Plenary Session # Four : “Oil Shocks and the Stock Markets”

Oil and GCC Financial Markets: The Significance of the Oil Price Collapse

Shawkat Hammoudeh
Drexel University
Philadelphia, PA

Outline of presentation

- Introduction
- Oil Market
- GCC Fiscal Budgets
- GCC Fiscal Adjustments
- GCC Money Markets
- GCC Exchange Rates
- GCC Stock Markets
- Conclusion

Introduction

- Oil is the backbone of the GCC economies.
- Oil and gas output account for about 50% of the GDP for Qatar and Saudi Arabia and 40% for the UAE.
- Oil and gas exports are the major sources of GCC fiscal budgets.
- Oil revenues fund GCC banks, drive GCC stock markets, support the peg with the dollar and replenish foreign reserves.
- Oman and Bahrain are the most venerable to price declines
- The recent collapse of oil prices underlines the strong relationship between the GCC economies and their financial markets.

Oil Market-I

- Oil is the most volatile and most widely traded commodity in the world. [*Slide 1*]
- The oil market needs a regulator to balance global supply and demand:
- *Seven Sisters*: 1950s & 1960s).
- *OPEC*: 1970s, 1980s, 1990s, 2000s until 2014.

[*Slide 2*]

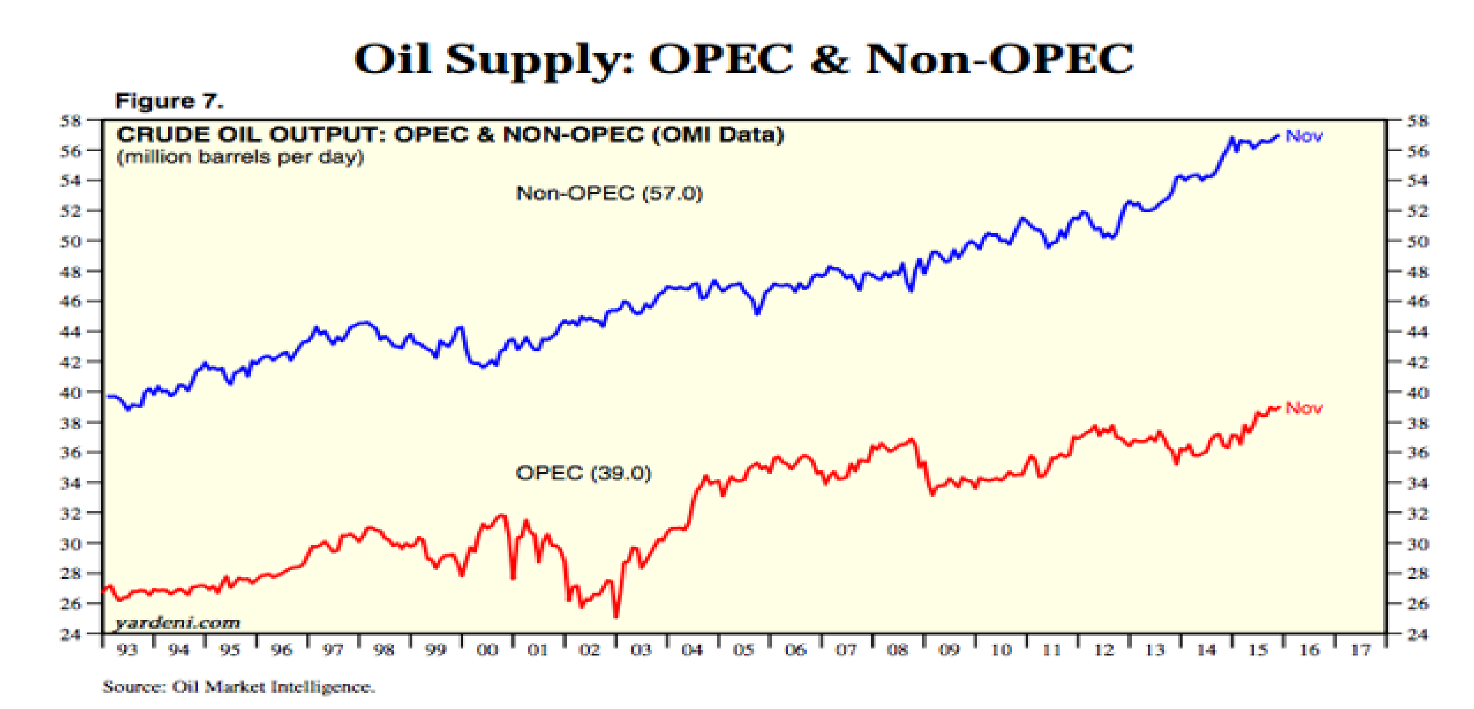
- OPEC relinquished its role as a regulator three times: 1985, 2008/2009 and 2014 to present.
- Each time the regulator's job is assigned to the market, we had an oil crisis.

