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Equity Market Return Expectations for Saudi Arabia, 2020-2024

Authors

M.R. Raghu CFA, FRM, FCMA

Head of Research

+965 2224 8280

rmandagolathur@markaz.com

Venkatram Kolluri

Senior Consultant

+965 2224 8280

VKolluri@e-marmore.com

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Why are Equity Market Expectations important for Saudi Arabia?

Widespread investor interest

Saudi Arabia has attracted global investor interest after MSCI's EM inclusion with an estimated weightage of 2.8% in the MSCI EM Index

Size and progression

Saudi Arabian Equity market is the largest in the Middle East and has seen several reforms in recent years.

Saudi Aramco

Saudi equity market includes the world's largest company by Market Capitalization.

Investor Base and Liquidity

Saudi markets have a strong domestic & international investor base and is the most liquid Middle East equity market.

Marmore Long-Term Capital Market Expectations

What is Marmore Long-Term Capital Market expectations?

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 Saudi Arabia'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 industry-level and economic forecasts obtained from reputed source.

What is the frequency of updates?

We provide an update of these expectations every six months.

Marmore Framework for arriving at Return expectations

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

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

- The Average Index Dividend Yield is estimated based on forecasted Net Profit and Dividend payout Ratio for the years 2020-2024 and the estimated Market Capitalization as of May 7th, 2020 the date used as the base date for the calculations.

- Index Earnings (Index Net Profit) is estimated for the forecast period and the CAGR in Net Profit for the period May 2020 to December 2020 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 SIN(b * t) + c, *where t=0*, for the starting year.

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 SIN(b * t) + c*t +d, *where t=0*, for the starting year.

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 estimated Dividend Yield for the forecast period 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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Saudi Economy – Snapshot

Economic parameter	2009-2014 Avg.	2015	2016	2017	2018	2019	2020e
Real non-oil GDP growth (%)	6.5	3.2	0.2	1.3	2.2	3.3	-4.0
Inflation (average CPI) annual change (%)	3.4	1.3	2.0	-0.9	2.5	-1.2	0.9
Fiscal Balance (% of nominal GDP)	4.1	-15.8	-17.2	-9.2	-5.9	-4.5	-12.6
Current Account Balance (% of nominal GDP)	15.2	-8.7	-3.7	1.5	9.2	6.3	-3.1
Government Gross Debt (% of nominal GDP)	5.8	5.8	13.1	17.2	19.0	22.8	34.0

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 -1.1% in 2020 with non-oil GDP growth declining by 4.0%

- Cost of capital is expected to remain at low levels given that Saudi Arabia's 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 petrochemical industry can be expected to improve returns due to cyclical trends in the later part of the next 5 years period.

- 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.

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Index, GDP and Oil

TASI Historical Index, GDP & Oil price

Oil price values (USD/bbl): 63, 80, 111, 112, 109, 99, 54, 45, 55, 72, 64

Legend:
- TASI (Index Value)
- GDP of Saudi Arabia at Current Prices
- Average Oil price (USD/bbl)

Source: Refinitiv, IMF, Marmore Analysis; Note: Oil price does not have an axis

- TASI has shown a CAGR of 3.2% over the period of 2009-2019. TASI closely tracks the change in the GDP of the country.

- KSA Index that had a high correlation with Oil prices until 2014. In the subsequent years, though the oil prices remained low the index has marched ahead.

- The Free Float Market Cap of the Index is estimated to have increased from USD 160 billion in 2009 to USD 270 billion in 2019.

- The increase in free float market cap in 2019 was mainly due to the addition from the IPO of Saudi Aramco in December 2019.

- The market cap of TASI companies including that of Aramco was USD 2.2 trillion as of December 2019.

- Oil being the major source of revenue for Saudi Arabia, the country's GDP and the equity market performance are highly correlated to Oil prices.

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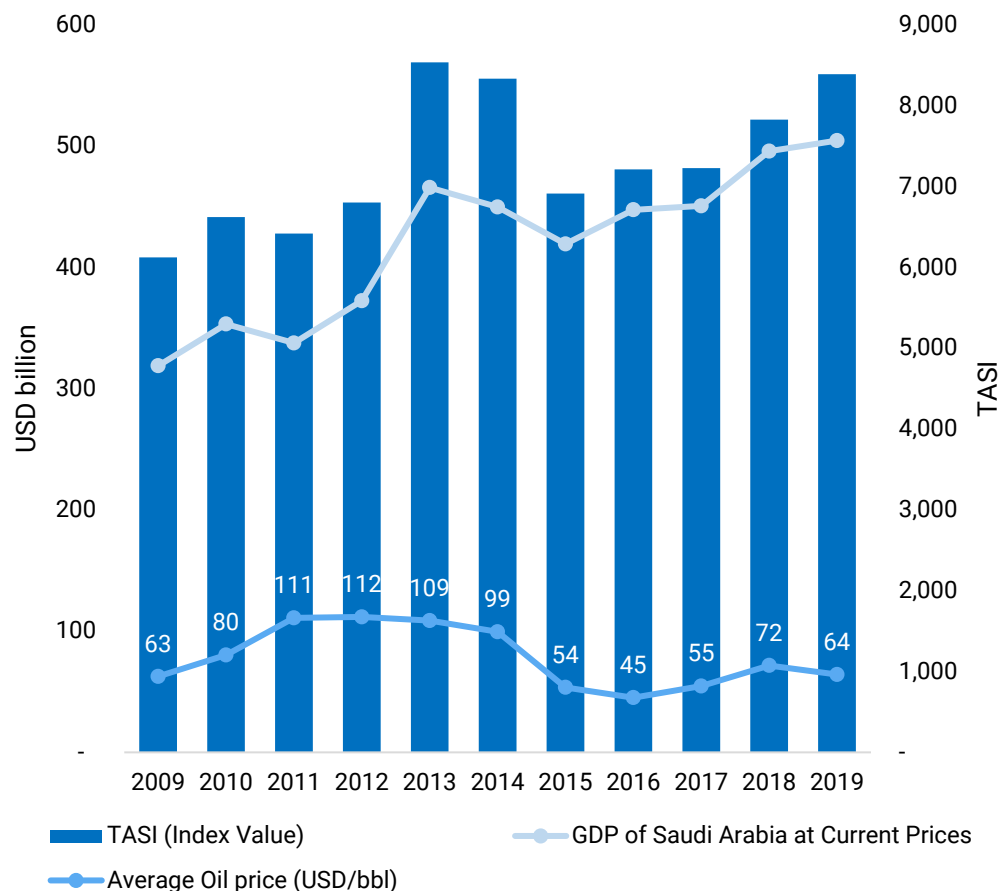
- 5-year Equity Market Expectations (2020-2024)

