June 2020

Equity Market Return Expectations for Dubai, 2020-2024

Updated for Covid-19 Impact

Prepared by

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M A R K A Z

RESEARCH
PROVIDER
OF THE YEAR
2018
GLOBAL INVESTOR (EUROMONEY)

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Why are Equity Market Expectations important for Dubai?

Widespread investor interest

UAE has attracted global investor interest after MSCI's EM inclusion with an estimated weightage of 0.4% in the MSCI EM Index

Size and progression

Dubai Equity market is an important market in the Middle East and has seen several reforms in recent years.

Dubai Banks

Dubai's Stock market's Market Capitalization is dominated by banking sector.

Investor Base and Liquidity

Dubai stock market has a strong domestic investor base & in recent years it has opened up to international investors

Introduction

What is Marmore Long-Term Capital Market expectation?

Marmore's Capital Market Expectations are views of equity market growth and returns over the medium term (5 years) using internationally accepted economic and investment methodologies.

What does it cover?

We provide 5-year return expectations for Dubai's equity market.

Where can it be used?

Our data enables investment managers and investors to judiciously plan their asset allocation strategies and achieve optimization of the risk-return mix for their investment portfolios.

How do we arrive at it?

We have developed our own proprietary model to estimate the returns. Our expectations are arrived from the analysis of both historical and forward-looking equity market indicators in addition to economic forecasts obtained from reputed source.

What is the frequency of updates?

We provide an update of these expectations every six months.

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Marmore Framework for arriving at Return expectations

The equity market expectations is based on the Grinold - Kloner Model

		Dividend Yield (D/P)
		+
Equity Returns (E)	**=**	**Change in Earnings (Delta E)**
		+
		P/E Compression/Expansion (Delta P/E)

- The average Dividend Yield for the period May 2020 to December 2024 is based on estimated Index Net Profits during the years, expected Dividend Payout ratio and the Index Value of as of May 7th, 2020 is the base for the calculations.

- Index Earnings are estimated for the forecast period based on estimated Index Net Profits and the CAGR in Net Profits is used as the Change (Delta) in Earnings.

- Index Appreciation is assessed for the forecast period by estimating the CAGR in Market Capitalization for the forecast period.

- The difference b/w the Index Appreciation and the Change (Delta) in Earnings gives the P/E Expansion (if the difference is positive) or P/E Compression (if the difference is negative).

- All parameters are fine tuned based on Marmore's assessment of the macro-economic environment and parameters for the country.

Detailed Methodology

STEP 1

Establish ratio between historical '**Index profits**' and '**GDP**' for the country using sinusoidal function (as the relationship was found to be '*cyclical*').

Profits/GDP ratio= a*COS(b*t) + (c +d*t) , *where t=0*, for the starting year (*2008*).

STEP 2

Using IMF GDP forecasts, estimate the corporate profits for the future years.

STEP 3

Establish ratio between historical '**Index market cap**' and '**GDP**' for the country

Market Cap-to-GDP = a*COS(b *t) +c-(d)*t + (e ^ f) * t , *where t=0,* for the starting year 2003).

STEP 4

Using IMF GDP forecasts, estimate the Index market Cap for the future years.

STEP 5

Future Index value is estimated from Index market cap.

STEP 6

Growth in index value (YoY) provides the index appreciation for the year. The Dividend Yield estimated for the year is added to the index appreciation to arrive at the expected equity return for the year.

STEP 7

Growth in corporate profits (YoY) provides the earnings growth for the year.

STEP 8

Difference between Index appreciation less earnings growth provides P/E change.

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UAE Economy − Snapshot

Economic parameter	2009-2014 Avg.	2015	2016	2017	2018	2019	2020e
Real non-oil GDP growth (%)	6.3	5	3.2	1.9	1.3	1.0	-5.0
Inflation (average CPI) annual change (%)	1.3	4.1	1.6	2	3.1	-1.9	-1.0
Fiscal Balance (% of nominal GDP)	3.2	-3.4	-2	-1.4	1.2	-0.8	-11.1
Current Account Balance (% of nominal GDP)	12	4.9	3.7	7.3	9.1	7.4	1.5
Government Gross Debt (% of nominal GDP)	18.6	18.7	20.2	20	19.1	26.6	33.6

Source: IMF World Economic Outlook, April 2020

- The World economy is projected to contract by 3% in 2020 and this would lead to a significant fall in oil demand and reduced oil prices as per the estimates of IMF and Energy Information Administration (EIA) of USA.

- The Covid-19 pandemic is expected to result in negative real GDP growth of -3.5% in 2020 with non-oil GDP growth declining by 5.0%.

- Cost of capital is expected to remain at low levels given that Dubai is expected to follow the global trend of low interest rates driven by negative rates in Europe and expected zero interest rates in USA. Loan demand and industrial investments can be expected to better with the benign interest rate environment.

- The banking sector, telecommunications sector, hospitality and tourism and insurance sectors can be expected to perform better with positive economic growth for the Emirate.

- Concerns about the Covid-19 pandemic and the economic dislocation is expected to persist and this casts a shadow on oil prices which are effected also by the global economic slowdown. The other concern is the possibility of OPEC+ agreement not being adhered to by the respective countries in the event of the pandemic not subsiding, leading to a prolonged period of low oil demand.