Slide 1:Oil Market-II

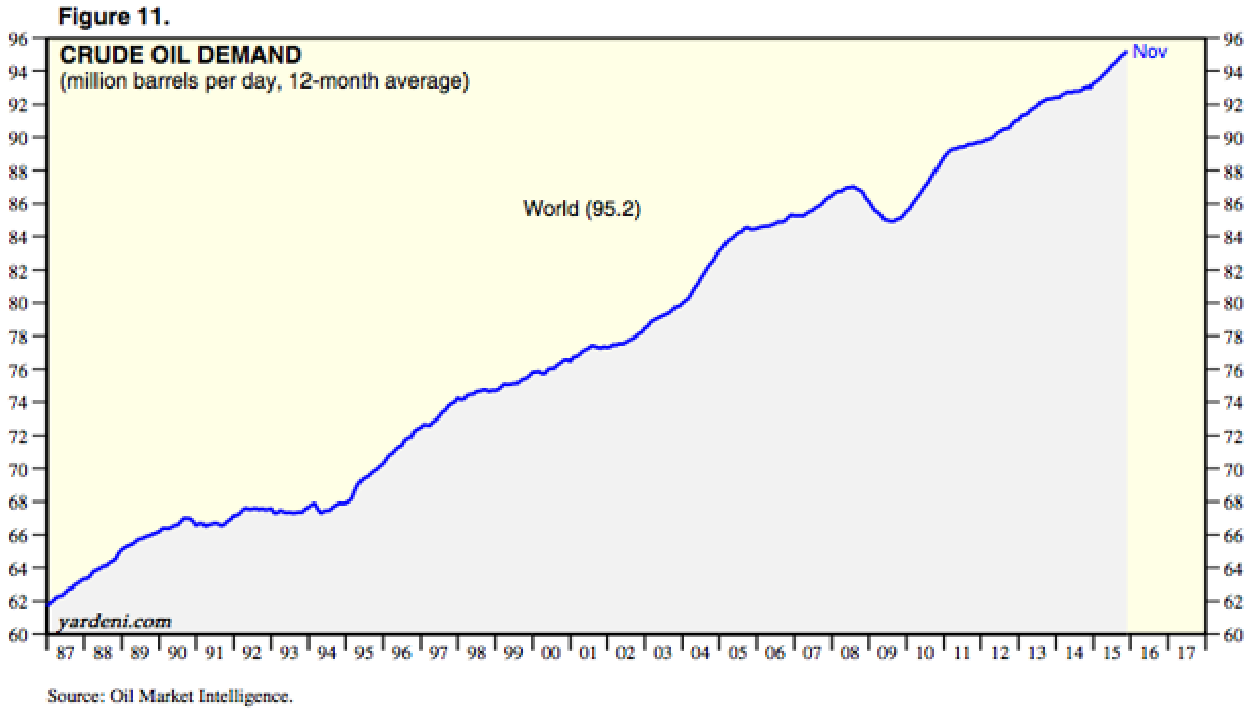
- Slide 1: Oil price increased by 245% (from low 2009 to late 2011). It dropped from $110 in June 2014 to $29 in early 2016 (-72%).

Slide 2:Oil Market-III

- ❑ Slide 1: Global Supply and Demand



Oil Demand: World



Oil Market: The Balance-IV

TABLE 1:	World production	World consumption	Implied stock change and balance
	millions barrels per day		
Q1 2015	94.6	92.7	1.9
Q2 2015	95.5	93.2	2.3
Q3 2015	96.4	94.9	1.5
Q4 2015	96.0	94.2	1.8
Q1 2016	95.3	93.9	1.4 mbd
Q2 2016	96.1	94.6	1.5
Q3 2016	96.6	95.8	0.7
Q4 2016	96.4	95.7	0.7
Q1 2017	95.8	95.3	0.4
Q2 2017	96.8	96.1	0.8
Q3 2017	97.3	97.3	0.0
Q4 2017	97.1	97.2	0.0
Source:	EIA		

