IMPACT OF U.S. TRANSITION ON THE SAUDI ECONOMY

THE QUARTERLY WORKSHOP ON THE SAUDI ECONOMY

By

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Outline

- Introduction
- Impact of QE on EMEs
- Fed Tapering Effects on:
  - EMEs,
  - GCC
- Timing & Effect of the Exit
- Empirical Analysis

Introduction

- Global Financial Crisis of 2007-08:
  - Central Banks' risk-free short-term nominal interest rates were close to zero.
  - Unconventional monetary policy, QE.
  - Increasing the money supply tends to depreciate a country's exchange rates
    - Capital outflow;
    - Higher exports;

Impact of QE on Emerging Markets

- **Unconventional Monetary Policy and Currency War**
  - Some emerging countries expressed their concerns of a potential currency war.
- **Exchange Rate Volatility**
  - Sudden capital inflow has a negative impact on emerging markets, as it increases the market volatility and causes appreciation of local currencies.
- **Inflationary Pressures in Emerging Markets**
  - Sudden capital inflow may place an upward pressure on local inflation.

Impact of Fed's Tapering on Emerging Markets

- In May 2013, Federal Reserve officials first started signaling the possibility of tapering the Fed's $85 billion securities purchases program.

- On December 18, 2013, the Fed decided to taper its quantitative easing policy by $10 billion per month.

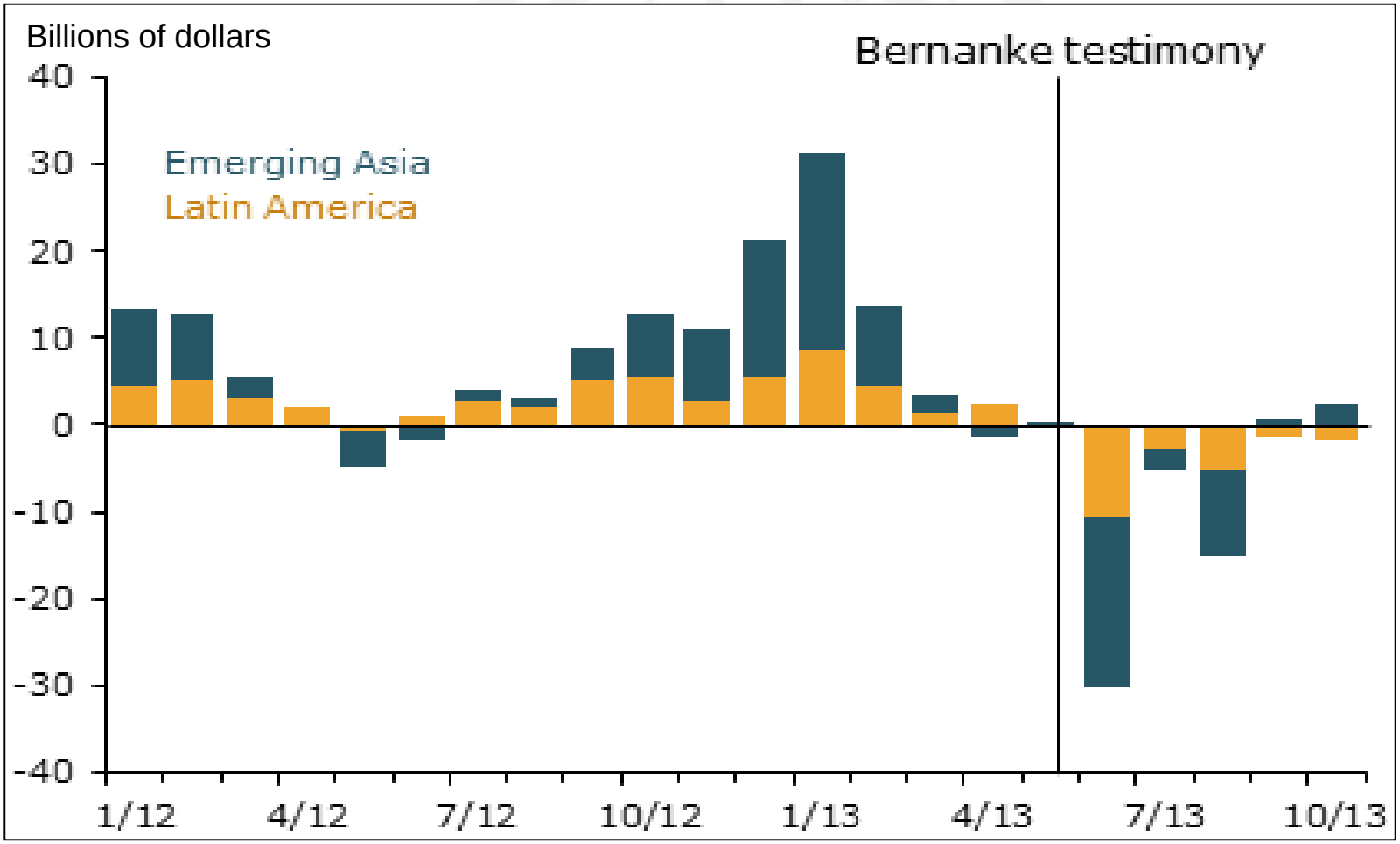
- Areas of impact include:

