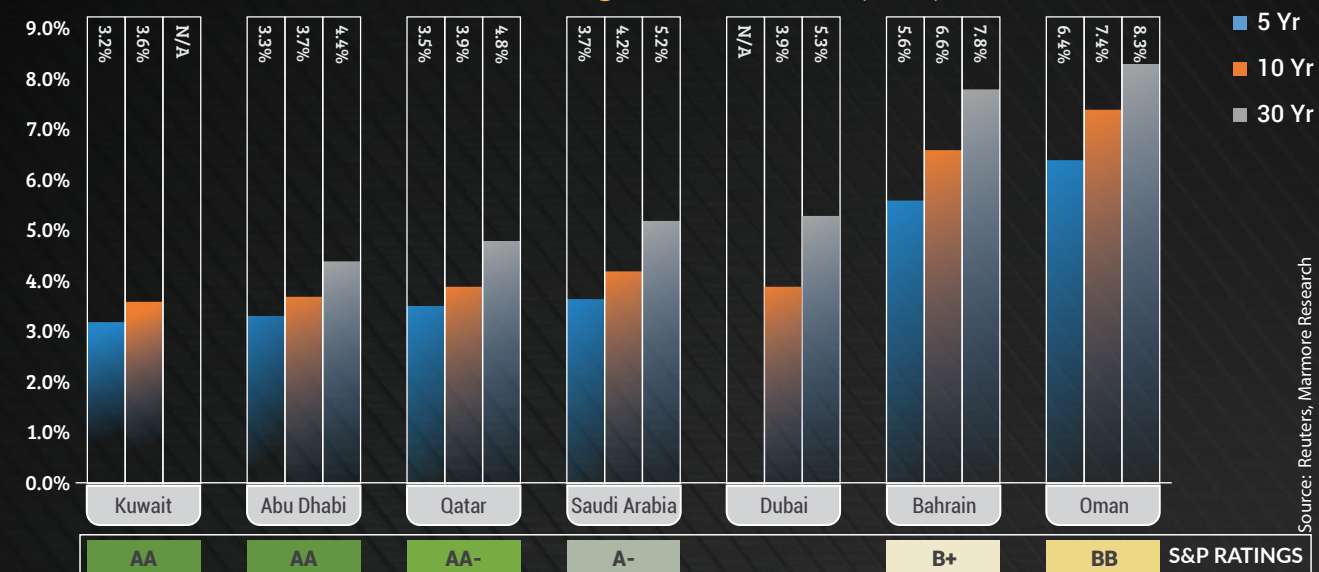
MARMORE CHART PACK

General Government Gross Debt (% GDP)



Source: IMF (October 2018)

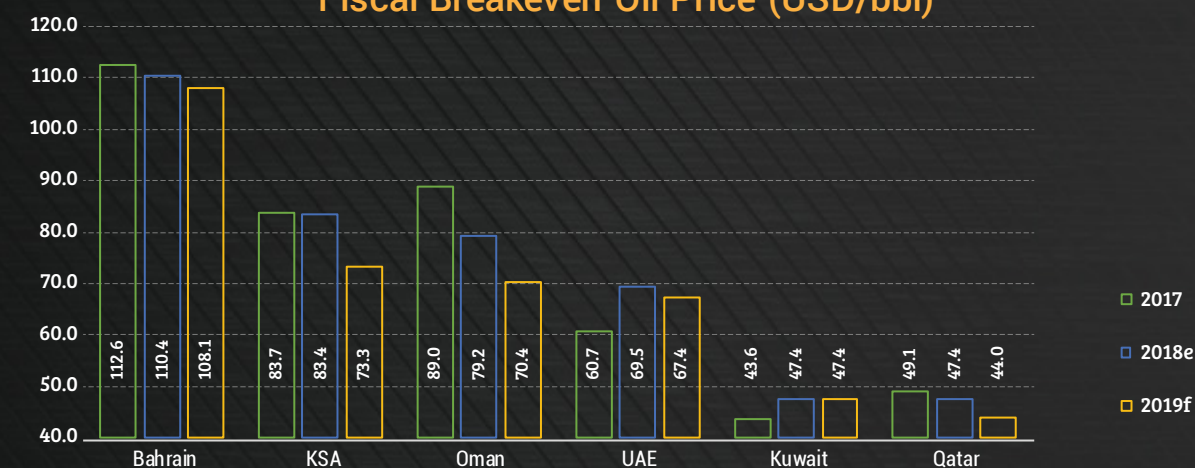
GCC Sovereign Bond Yields (in %)