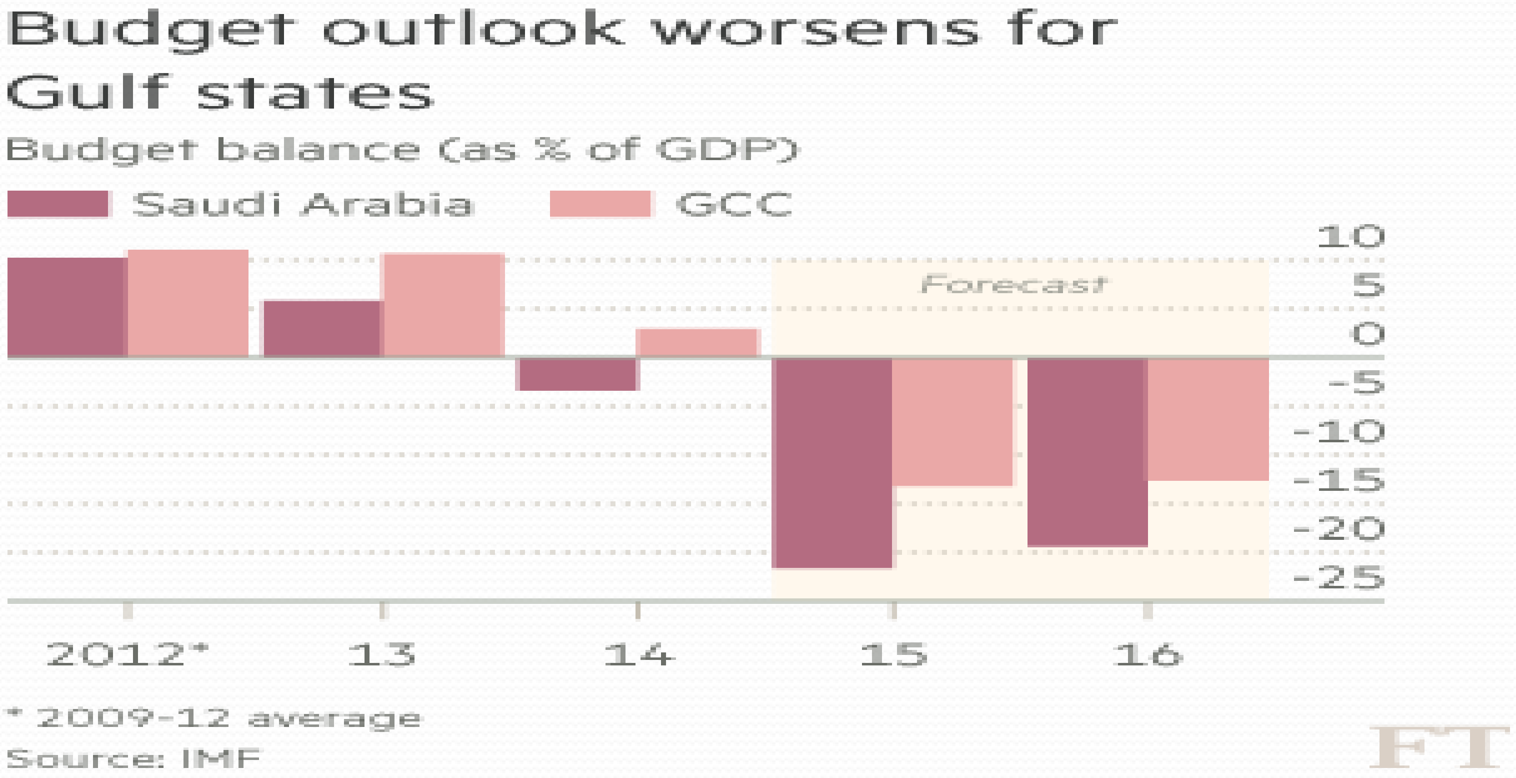
GCC Fiscal Budget Deficits

- Oil is the dominant source of revenue for GCC budgets.
- The drastic and persistent drops in the oil price have dug a large hole in the GCC fiscal budgets.
- IMF expected the average GCC budget deficit to be 13% of aggregate GCC GDP for 2015.
- Saudi Arabia's expected fiscal deficit is estimated at 21% of GDP in 2015 and 19.4% in 2016.

Important Fiscal Adjustments-I

- The GCC governments have to do almost everything they can to plug the large current fiscal holes in their budgets, by increasing oil production, selling their investments in U.S. T-bills and maybe privatizing state-owned enterprises . [Slide 3]
- GCC currency devaluation is not in the card for now.
- These governments have introduced new taxes and cut spending.
- They borrowed from local banks but that has created a liquidity squeeze.
- They are borrowing from foreign banks for the first time in a decade .
- There is a significant difference between borrowing in domestic currency and in foreign currency.

Slide 3


Budget outlook worsens for Gulf states
Budget balance (as % of GDP)
Saudi Arabia
GCC
Forecast
10
5
0
-5
-10
-15
-20
-25
2012*
13
14
15
16
* 2009-12 average
Source: IMF
FT

Fiscal Adjustments-II

- Oman borrowed $1 billion at 120 bpts over LIBOR in January 2016. Qatar borrowed $5.5 billion at 110 bpts higher than LIBOR at the same period. Saudi Arabia is now negotiating to borrow $8 billion but at higher rates than those paid by Oman and Qatar. Kuwait is next. The six GCC countries are expected to borrow $20 billion from foreign sources this year.
- The GCC countries will have to deal with a cumulative fiscal deficit of more than $1 trillion over the next five years. They may have a fiscal sustainability problem in those years.
- Saudi Arabia is planning to issue Saudi bonds denominated in foreign currencies for the first time in more than a decade.