Index, GDP and Oil

Dubai Equity Index Value, UAE non-oil GDP & Oil Price
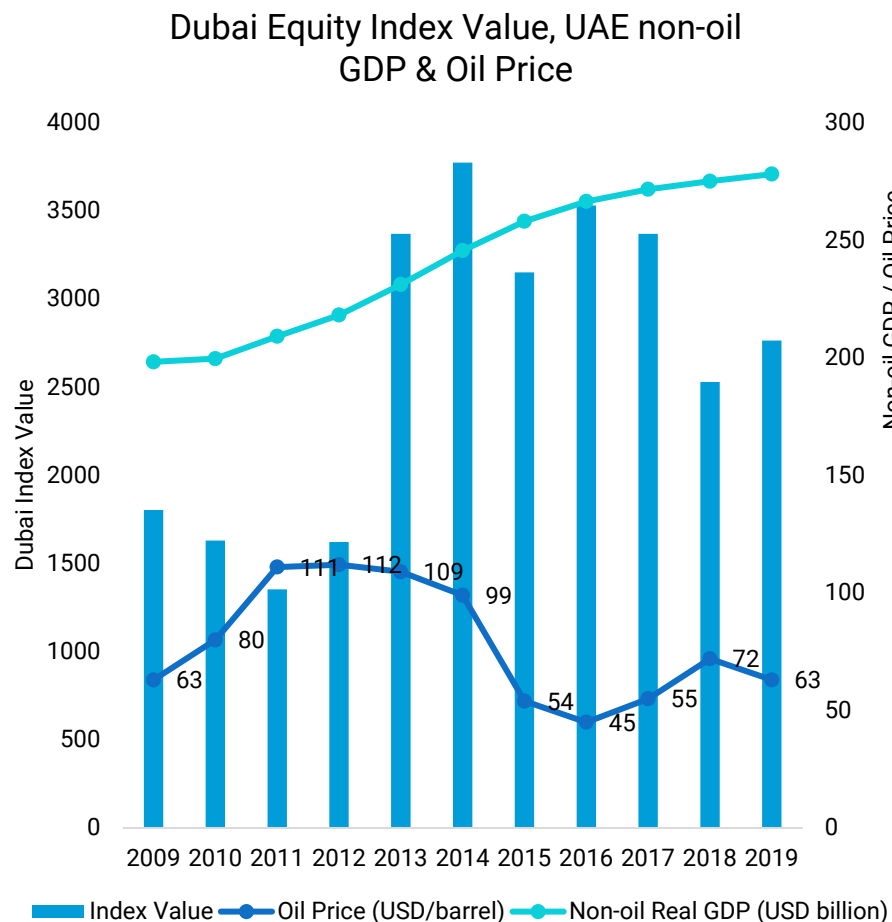
Source: Refinitiv, IMF, Marmore Analysis.

- DFM Index has shown a CAGR of 4.4% over the period 2009-2019.

- DFM Index is only a small way correlated with the change in the non-oil Real GDP of UAE.

- The Free Float Market Cap of the DFM Index is estimated to have increased from USD 19.1 billion in 2009 to USD 33.7 billion in 2019.

- The increase in free float market cap by 2019 was partly due to the addition net of deletions of few companies during the period.

- The total market cap of DFM companies was USD 95 billion as of December 2019.

- UAE's non- oil GDP is not correlated to Oil prices and the DFM Index Value shows only small correlation with UAE's non-oil GDP.

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Dubai's Equity Market - Snapshot

Index Name	DFM Index
Last Close (May 11, 2020)	1,884
YTD Change (%)	-31.9%
P/E TTM	4.73
Dividend Yield	5.29%
Listed Companies	37
Market Capitalization (May 11-2019) (USD Bn)	56
Turnover Ratio (Dec-2019)	45%

Source: Refinitiv, DFM;

- Dubai's Equity Market represented by DFM Index (DFMI) witnessed CAGR in its Index of only (-) 6.0% over the period 2014-2019 when non-oil GDP growth was similar at a CAGR of 1.4% and negative earnings CAGR of (-)2.8% during the period.

- Next five years are expected to see positive Equity Returns from DFMI mainly due to the steep fall in the Index Value in May 2020 due to Covid-19 impact, despite about zero growth in GDP expected during the period 2020-2024..

DFMI – Historical Equity Returns (2011-2019)

DFMI Equity Returns (2011-19)

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019
Dividend Yield	4.9%	3.4%	4.6%	4.1%	2.5%	5.7%	4.7%	4.7%	5.2%
Earnings Growth	-55.3%	-18.9%	-12.6%	-0.5%	35.8%	63.6%	8.1%	3.3%	-4.4%
P/E Expansion	90.4%	-5.2%	-5.8%	33.1%	44.0%	-53.5%	-18.2%	13.7%	-1.8%
DFMI Equity Returns	40.1%	-20.7%	-13.8%	36.8%	82.3%	15.8%	-5.3%	21.7%	-1.1%
Real Non-oil GDP Growth	*-3.5%*	*0.7%*	*4.7%*	*4.3%*	*5.9%*	*6.2%*	*5.1%*	*3.3%*	*1.9%*