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Saudi Equity Market - Snapshot

Index Name	TASI Index
Last Close (May 11th, 2020)	6,604(December 31, 2019: 8,389)
YTD Change (%)	-21.3%
P/E TTM	15.97
Dividend Yield	3.95%
Listed Companies	200
No of Large Cap Companies	17
No of Mid Cap Companies	34
No of Small Cap Companies	149
Market Capitalization (May 11-2019) (USD Bn)	2,062
Turnover Ratio (Dec-2019)	45%

Source: Refinitiv, Tadawul; Note: Large, Mid and Small cap classification based on MSCI methodology

- Saudi Equity Market represented by TASI Index witnessed CAGR of the Index of only 0.1% over the period 2014-2019 (when GDP growth was also low at a CAGR of 1.0%), nevertheless it showed an Index Return of 7.2% in 2019 aided by inclusion of the Index in MSCI and consequent inflow of foreign capital.

- 2019 also closed with a boost to Index Market Cap by inclusion of Saudi Aramco post its IPO in the month.

- Next five years are expected to see positive Equity Returns from TASI mainly despite negative GDP growth of (-) 0.2%, due to draw down of the TASI to a low level of 6,604 as of May 11, 2020 as compared to Index Value of 8,389 as of December 31, 2019.

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TASI – Historical Equity Returns (2009-2019)

TASI Equity Returns (2009-19)

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Dividend Yield	4.0%	3.2%	3.5%	4.0%	3.6%	4.3%	4.4%	4.1%	4.1%	4.0%	4.0%
Earnings Growth	-30.8%	15.6%	20.0%	6.7%	3.9%	1.9%	-8.9%	-7.5%	-4.0%	11.8%	-11.1%
P/E Expansion	58.3%	-7.4%	-23.1%	-0.7%	21.6%	-4.3%	-8.2%	11.8%	4.2%	-3.5%	18.3%
TASI Equity Returns	31.4%	11.3%	0.5%	10.0%	29.1%	1.9%	-12.6%	8.4%	4.3%	12.3%	11.2%
Nominal GDP Growth	*-17.4%*	*23.1%*	*27.1%*	*9.6%*	*1.5%*	*1.3%*	*-13.5%*	*-1.4%*	*6.8%*	*14.2%*	*0.8%*

Source: Refinitiv & Marmore Calculations

TASI Historical Equity Returns (2009-2019)
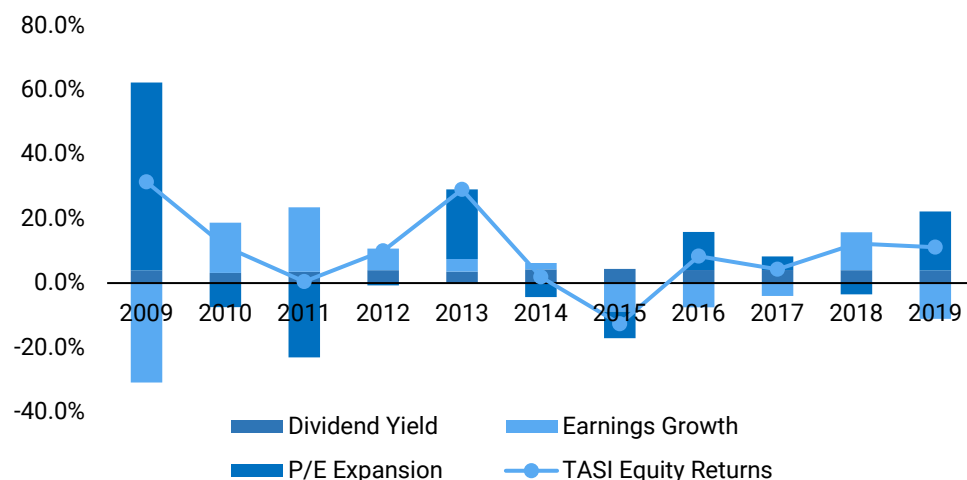
- Dividend Yield for TASI has been stable over the period with only small variations.

- Earnings Growth has been fluctuating over the period with high negatives and high positives in line with GDP fluctuations.

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

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

TASI − Major Constituents of the Index (2019)

Large Constituents of TASI (2019)	Total Market Cap (USD Billion)	Free Float (%)	Free Float Market Cap (USD Billion)
Saudi Arabian Oil Co	1,880	1.56%	29.3
Saudi Basic Industries Corporation SJSC	75	30.00%	22.5
Saudi Telecom Company SJSC	54	30.00%	16.3
Al Rajhi Banking & Investment Corporation SJSC	44	94.14%	41.0
National Commercial Bank SJSC	39	45.01%	17.7
Saudi Electricity Company SJSC	22	18.78%	4.2
Riyad Bank SJSC	19	44.80%	8.6
Saudi British Bank SJSC	19	32.83%	6.2
Samba Financial Group SJSC	17	58.46%	10.1
Saudi Arabian Mining Co SJSC	15	32.82%	4.8

- TASI is a free float weighted Index. Saudi Aramco, the largest company in the world, was added to TASI in December 2019.