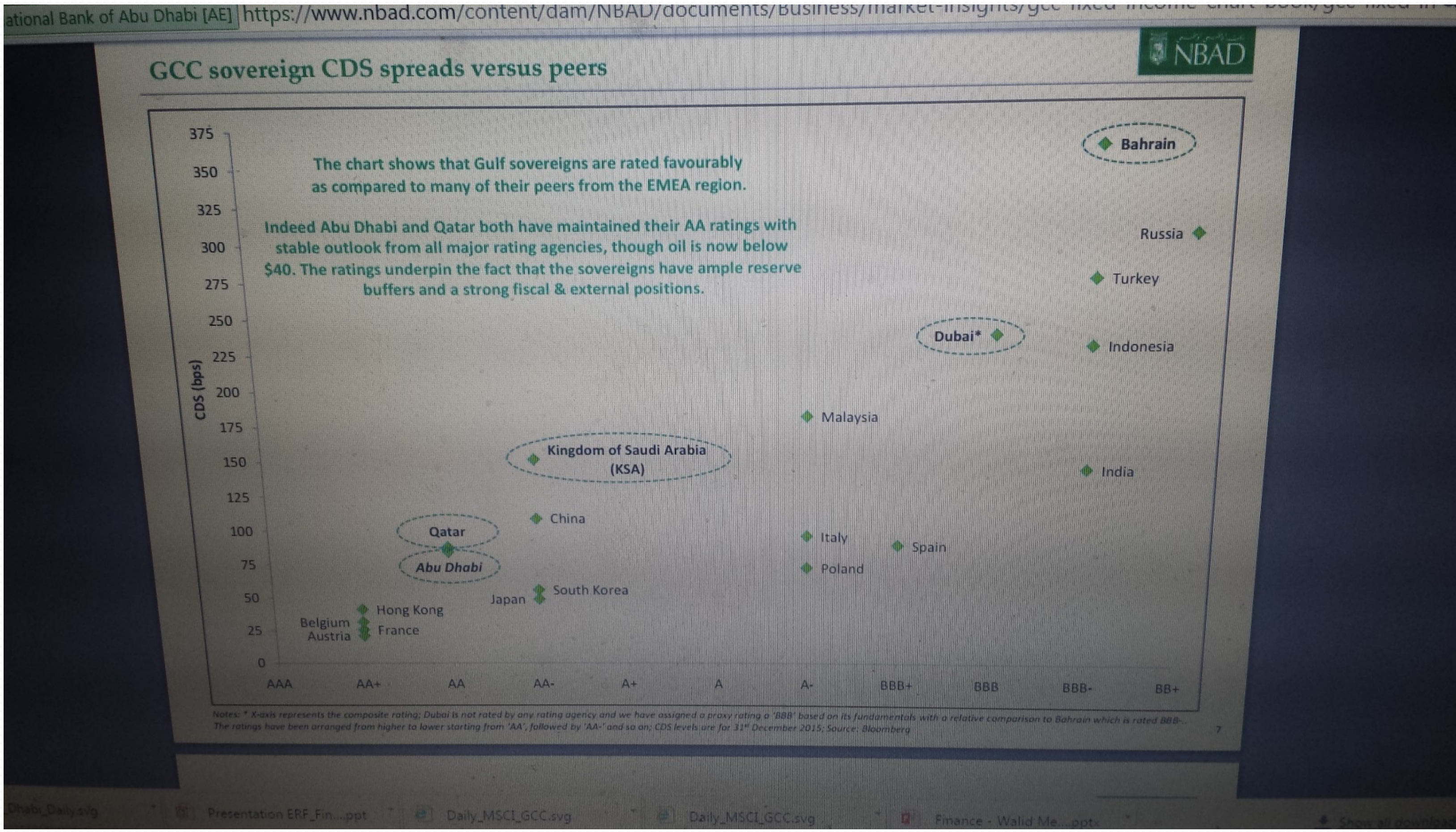
The impact on GCC Money Markets

- The domestic liquidity squeeze has raised domestic interest rates, constraining net interest margins and lowering profitability for GCC banks and crowding out private investment.
- GCC central banks had already increased their interest rates in the wake of the Fed's increase of the federal target rates. The increase was incorporated in Kuwait (discount rate), UAE (certificates of deposit), Saudi Arabia (reverse repo) and Bahrain (one-week deposit rate).
- Borrowing from foreign markets and issuing bonds denominated in foreign currencies will elevate the integration between the GCC and international interest rates.
- Since interest rates are the link between the financial and real sectors of the economy, global shocks will thus have greater impacts on the GCC financial markets and the macroeconomy.