Source: Refinitiv & Marmore Estimates for unavailable data

DFMI Historical Returns
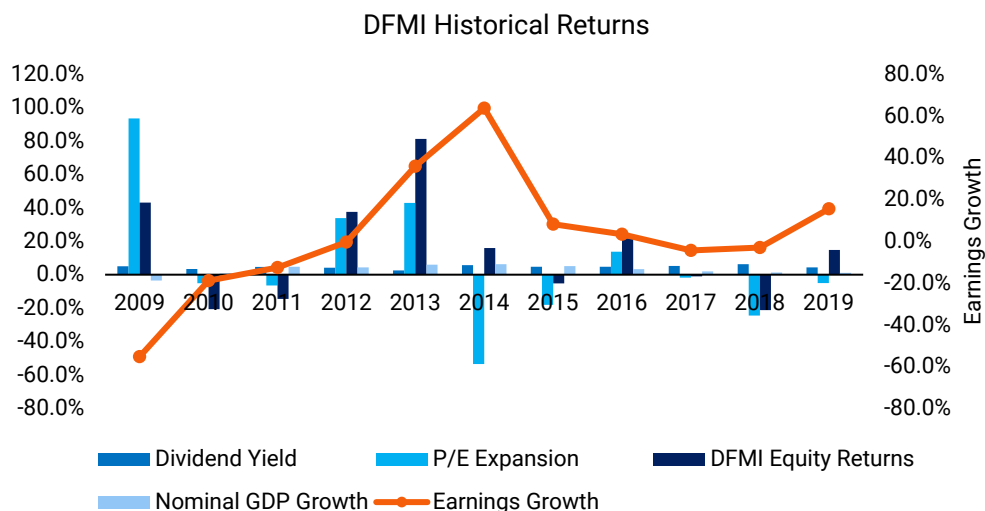
- Dividend Yield for ADSI fluctuated in the historical years and in 2019 it was lower than in 2018.

- Earnings Growth has been fluctuating over the period with high negatives and high positives due to constituent industry factors as well as cyclicality.

- Varying levels of P/E expansion and P/E Compression was witnessed during the period.

- Consequently, Equity Returns saw troughs and peaks over the years

DFMI − Major Constituents of the Index (2019)

Large Constituents of DFMI (2019)	Total Market Cap (USD Billion)	Free Float (%)	Free Float Market Cap (USD Billion)
Emirates NBD Bank PJSC	22.4	46.25%	10.35
Emirates Islamic Bank PJSC	14.8	0.11%	0.02
Dubai Islamic Bank PJSC	9.9	64.38%	6.37
Emaar Properties PJSC	7.8	70.78%	5.55
Emirates Integrated Telecommunications Company PJSC	6.8	20.12%	1.37
Emaar Malls PJSC	6.5	15.37%	1.00
Emaar Development PJSC	4.3	21.00%	0.90
Mashreqbank PSC	3.4	16.68%	0.57
Commercial Bank of Dubai PSC	3.1	35.72%	1.09
Dubai Financial Market PJSC	2.1	20.00%	0.42
Air Arabia PJSC	2.0	72.23%	1.48
Dubai Investments PJSC	1.5	77.26%	1.16

- DFMI is a free float weighted Index. The banks, telecommunication companies, real estate and aviation services companies are among the largest constituents of the Index.

- The Free Float for Emirates NBD Bank the largest constituent of the Index is 46%, while it varies between 0.1% to 77.3% for the remaining of the largest constituents of the Index. The average free float for the Index is 37.4%.

P/E Ratio

P/E Ratio for DFMI

18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
-

16.1

11.0

10.5

9.2   8.8   9.2   9.2

8.3   8.5

7.1   6.8

2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019
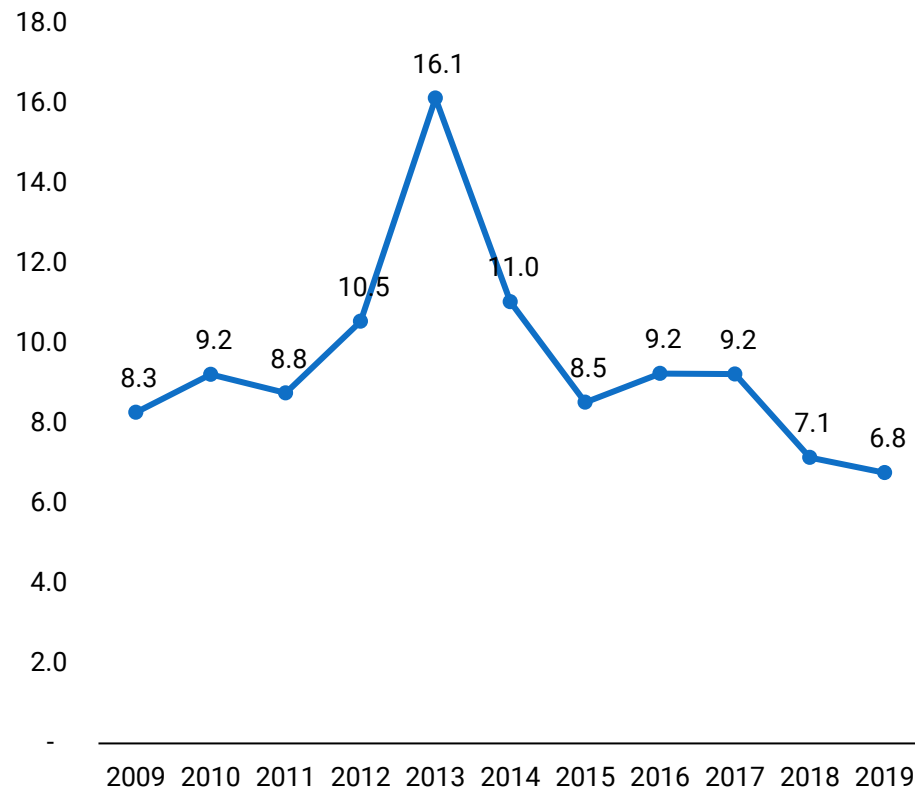
Source: Refinitiv, IMF, Marmore Analysis

- DFMI P/E Ratio has exhibited an upward trend followed by a downward trend with a peak in 2013, over the historical period 2009-2019.

- As result, P/E expansion as well as P/E compression are seen over the period 2009-2019.

- The P/E Ratio changes over time can be due to changes in future growth expectations by investors in the Market at each point of time, as well as change in weights of index constituents.