Note: Regulations in Kuwait (which are being amended) doesn't permit issuance of 30 yr bond currently

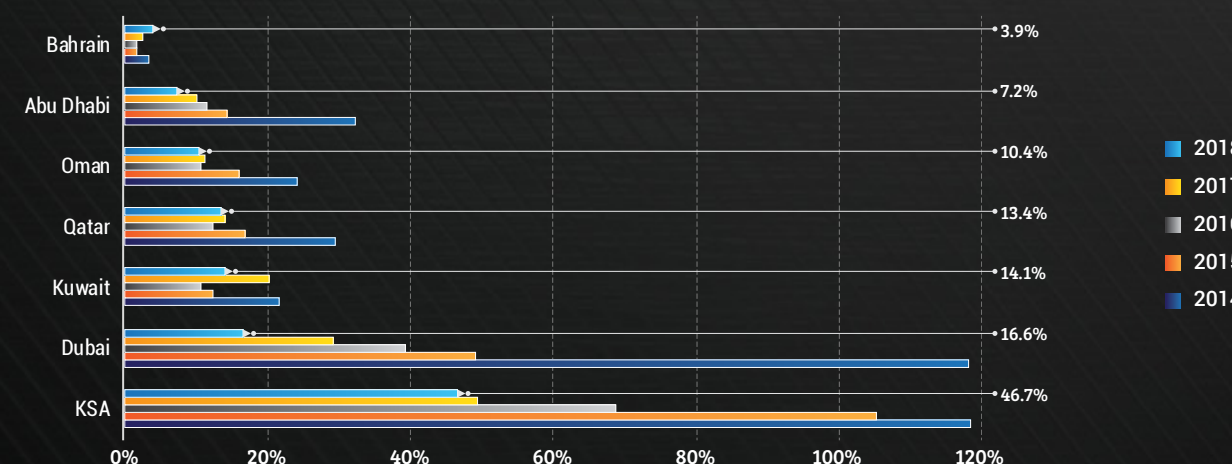
Source: Reuters, Marmore Research

Fiscal Breakeven Oil Price (USD/bbl)



Source: IMF (Oct. 2018)

Turnover Ratio (%)



Source: Reuters, Marmore Research

Kuwait's economic analysis from a decision-maker's perspective

Understand, from a critical point-of-view, what has happened and what is expected in Kuwait

Launching

Kuwait Economic Observer

A BILINGUAL quarterly newsletter published by **Marmore MENA Intelligence**, a wholly-owned subsidiary of Kuwait Financial Center 'Markaz'.

Write to us at research@e-marmore.com to request your free copy.



www.e-marmore.com



[/marmoremena](https://www.facebook.com/marmoremena)



[marmore-mena](https://www.linkedin.com/company/marmore-mena)