- Despite Saudi Aramco's free float (%) being very small, it is still much bigger than SABIC, SABIC was previously the largest constituent in the TASI index. Because of very small free float of Saudi Aramco, the weighted average Free Float for the Index Companies is only 11.9%

P/E Ratio

P/E Ratio for TASI
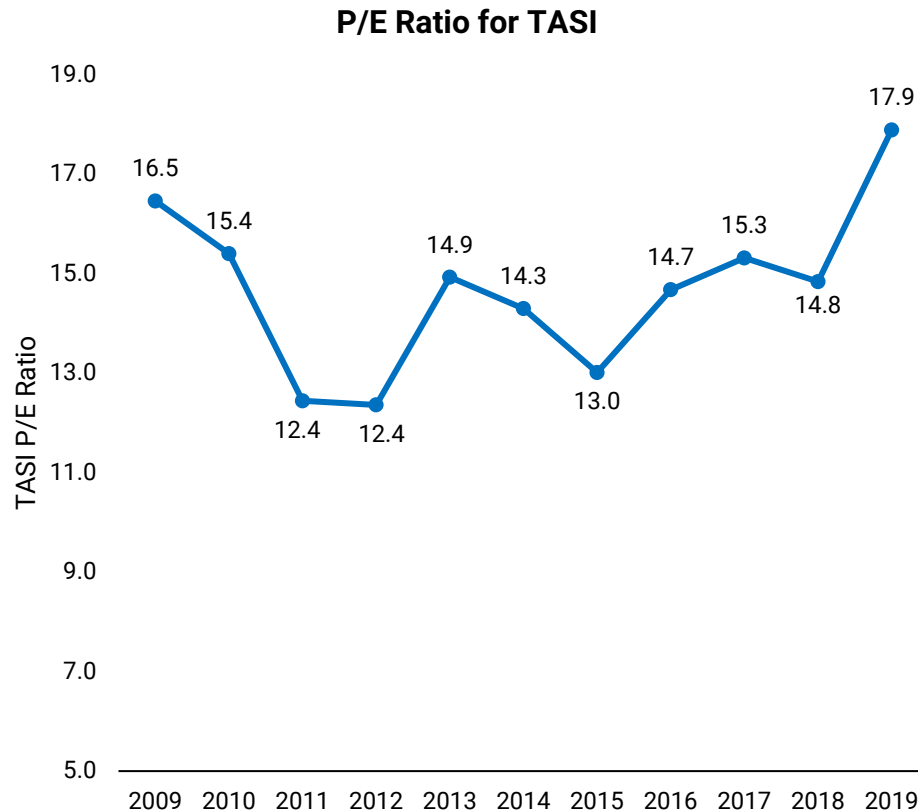
Source: Refinitiv, IMF, Marmore Analysis

- TASI P/E Ratio has been exhibiting cyclical trends over the historical period 2009-2019

- As result, alternating periods of P/E expansion and P/E compression have been seen over the period.

- The differing P/E Ratio over time can be due to changes in cost of capital as well as 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 from the high of 16.5X in 2009 to the low of 12.4 in 2012, may have been due to the fears about economic growth and corporate earnings in the future, post global economic crisis.

- The recovery in P/E ratio in 2013 might have been helped by lower interest rate environment, though it might have been offset later by lower oil prices in 2015-16.

- An improvement in the oil prices and better Saudi economic prospects would have aided the P/E Expansion post 2017.

Market Cap. to GDP

MCAP TO GDP RATIO
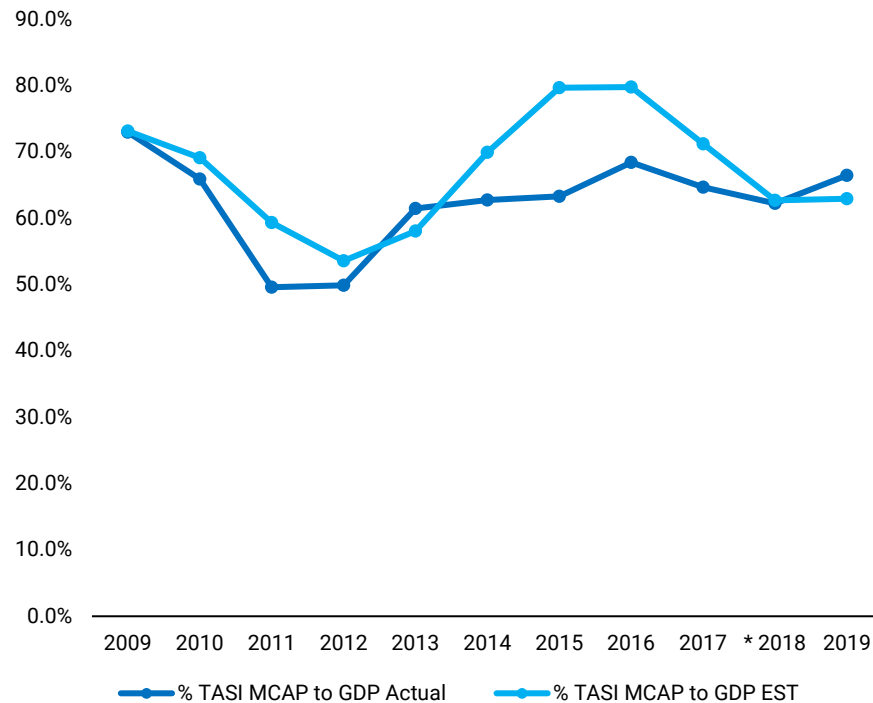
Source: Refinitiv, IMF, Marmore Analysis

- Ratio of TASI Market Cap to GDP at Current Prices is also 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 Ratio with successive higher peaks and higher lows.

- 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 peaks in 2013 and 2016 were due to a P/E expansion in the years. The troughs in 2011, 2014 and 2018 were due to a P/E contraction.