- The drop in P/E Ratio in 2019, may be due to anticipated fears about real estate and tourism sector effecting economic growth and corporate earnings in the future.

- The peak in P/E ratio in 2013 might have been due to anticipated earnings spike that materialized in 2014.

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Market Cap. to GDP

DFM Market Cap to GDP Ratio (2009-2019)
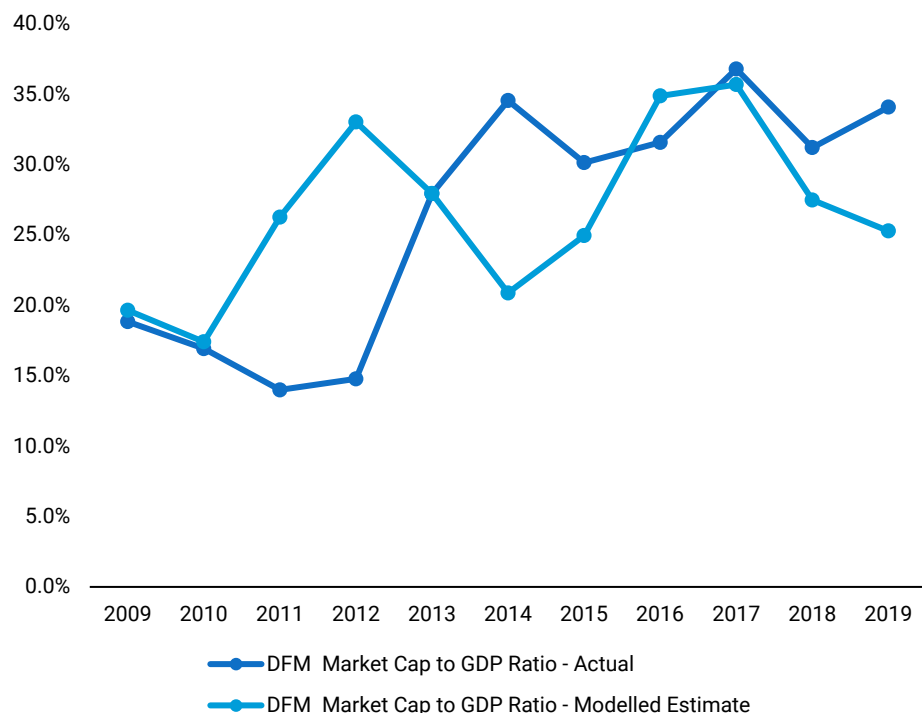
Source: Refinitiv, IMF, Marmore Analysis

- Ratio of DFMI Market Cap to nominal non-oil GDP is exhibiting a cyclical pattern i.e. in the form of a Sinusoidal or horizontal S-curve over the period 2009-2019. There is also an upward incline in the sinusoidal curve with next high and next low being higher than the previous high and low.

- A smoothened version of the curve that is created using a variant of the basic sinusoidal function is also shown in the chart on the left side.

- The peak of the ratio in 2014 compared to 2011-2012 was due to earnings increase being sharply higher than increase in GDP in that year. The troughs in in 2015 was due to P/E compression as well as smaller earnings growth and 2018 was mainly due to negative earnings growth and P/E compression.

- A forecast of this Ratio based on its cyclical trend has been prepared by Marmore for the future period of 2020-2024.

- Using the forecasted Ratio-MCAP/GDP and using IMF forecast numbers for UAE's nominal non-oil GDP for 2020-2021 and previous growth estimates for 2022-2024, an estimate of the expected Market Cap of DFMI for the period has been arrived at.

- Lastly, using the DFMI Market Cap the CAGR of Index has been estimated and also used for estimating the P/E Expansion or Compression.

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DFM Earnings to GDP Ratio

DFM Net Profits to GDP Ratio
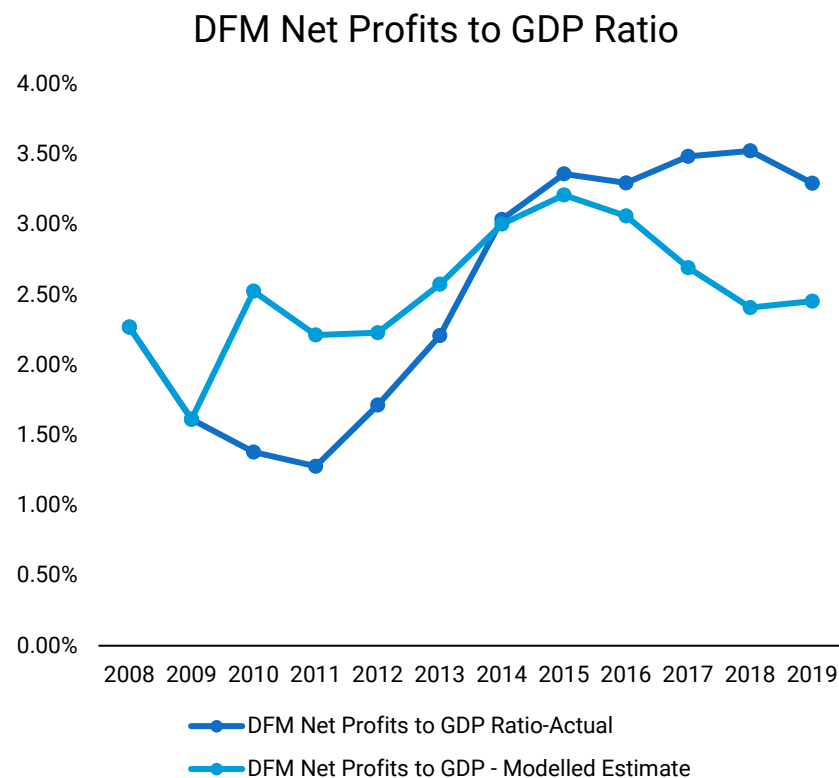
Source: Refinitiv, IMF, Marmore Analysis

- DFMI Earnings (Net Profits) to UAE Real Non-oil GDP at is exhibiting a long-term cyclical pattern i.e. in the form of a Sinusoidal or curve over the period 2008-2019, with an upward ascent that shows higher successive lows

- A smoothened version of the curve that is created using a variant of basic sinusoidal function is also shown in the chart on the left side.