The Impact on GCC Exchange Rates

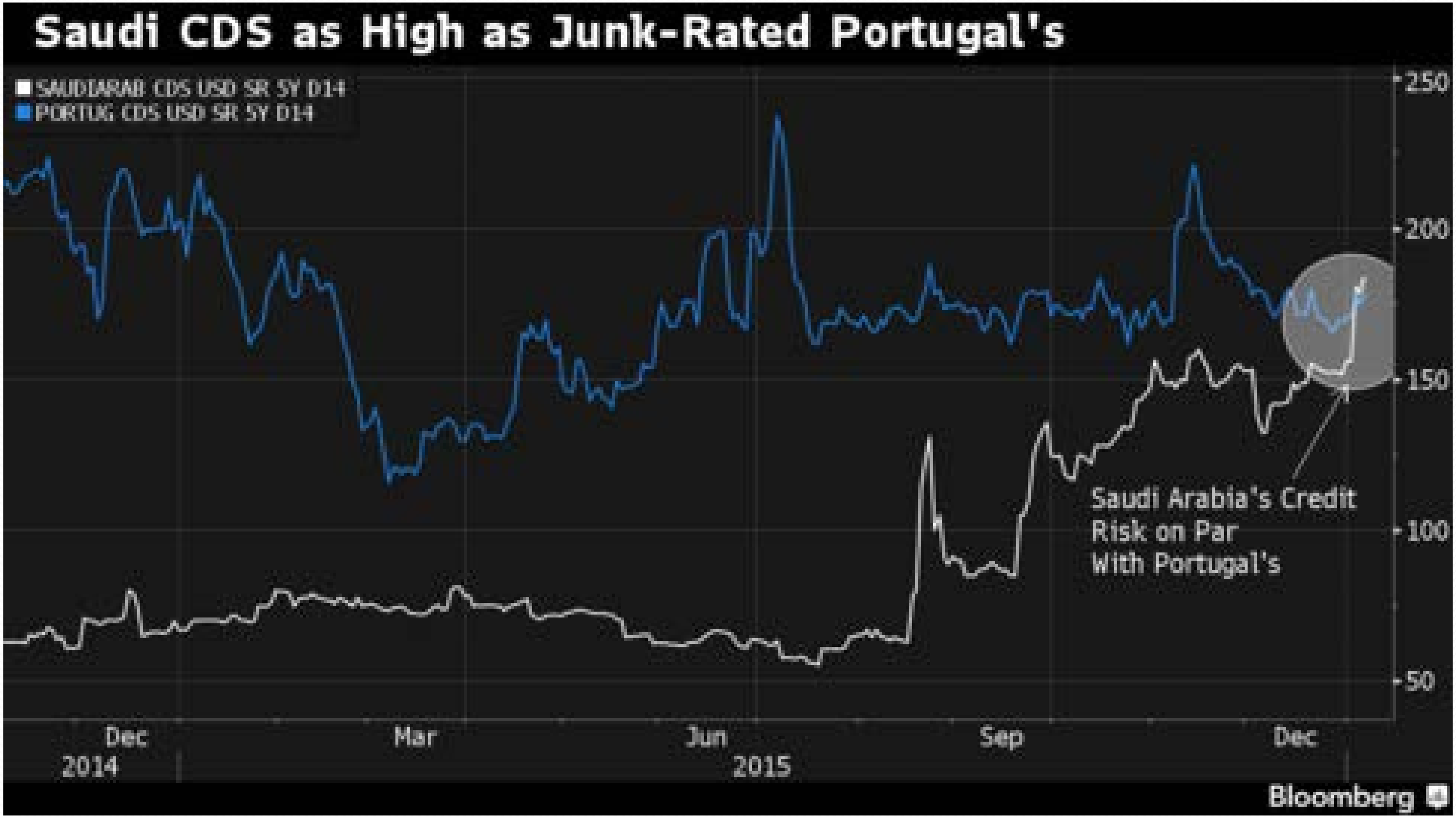
- Other oil-exporting countries such as Azerbaijan and Kazakhstan have devalued their currencies to translate their petrodollars into greater domestic revenues.
- Saudi sovereign credit default swaps (CDS) have jumped significantly in 2016, underscoring mounting credit risks. [Slide 4]
- Highest CDS premiums are for Dubai and Bahrain and the lowest is for Qatar.
- The USD/SAR forward rate spiked to a closing peak of more 1000 points in January 2016, up from 5.82 points on December 23, 2014.
- There is a tremendous pressure on Saudi Arabia to un-tie its Sr3.75-to-$1 peg which it has held for nearly 30 years. There are a lot of speculations about the future of the GCC pegs.
- Currently, the probability of a riyal devaluation is 39%.
- Riyal devaluations threaten the sovereignty of the country, is a matter of political pride and is the last resort.

Slide 4:GCC CDS Spreads (December 2015)