  i) **Capital Flows**,

  ii) **Exchange Rates**, and

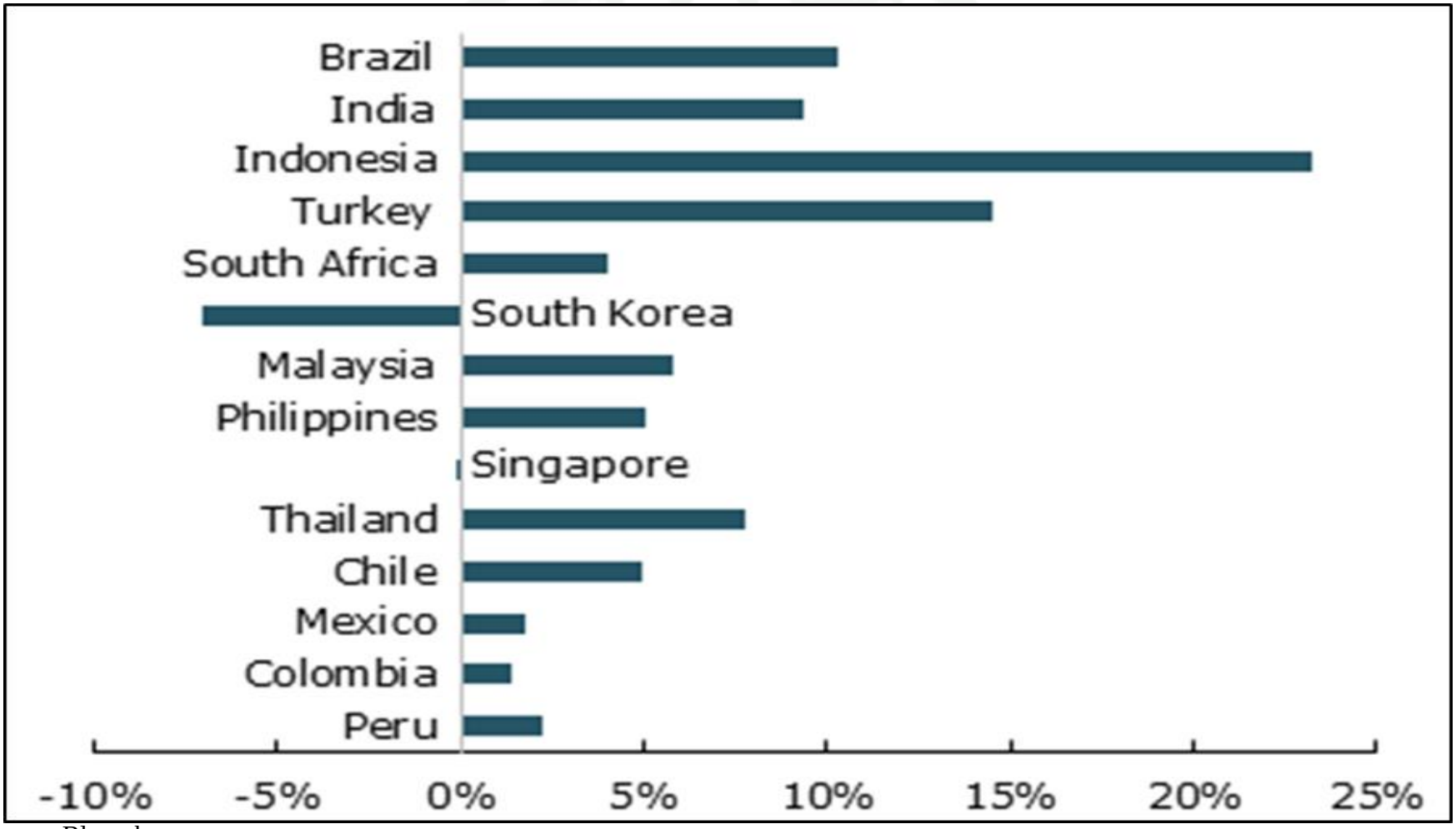
  iii) **Equity Markets**.