- The peaks in 2016-2019 were partly due to GDP stagnation over the period despite the increase in earnings. The trough in 2011 was partly due to GDP expansion while earnings growth was negative.

- A forecast of this Ratio of Earnings to nominal GDP (Ratio-E/GDP) based on the cyclical trend exhibited by this ratio, has been arrived at for the future period of 2020-2024.

- Using the forecasted Ratio-Net Profits to GDP and using IMF forecast for UAE's non-oil GDP growth for the 2020-2021 and previous estimates for 2022-24, an estimate of the expected net profits of DFMI for the period has been arrived at.

- Lastly, using the DFM Net Profits as proxy for DFM Earnings, the CAGR of DFM Earnings has been estimated and used also as one of the components of the DFMI Equity Returns.

Dubai Equity Market Performance Comparison

Asset Classes: Risk-Return Profile 2019
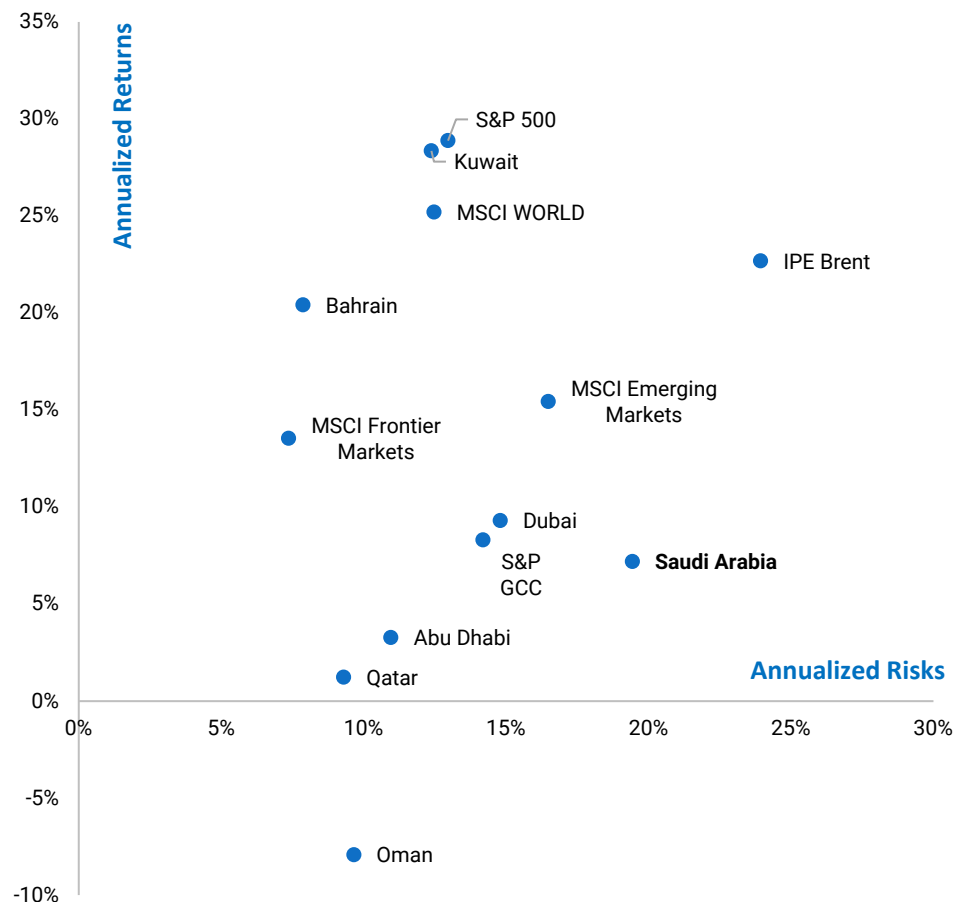
Asset Classes: Annualized Risk-Return Profile 2010-2019
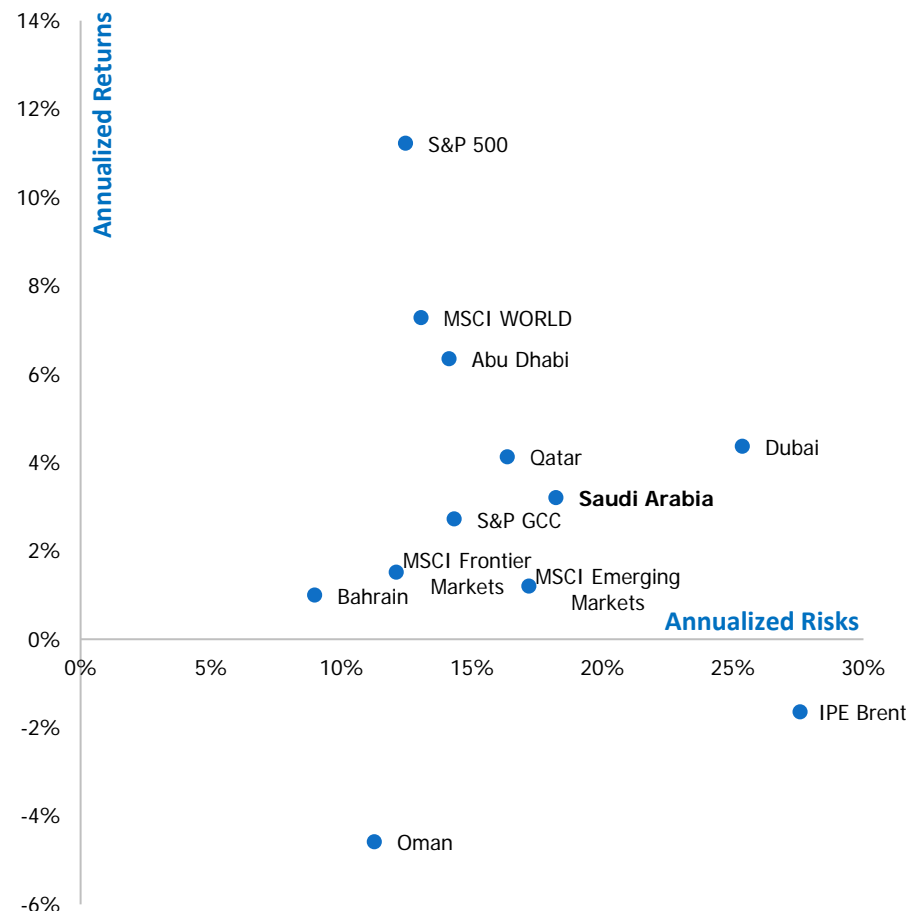
Source: Refinitiv, Marmore Research; Kuwait is absent in the Long-term asset class performance due to the lack of historical index data after the change in equity main equity indices