- A forecast of this Ratio of Market Cap to GDP (Ratio-MCAP/GDP) based on the cyclical trend exhibited by this ratio has been prepared by Marmore for the future period of 2020-2024.

- Using the forecasted Ratio-MCAP/GDP and based on forecast numbers for Saudi Arabia's nominal GDP using available IMF forecasted data for the period 2020-2024 issued in April 2020, an estimate of the expected Market Cap of TASI for the period has been arrived at.

- Lastly, using the TASI Market Cap forecast the CAGR of Index Appreciation for TASI has been assessed and used for estimating the P/E Expansion or Compression.

Company Earnings to GDP

Earnings to GDP -Actual & Equation Fit

Net Profit to GDP Ratio Actual % of Total GDP

TASI Earnings Equation Fit - % of Total GDP
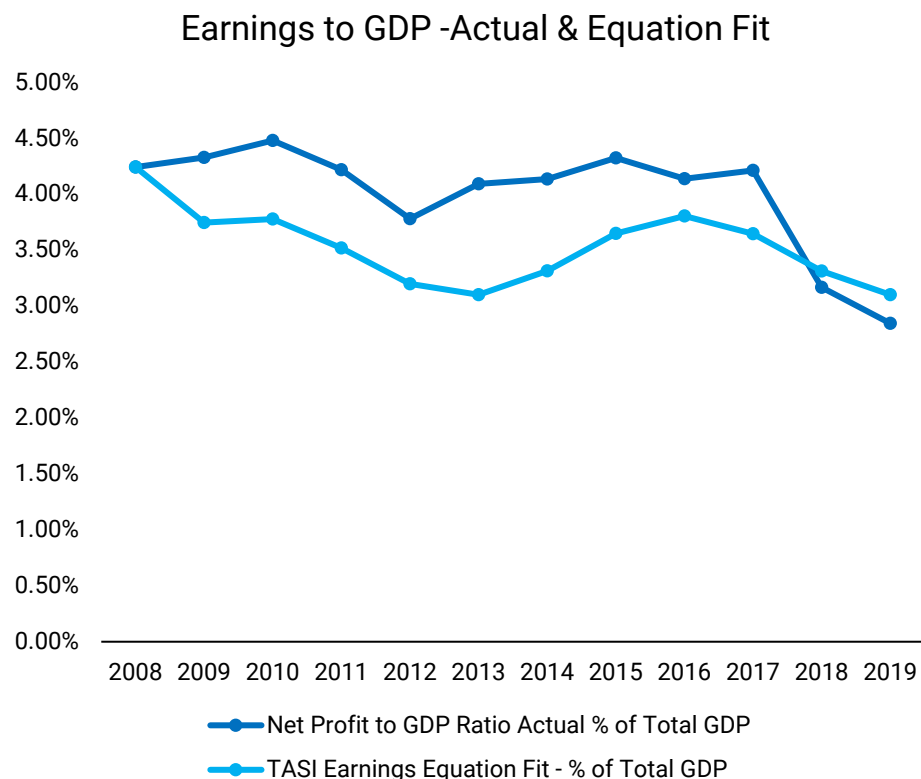
Source: Refinitiv, IMF, Marmore Analysis

- TASI Earnings (Net Profit) to GDP at Current Prices is exhibiting a cyclical pattern i.e. in the form of a Sinusoidal or horizontal S-curve over the period 2009-2019..

- A smoothened curve 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 smoothened trend of the Ratio indicates stable peaks and lows across the cycle period. The peak in 2010 was due to earnings expansion and peak in 2015 was due to GDP contraction. The troughs in 2012 and 2018 were partly due to GDP expansion.

- 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-E/GDP and based on IMF forecast numbers for Saudi Arabia's nominal GDP for the period 2020-2024, an estimate of the expected earnings of TASI for the period has been arrived at.

- Lastly, using the TASI Earnings forecast the CAGR of Earnings has been assessed and used for estimating TASI Dividend Yield.

Back testing of Model for Estimating Index Appreciation

The "Market Cap to GDP Ratio" Model has been back tested for the period 1995-2014 to assess correctness of 5 Year Index Appreciation (%) results derived from it and results are shown in the table and chart below.

| Historical Rolling 5 Year Index Returns Forecast (%) using Model						
S.No	Year	Forecast- Base Case	Forecast- Pessimistic	Forecast- Optimistic	Actual	Result
1	1995	-2.1%	-8.6%	5.7%	10.5%	Incorrect
2	1996	0.8%	-5.9%	8.9%	9.7%	Incorrect
3	1997	0.9%	-5.7%	9.0%	5.2%	Correct
4	1998	11.8%	4.4%	20.7%	25.7%	Incorrect
5	1999	5.4%	-1.5%	13.9%	32.2%	Incorrect
6	2000	4.0%	-2.9%	12.3%	49.2%	Incorrect
7	2001	3.4%	-3.4%	11.7%	26.7%	Incorrect
8	2002	7.8%	0.7%	16.4%	34.4%	Incorrect
9	2003	5.6%	-1.4%	14.0%	1.6%	Correct
10	2004	-7.4%	-13.5%	0.0%	-5.7%	Correct
11	2005	-16.3%	-21.8%	-9.6%	-16.9%	Correct
12	2006	-0.7%	-7.2%	7.3%	-4.2%	Correct
13	2007	-8.2%	-14.3%	-0.9%	-9.2%	Correct
14	2008	8.3%	1.2%	17.0%	12.2%	Correct
15	2009	6.9%	-0.2%	15.4%	6.4%	Correct
16	2010	6.2%	-0.8%	14.7%	0.9%	Correct
17	2011	8.6%	1.4%	17.3%	2.4%	Correct
18	2012	7.9%	0.8%	16.6%	1.2%	Correct
19	2013	3.1%	-3.7%	11.4%	-1.7%	Correct
20	2014	1.1%	-5.6%	9.2%	0.1%	Correct
Number of " Correct Calls"		13				
Total Number of Calls		20				
% Correct Calls		65.0%				