Increase in Saudi CDS over one year

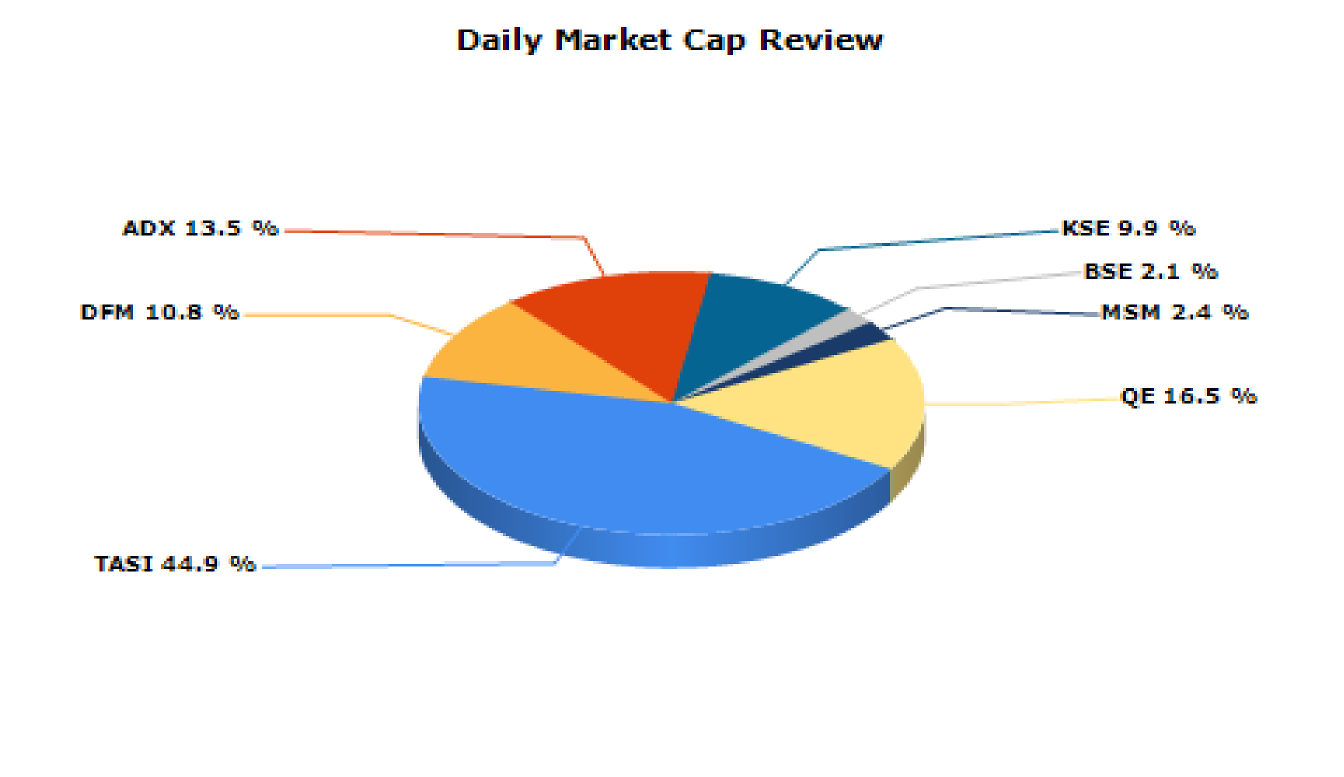
Saudi CDS: White for KSA, Blue for Portugal



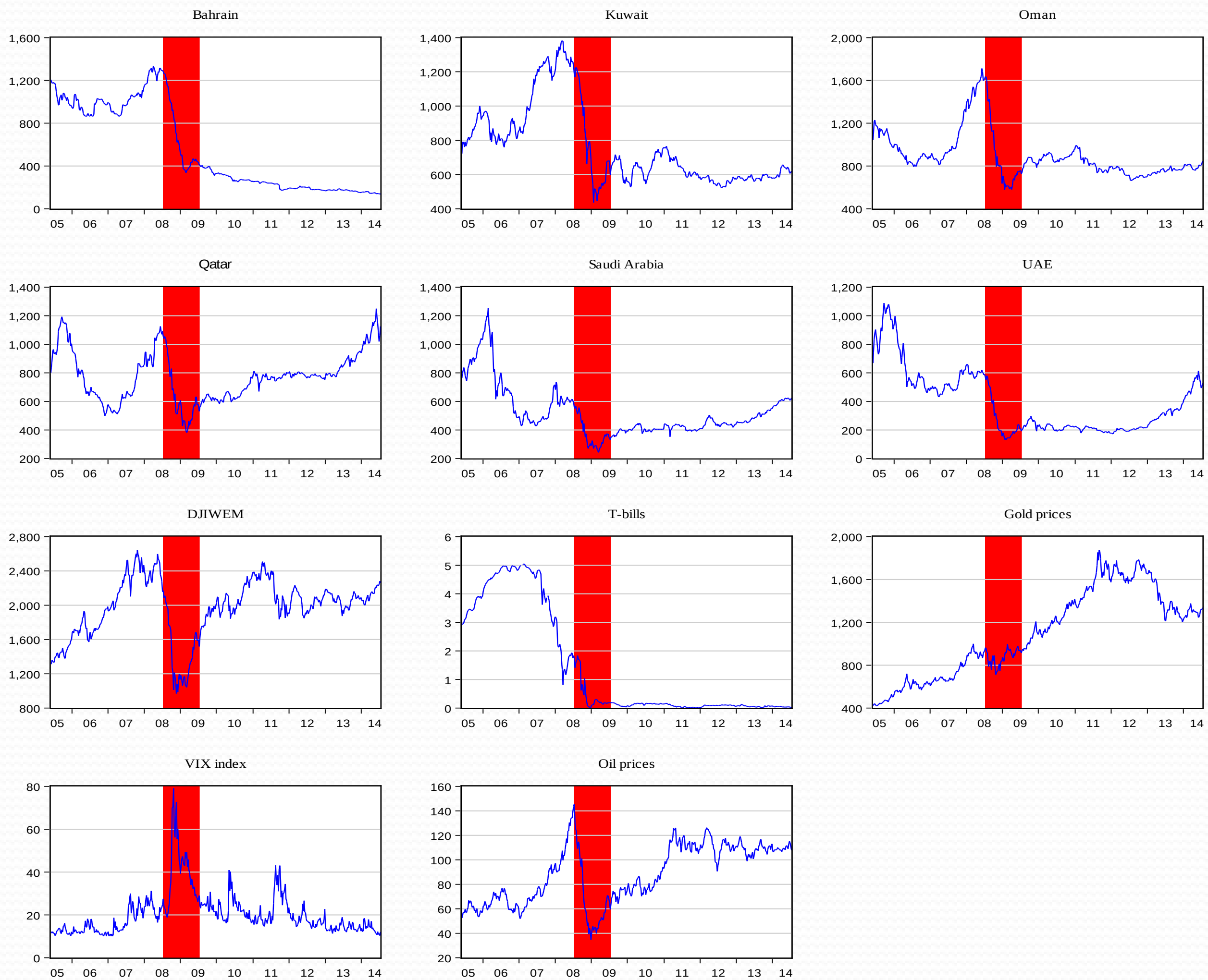
Yield spread between Saudi Electricity's bonds and U.S. Treasuries widened to a record.