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Back testing of Model for Estimating Index Appreciation

The "Market Cap to GDP Ratio" Model has been back tested for the period 2003-2014 to assess correctness of 5 Year Index Appreciation (%) results derived from it and results are shown in the table and chart below.

S.No	Year	Forecast-Base Case	Forecast-Pessimistic	Forecast-Optimistic	Actual	Result
7	2003	10.5%	-3.1%	21.4%	10.3%	Correct
8	2004	4.8%	-8.1%	15.2%	-6.4%	Correct
9	2005	10.4%	-3.3%	21.3%	-26.2%	Incorrect
10	2006	12.6%	-1.3%	23.7%	-20.0%	Incorrect
11	2007	6.6%	-6.6%	17.1%	-22.8%	Incorrect
12	2008	2.5%	-10.2%	12.5%	15.5%	Incorrect
13	2009	5.6%	-7.4%	16.1%	15.9%	Correct
14	2010	13.1%	-0.9%	24.3%	14.1%	Correct
15	2011	11.1%	-2.6%	22.0%	21.1%	Correct
16	2012	6.1%	-7.0%	16.6%	15.7%	Correct
17	2013	3.2%	-9.6%	13.4%	-5.6%	Correct
18	2014	6.5%	-6.6%	17.0%	-6.0%	Correct
Number of " Correct Calls"		8				
Total Number of Calls		12				
% Correct Calls		66.7%				
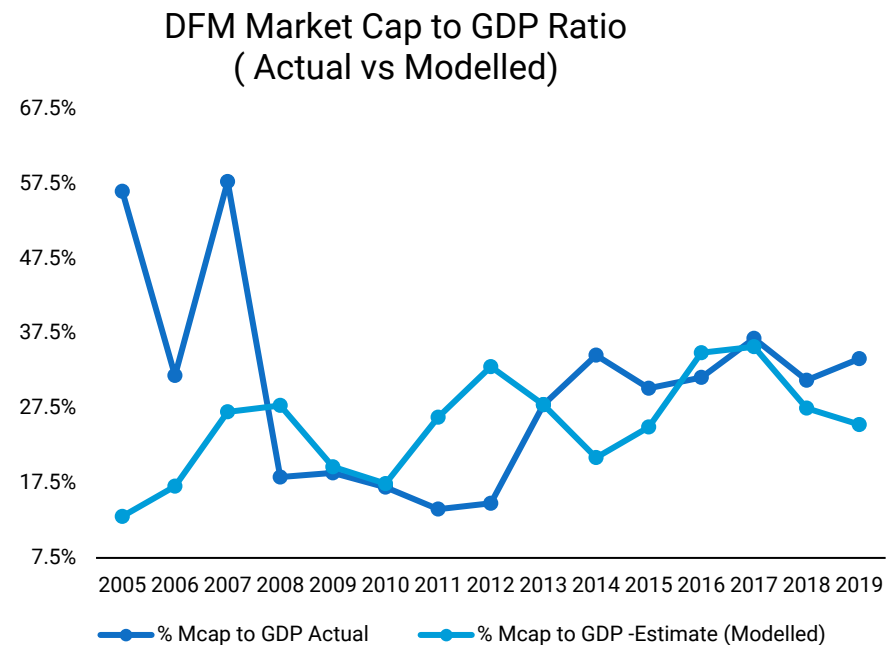
DFM Market Cap to GDP Ratio
(Actual vs Modelled)

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5-year* Equity Market expectations for Dubai

	Pessimistic Case (equal or lower)	Base Case (equal or higher)	Optimistic Case (equal or higher)
Equity Returns, Of which **(A+B+C)**	-3.3%	12.8%	25.6%
Dividend Yield **(A)**	3.7%	5.4%	6.5%
Earnings Growth **(B)**	-9.3%	-1.6%	2.5%
P/E Expansion **(C)**	2.3%	9.0%	16.5%
Dubai All Share Index level by 2024	1,380	2,669	4,270
Probability of the estimate	9.6%	55.3%	23.9%

* Period from May 7th, 2020 to December 31, 2024

Key Highlights

- Dubai Equity Market is expected to provide a total annualized return of 12.8% for the period between May 2020 and December 2024.