info@e-marmore.com



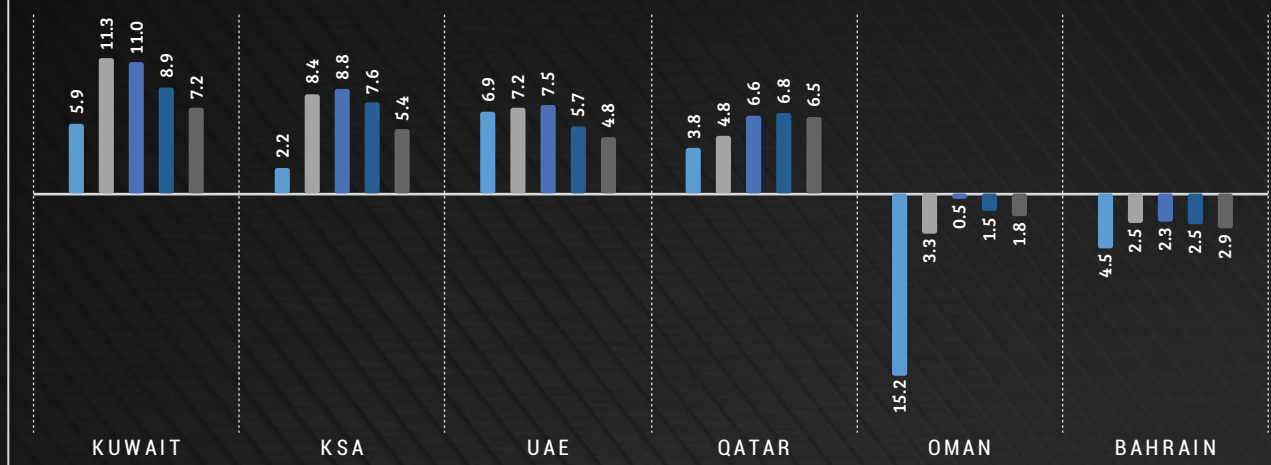
[@marmoremena](https://twitter.com/marmoremena)



[marmoreMENA](https://www.youtube.com/marmoreMENA)

CURRENT ACCOUNT BALANCE (% OF GDP)

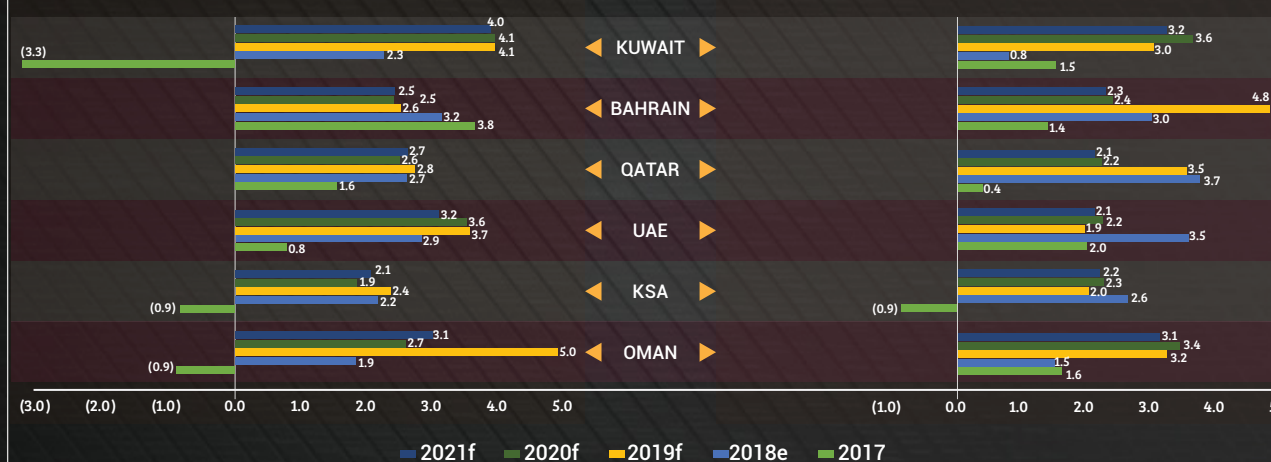
■ 2017 ■ 2018e ■ 2019f ■ 2020f ■ 2021f



Source: IMF (Oct. 2018)