Impact on GCC Stock Markets-I

[Slide 5]



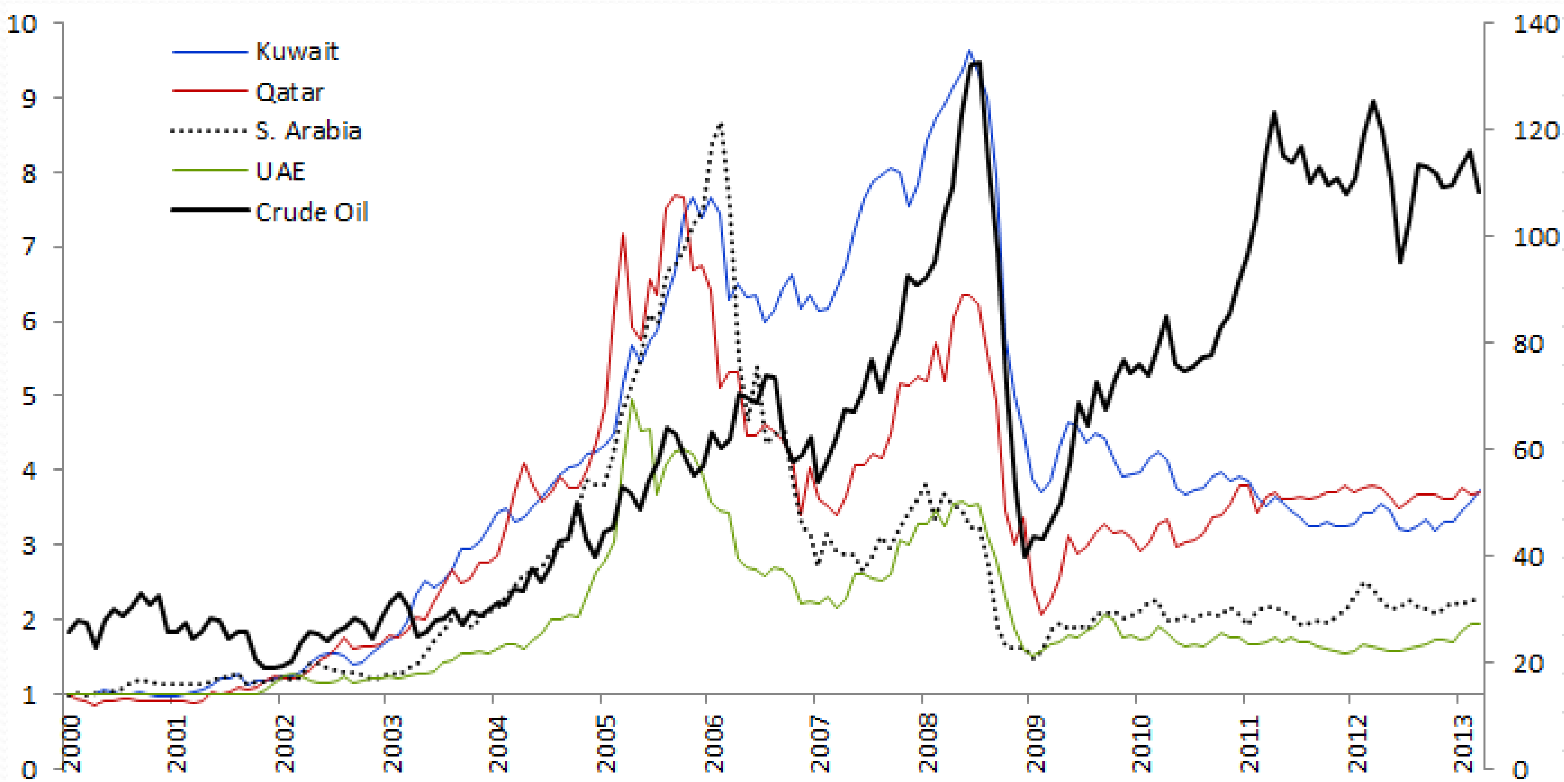
(slide 5): Time Evolution of Weekly GCC Stocks



GCC Stock Markets-II

- There has been an increase in the correlation between *global* stock markets and oil prices after the collapse of oil prices in the second half of 2014.
- Oil prices are currently driving global stock markets and driving them downward.
- The GCC stock markets also have followed this narrative but the GCC correlation with oil prices is stronger during oil booms than oil busts. [Slide 7]
- The relationship between oil prices and the Saudi stock market is thus asymmetric.