- The expected return is predominantly driven by dividend yield 5.4%, negative earnings growth of (-)1.6% and P/E Expansion of 9.0% for the period.

- Price/Earnings Multiple (PEM) is expected to be higher in 2024 than that as of May 7th, 2020 and also slightly higher than 2019 level of 6.8 times.

- Using IMF forecasts of Real non-oil GDP for the years 2020-2021 issued in April 2020 and previous estimates for remaining years, the GDP is expected to show zero growth for 2019-204, whereas it was only 6.4% during 2014-2019.

- DFMI Index level, which stood at 1,923 as of May 7th, 2020 and 2,765 as of December 31, 2019 is estimated to reach 2,669 by December 31, 2024 as per our model.

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Forecast of DFMI Index Level
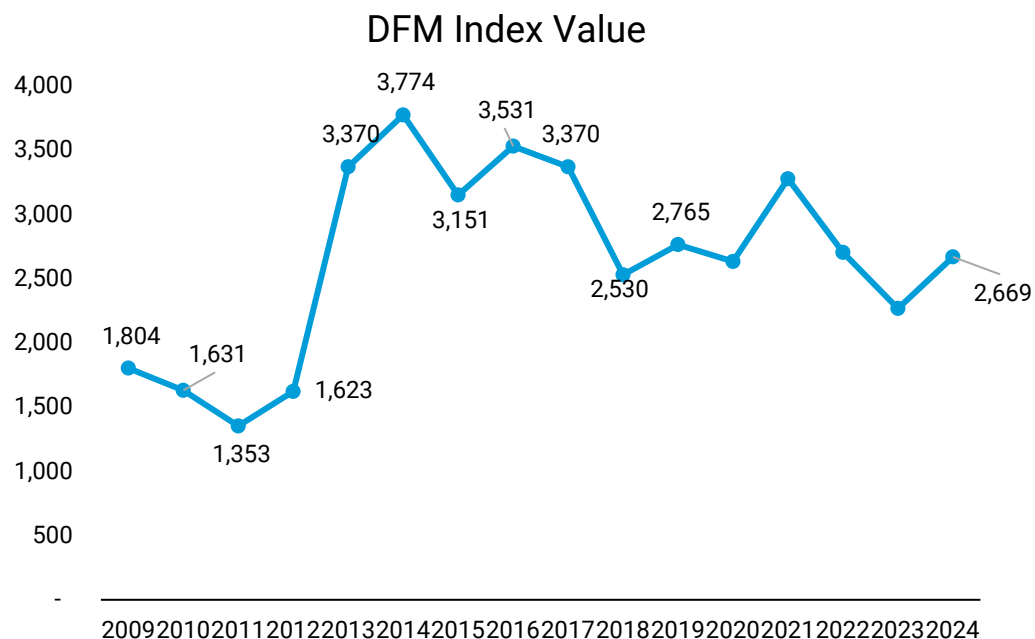
DFM Index Value

- DFMI index values has been forecasted based on the expected market capitalization of the index. DFMI Index Value is expected to grow at a CAGR of 7.4% i.e. increase by 39% in 2024 over that as of May 7th, 2020.

- Based on GDP forecasts, DFMI Index Free Float Market Capitalization is expected to reach USD 33 billion by 2024, based on the assumption of no changes in the Index Free Float percent.

- DFMI Earnings are expected to grow at a CAGR of (-) 1.6% i.e. decrease by 7% in 2024 over those in 2019.

- DFMI Index is therefore expected to fall in 2020 due to fall in non-oil GDP consequent to Covid-19 impact and subsequently recover in 2021 with GDP growth but thereafter show cyclical up and down movements like in the past despite expected growth in GDP in those years.

Projection of Key variables (1/2)

Dubai Financial Market Earnings per Share
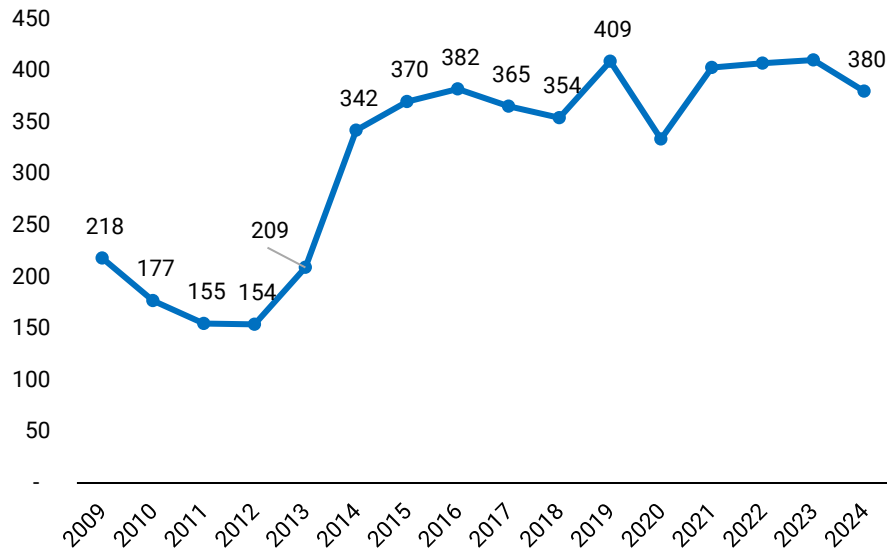
Dubai Financial Market P/E Ratio
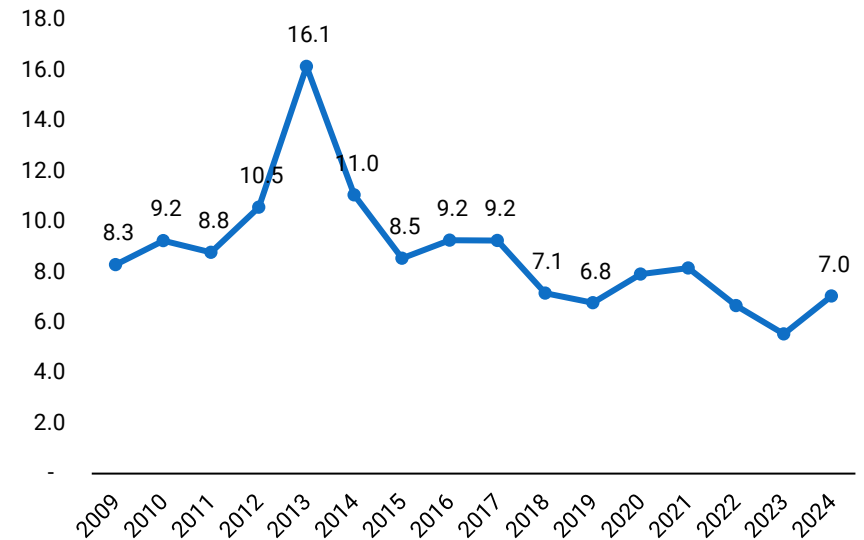
- DFMI's aggregate earnings are expected to decline slightly over 2019 levels, due to GDP fall expected for 2020 due to Covid-19 impact and subsequently show cyclical up and down movements following historical trend despite positive growth in GDP.