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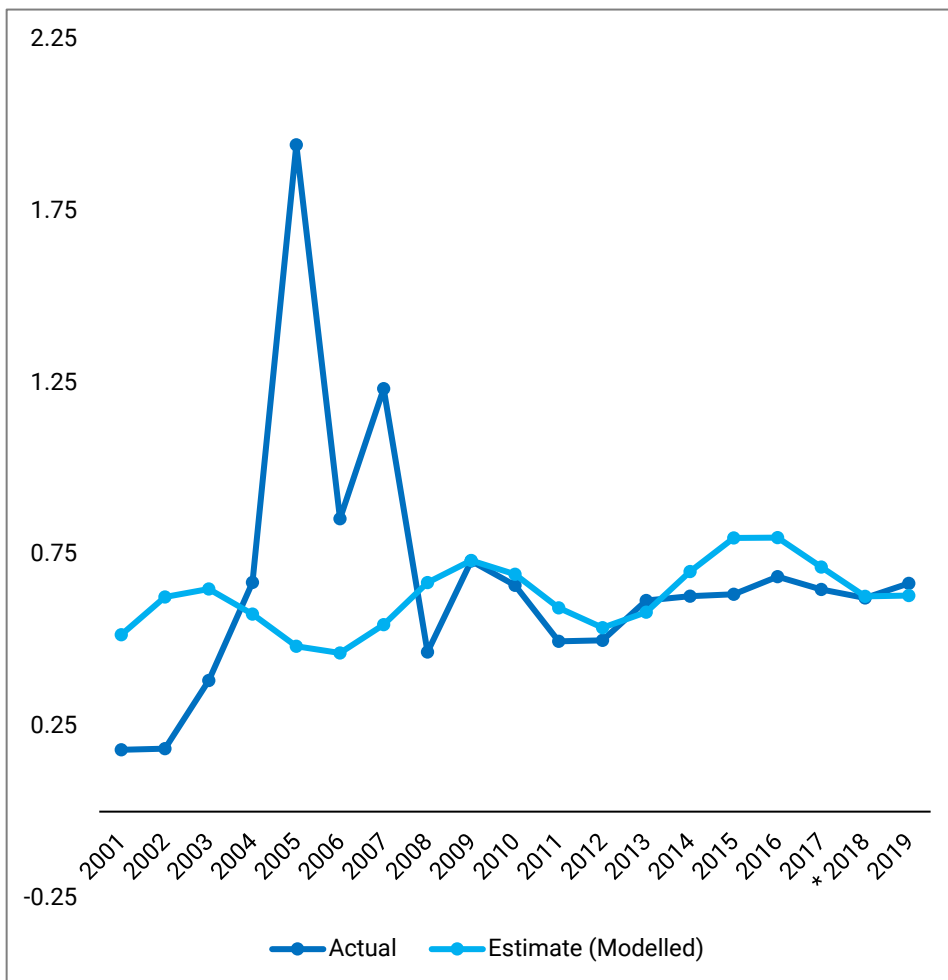
Saudi Arabia Equity Market Performance Comparison