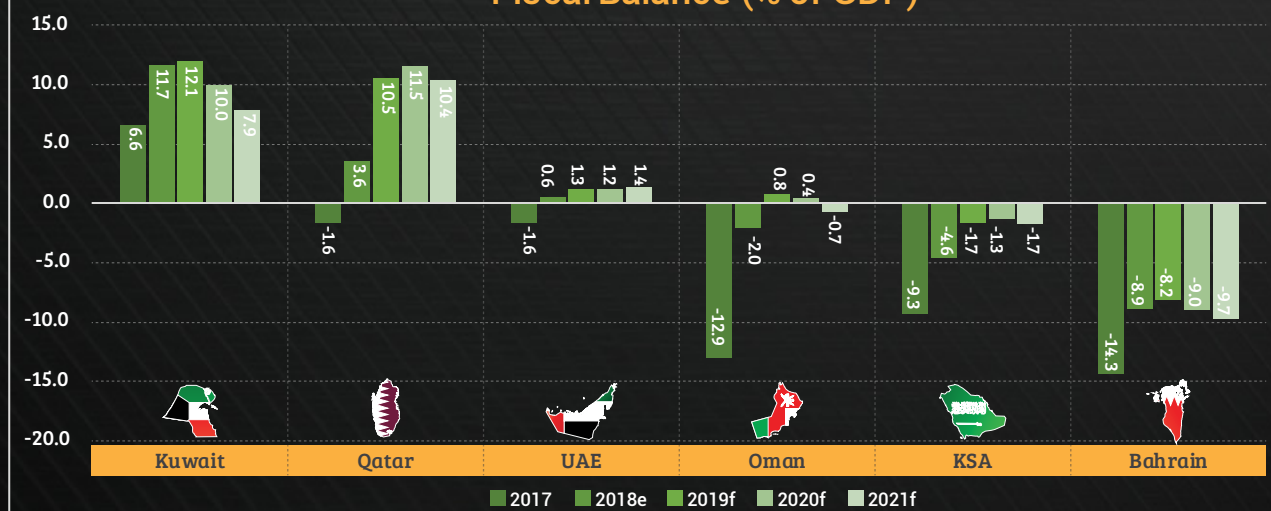
Real GDP Growth Rate (%)

Inflation, Average Consumer Prices (%)



Source: IMF (Oct. 2018)

Fiscal Balance (% of GDP)



Source: IMF (Oct. 2018)

MENA DATA AT A GLANCE

S. No.	Particulars	KSA	Kuwait		UAE	Qatar	Oman	Bahrain	Egypt	Jordan	Morocco
1	Nominal GDP, 2019f (USD Bn)	796	152		456	204	87	42	298	44	122
2	Real GDP Growth, 2019f (%)	2.4	4.1		3.7	2.8	5.0	2.6	5.5	2.5	3.2
3	Fiscal Balance, 2019f (% GDP)	(1.7)	12.1		1.3	10.5	0.8	(8.2)	(7.9)	(3.5)	(3.0)
4	Current Account Balance, 2019f (% GDP)	8.8	11.0		7.5	6.6	(0.5)	(2.3)	(2.4)	(8.6)	(4.5)
5	Gross Government Debt, 2019f (% GDP)	20.4	25.4		17.6	48.7	45.1	91.7	87.1	95.1	63.8
6	Fiscal BEP, 2019f (USD/bbl)	73.3	47.4		67.4	44.0	70.4	108.1	na	na	na
7	Inflation, 2019f (%)	2.0	3.0		1.9	3.5	3.2	4.8	14.0	2.3	1.4
8	Population, 2019f (millions)	33.9	4.7		10.7	2.8	4.4	1.5	99.2	10.1	35.6
9	Ease of Doing Business Rank (DB 2019)	92	97		11	83	78	62	120	104	60
	• Starting a Business	141	133		25	84	37	66	109	106	34
	• Dealing with Construction Permits	36	131		5	20	66	57	68	139	18
	• Getting Credit	112	134		44	124	134	112	60	134	112
	• Protecting Minority Investors	7	72		15	178	125	38	72	125	64
	• Enforcing Contracts	59	77		9	122	73	128	160	108	68
	• Resolving Insolvency	168	115		75	120	100	93	101	150	71
*Rankings across 190 economies											
10	Global Competitiveness Index	39	54		27	30	47	50	94	73	75
11	Corporate Governance	11	85		13	123	86	74	81	108	59
12	Quality of Roads	30	62		9	14	8	27	45	70	48
13	Skills of Current Workforce	40	86		19	18	35	28	119	51	103
14	Domestic Competition	20	72		9	15	23	22	48	46	49

Source: Reuters, IMF, World Bank