- Dubai much like other emerging markets is expected to see Index P/E multiple compress in 2020 due to the fall in Index value. With negative earnings growth during 2020, and cyclicality in Earnings and Index Value , DFMI's P/E multiple is expected to follow a cyclical movement in the remaining years of the forecast period and end with a marginal increase in 2024 over 2019 value.

Projection of Key variables (2/2)

DFM Net Profit to GDP Ratio
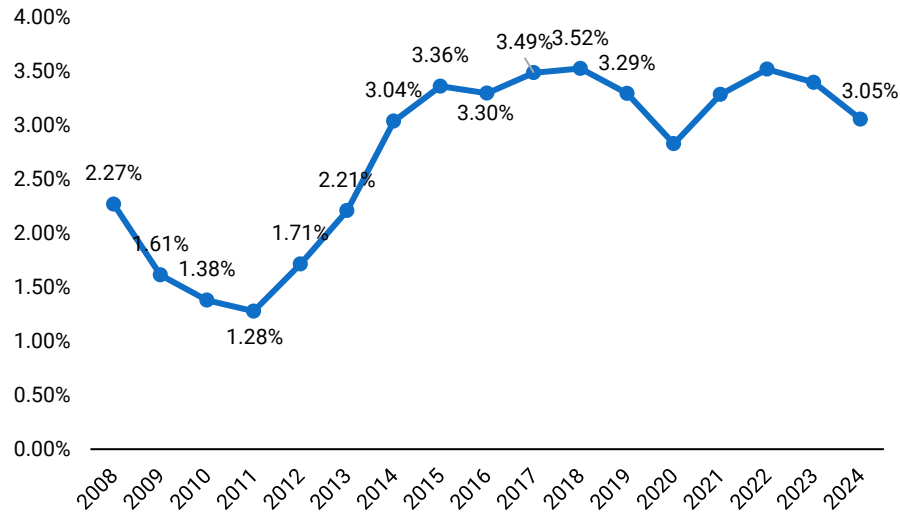
DFM Market Cap to GDP Ratio
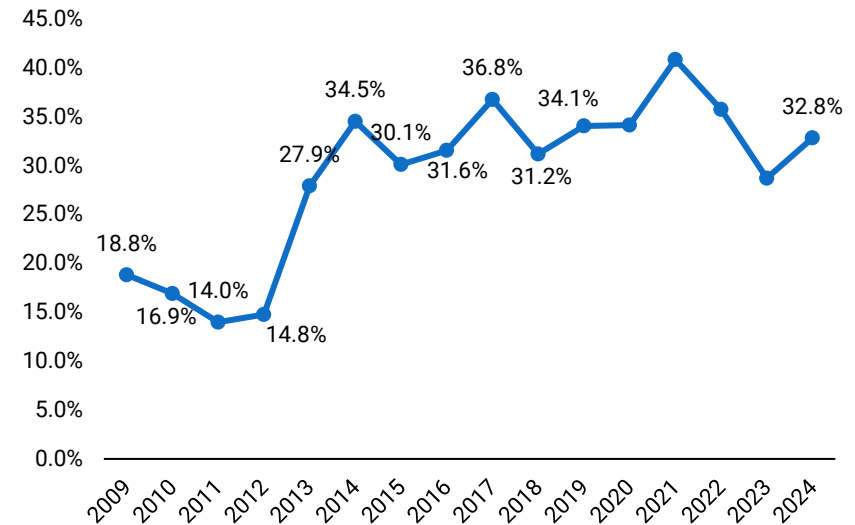
- The Corporate profits of companies included in the DFM Index is largely consisting of banking stocks followed by real estate and telecommunication stocks that are expected to increase their earnings in a period of stable and growing GDP growth. Net profit to GDP ratio for DFM is expected to fall in 2020, increase during 2021 and 2022 and finally again show a cyclical decline till 2024.

- The DFMI Market Cap to GDP ratio is expected to exhibit previous cyclical behavior in the forecast period of 2020-2024 and is expected to see small decrease in 2024 over 2019 level.

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