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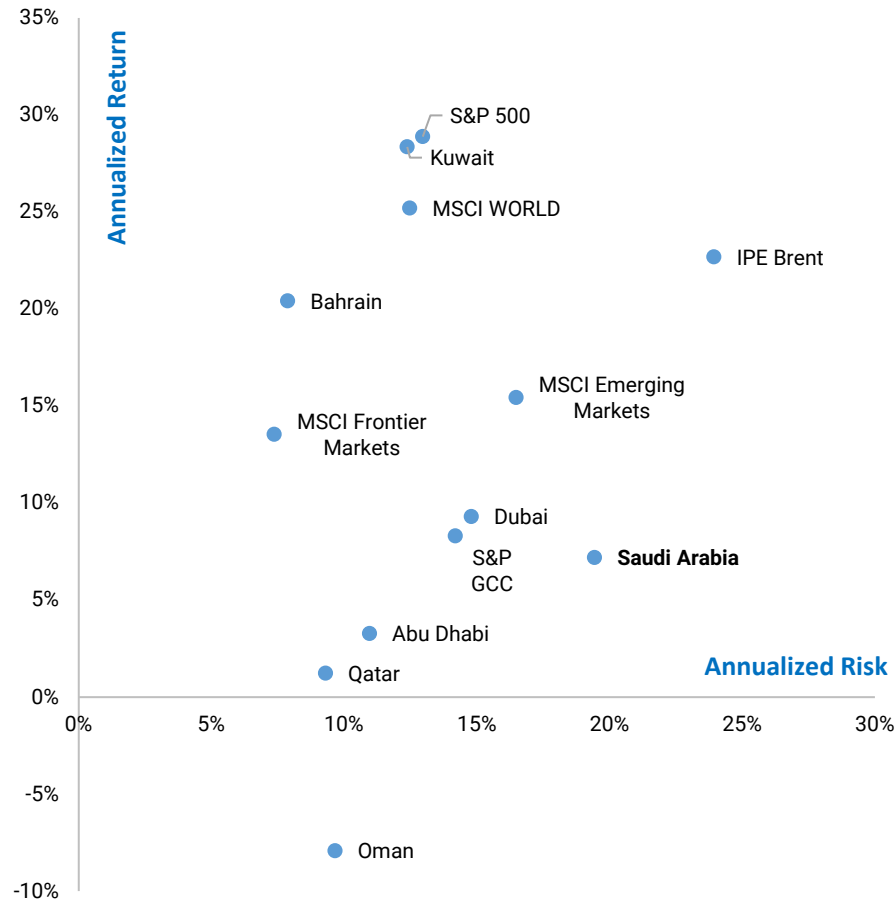
Asset Classes: Annualized Risk-Return Profile 2010-2019
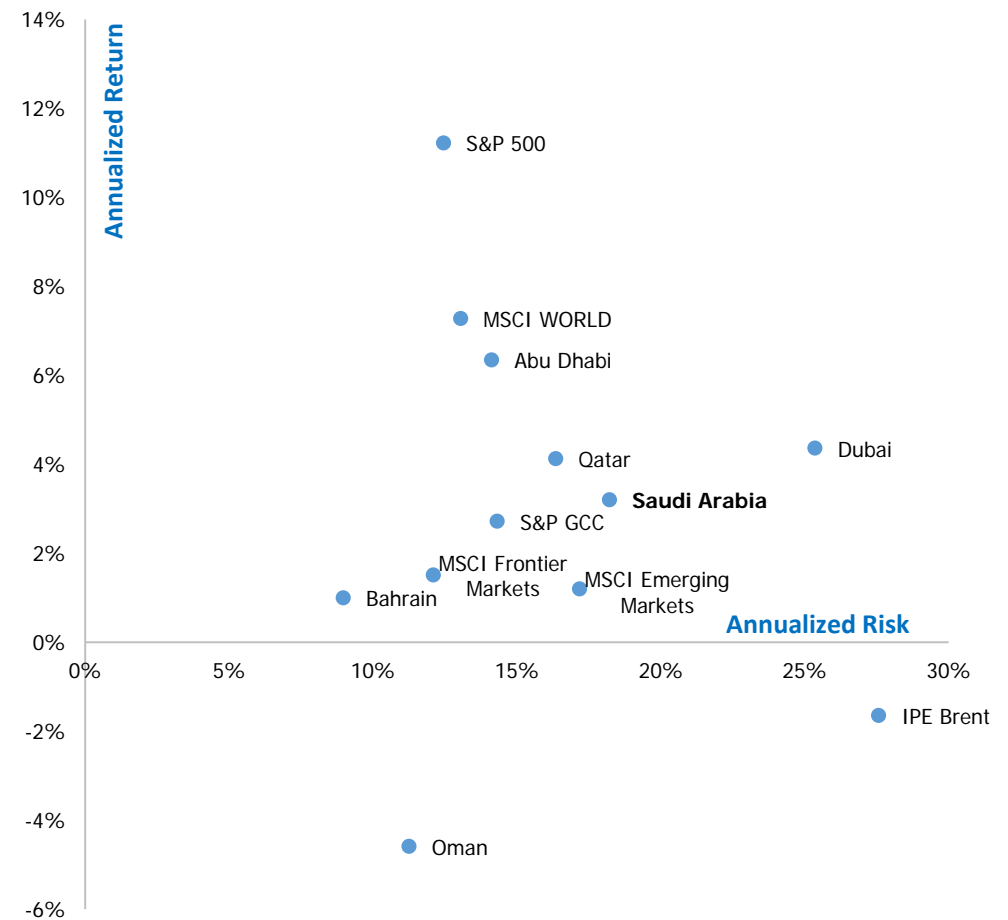
Source: Refinitiv, Marmore Research; Kuwait is absent in the Long-term asset class performance due to the lack of historical index data after the change in equity main equity indices

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5-year* Equity Market Expectations for Saudi Arabia

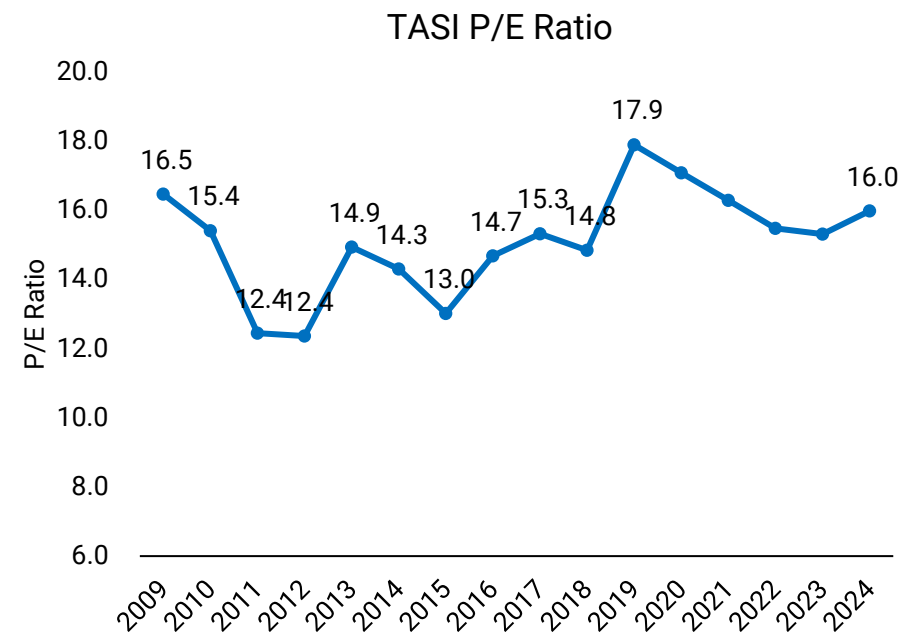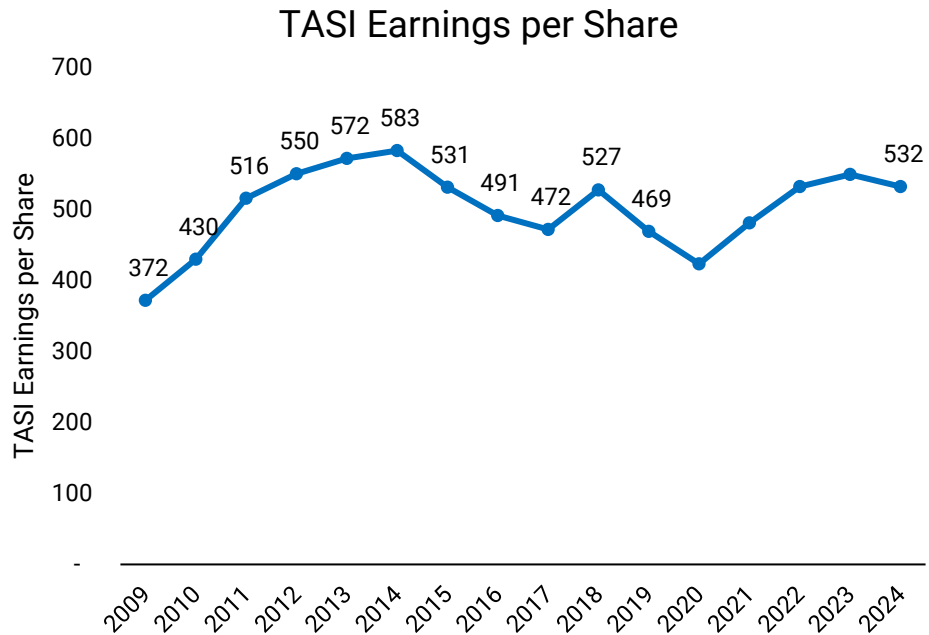|	Pessimistic Case (Lower or equal)	Base Case (Higher or Equal)	Optimistic Case (Higher or Equal)
Equity Returns, Of which (A+B+C)	1.0%	9.2%	24.6%
Dividend Yield (A)	3.4%	3.7%	4.8%
Earnings Growth (B)	0.9%	2.8%	9.2%
P/E Expansion (C)	-3.2%	2.8%	10.6%
KSA TADWAUL INDEX level by 2024	5,942	8,501	15,188
Probability of the Estimate	14.1%	53.1%	26.4%
* Period from May7th, 2020 to December 31st 2024 .			