(Slide 7) Oil price and GCC stock market indexes



The Saudi Tadawul Index follows the oil price.

GCC Stock Markets-III

- Oil price risk is a systematic risk factor for most GCC markets due to limitations on oil risk diversification and lack of hedging tools.
- Channels through which oil risk can affect stock prices are: cash flows, discount rates, and risk premium.
- High level of *firm-specific risk* is due to lack of diversification opportunities, particularly in Saudi Arabia (2.385%) and Kuwait (1.848%) – GCC average (1.785%).

Stock Market-IV

- Stock *market risk* is driven by oil booms and busts, so does the *firm-level* risk.

GCC Banking

- There are 65 local banks listed on the stock exchanges of the GCC countries.
- The share of foreign banks in the GCC banking system is small.
- The GCC banks are characterized on average by diseconomies of scale during the 2000-2014 period (banks are not efficient because they produce below capacity).
- The Omani and then Qatari banks have the lowest diseconomies of scale, while the Bahrain banks have the highest.
- The commercial and Islamic banks have almost the same level of diseconomies of scale.
- There is an insignificant link between the too-big-to-fail status and economies of scale in the GCC banks.
- Tougher Basel 3 capital requirements are negatively correlated with the level of economies of scale for the GCC banking

Impacts on GCC Economic Growth

- GCC GDP is largely dominated by the industrials that are related to energy sectors.
- The non-oil GDP growth is expected to decrease by 1.75 percentage points once the adjustment of the oil price collapse starts.
- Risks to economic growth are being aggravated by protracted regional wars.

Composition of GCC GDP

	Energy Exports (% of total)	Energy exports (% of energy use)	Composition of GDP		
			Agriculture	Industr y	Services
Kuwait	95	401	0.3%	49%	50%
Qatar	85	484	0.1%	68%	31%
S. Arabia	90	212	2%	60%	38%
UAE	45	188	0.6%	59%	41%

Conclusions-I

- GCC countries are highly sensitive to steep drops in oil prices.
- They have experienced large holes in their fiscal budgets.
- They borrow in the domestic money market but that creates a liquidity squeeze and higher interest rates.
- They borrow in the foreign markets and this makes the GCC financial markets more susceptible to global shocks.
- The increased integration with global markets should help move the GCC stock markets from frontier markets to emerging markets.
- GCC stock markets follow the movement of oil prices but the correlation is greater during boom markets than bust markets (asymmetry).

Conclusions-II

- Saudi Arabia could exhaust its foreign reserves within five years, and borrowing may not be able to plug the fiscal holes in its budget.
- The probability of currency devaluation is increasing, as the shale oil companies show more resilience and the GCC countries deplete their foreign reserves.
- The collapse in oil prices may reduce non-oil GDP growth by 1.75 percentage points this year.
- Research on the relationship between the GCC financial markets and economics and global counterparts will become more interesting than before. GCC Market segmentation has been gravely wounded.

Conclusions-III

- Low level of institutional investor participation is a problem as those investors can contribute to the investment culture and make markets more informationally efficient.
- GCC stock markets follow the movement of oil prices but the correlation is greater during boom markets than bust markets (asymmetry).
- Saudi Arabia could exhaust its foreign reserves within five years and borrowing may not be able to plug the fiscal hole in its budget.
- The probability of currency devaluation is increasing as the shale oil companies show more resilience and the GCC deplete their foreign reserves.
- The collapse in oil prices may reduce non-oil GDP growth by 1.75 percentage points this year.
- Research on the relationship between the GCC financial markets and economics and global counterparts will become more interesting than before. GCC Market segmentation has been gravely wounded.

Summary-III

- As policymakers in OPEC, the GCC should be prudent in discerning the effects of oil price changes on their corresponding economies and equity markets by their understanding of the supply/demand factors.

- They can also take advantage of the information on the benefits of safe assets such as gold, Islamic equity market, volatility in the U.S. equity markets and changes in the U.S. Treasury bill rate in designing diversified portfolios.

- The evidence of dependence of the GCC stock markets with the Islamic equity index and the major macroeconomic factors provides meaningful insights pertinent to international asset pricing, risk management and the dynamic interactions in the global economy.

Future Work

- Future research may assess the roles of **Islamic equity sectors' indexes and Sukuk** as hedge and safe haven assets for developed and emerging stock markets.