Key Highlights

- Saudi Equity Market is expected to provide a total annualized return of 9.2% for the period from May 7th, 2020 to December 31, 2024, based on Index Value of 6,629 as of May 7th, 2020.

- The expected return is predominantly driven by a dividend yield of 3.7% based on the Index Value of 6,629 as May 7th, 2020 and Earnings Growth of 2.6% for the period.

- Price/Earnings Multiple (PEM)in 2024 is estimated at 16.0 times compared to 2019 level of 17.4 times. PEM expansion of 2.8% is , expected for the period May 7th, 2020 to December 31, 2024.

- Based on available IMF forecasts issued in April 2020 it is estimated that Nominal GDP will grow at a CAGR of (-) 0.2% in the next five years, whereas it was 1.0 % during 2014-2019.

- TASI Index level, which stood at 6,629 on May 7th, 2020 is estimated to reach 8,501 by December 31, 2024 as per our model.

Forecast of TASI Index Level
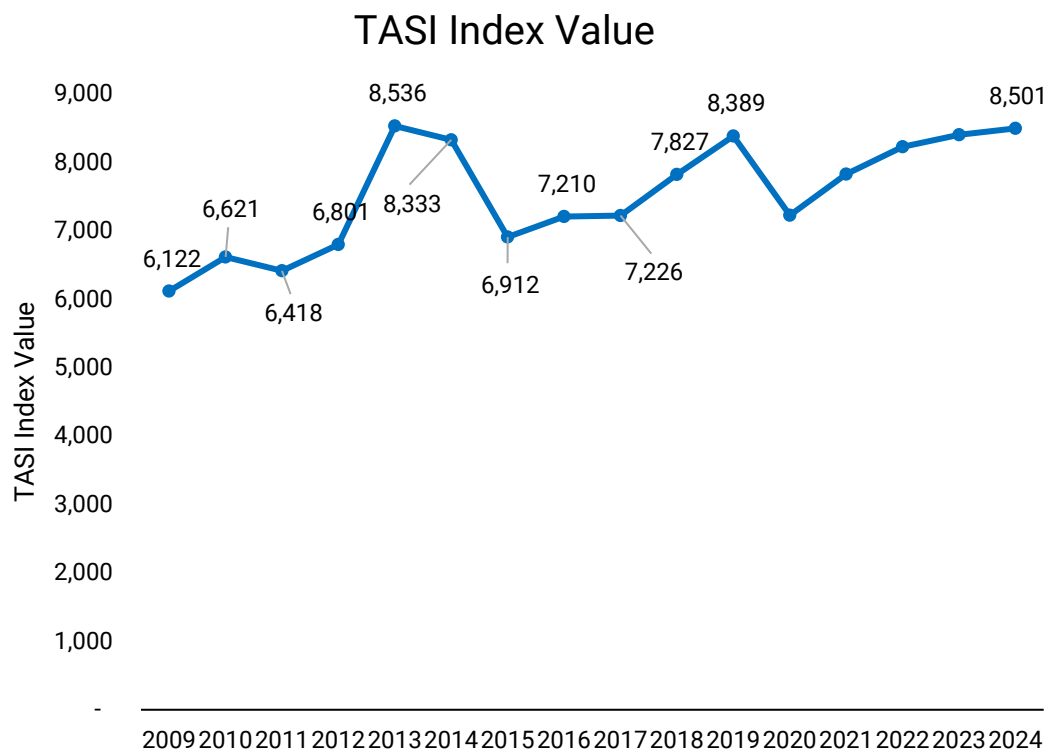
TASI Index Value

- TASI index values has been forecasted based on the expected market capitalization of the index. The TASI Index Value is expected to grow at a CAGR of 5.6% i.e. increase by 28.2% in 2024 over that as of May 7th, 2020.

- Based on GDP forecasts, TASI Index Free Float Market Capitalization is expected to reach USD 343.3 billion by 2024.

- TASI Earnings are expected to grow at a CAGR of 2.8% i.e. increase by 13.5% in 2024 over those in 2019.

- While P/E Expansion of approximately 2.8% is expected in 2024 over May 7th, 2020 levels, a small P/E Compression at a CAGR of (-) 2.3% is expected in 2024 over 2019 and therefore P/E Multiple for 2024 is expected at 16.0 X compared to 17.9X in 2019.

Projection of Key variables (1/2)

TASI Earnings per Share

Data points (2009–2024): 372, 430, 516, 550, 572, 583, 531, 491, 472, 527, 469, (2020), (2021), 532, (2023), 532

TASI P/E Ratio

Data points (2009–2024): 16.5, 15.4, 12.4, 12.4, 14.9, 14.3, 13.0, 14.7, 15.3, 14.8, 17.9, (2020), (2021), (2022), (2023), 16.0

- GDP forecasts give a good indication of how corporate earnings would fare out. TASI's aggregate earnings are expected to fall sharply in 2020 due to steep fall in oil prices and Covid-19 impact. The GDP growth estimates used are based on based on available IMF forecasts for GDP growth issued in April 2020 for two years and previous growth rates for 2022-2024.

- Saudi Arabia much like other emerging markets are expected to see their P/E multiple compress in 2020, as the index fall is expected to exceed earnings fall. Thereafter also TASI's P/E multiple is expected to see compression during the period 2021-2023 with a rise again in 2024.

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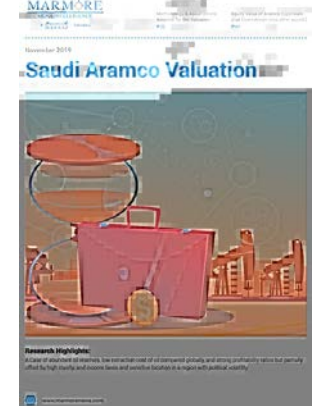Subsidiary

Projection of Key variables (2/2)

TASI Net Profits (excl. Aramco) to GDP Ratio
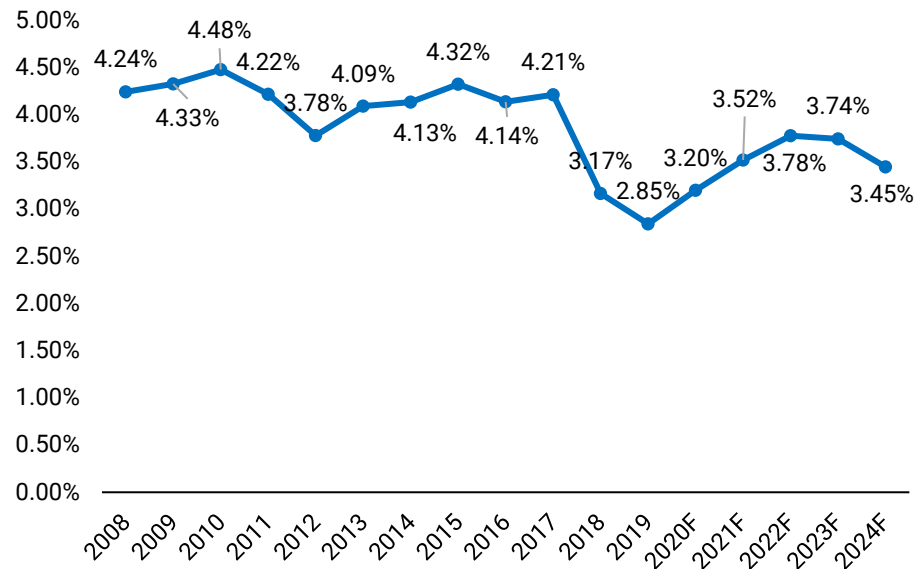
TASI Market Cap (excl. Aramco) to GDP Ratio
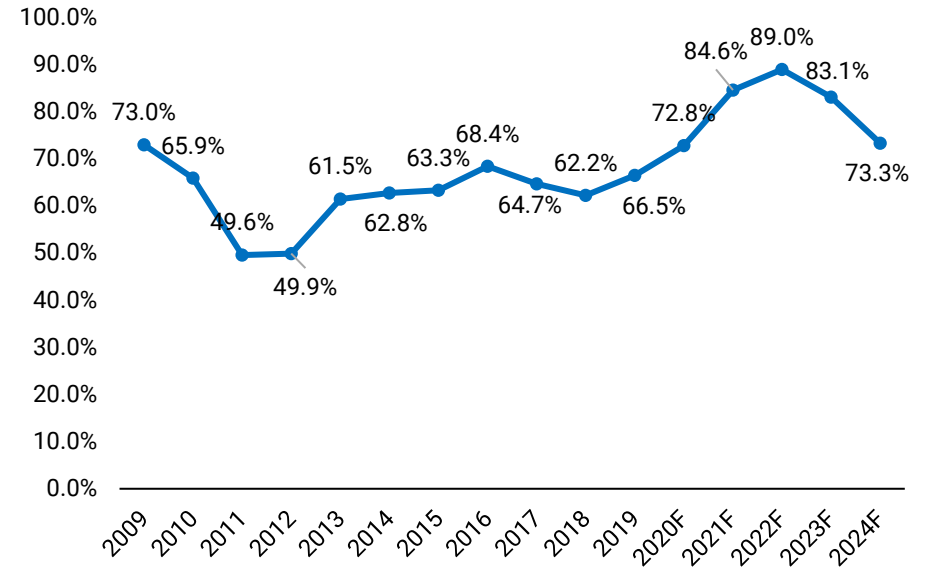
- The Corporate profits of companies (excluding Aramco) comprising TASI Index is a sub-set of the country's total value added in a year. Net profit to GDP ratio is expected to remain between the range of 2.85% to 3.78%, almost within the peaks prior to 2020.

- With the inclusion of Saudi Aramco, Total Market Cap. to GDP ratio was 279% in 2019 much higher than that of other markets.

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