Capital Flows to Emerging Markets in Asia and Latin America



Source: Powell (2013a)

Exchange Rate Depreciation, May-December 2013



Source: Bloomberg

MSCI Emerging Markets Index

Source :Bloomberg

Risks to GDP growth for EMEs

- A rebalancing of global growth was in favor of advanced countries.
- Organization for Economic Cooperation and Development (OECD) countries are expected to contribute about 31% of global growth in 2014 and 2015, compared to just 21% in 2013.
- EMEs are expected to contribute 56% in 2014 and 55% in 2015 compared to 63% in 2013.

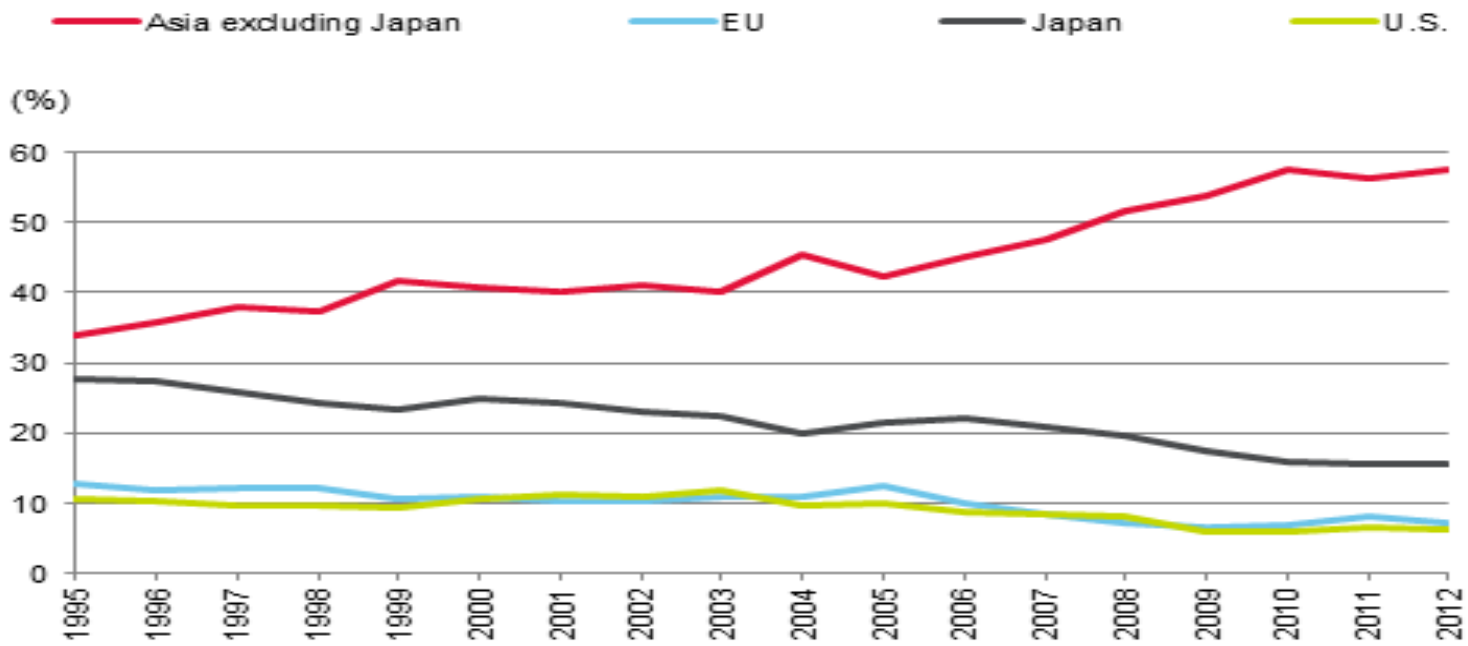
Direct Impact of Fed's Tapering on Saudi Arabia

- The direct impact of Fed tapering on Saudi Arabia is likely to be limited, given the low external exposure of the Saudi financial system.

- Saudi Arabia is moderately integrated with the global financial system and hence less sensitive to global financial developments:
  - Liquid & well-capitalized banking system.
  - Banks' external exposure is still moderate.
  - Foreign participation in domestic capital market is limited.

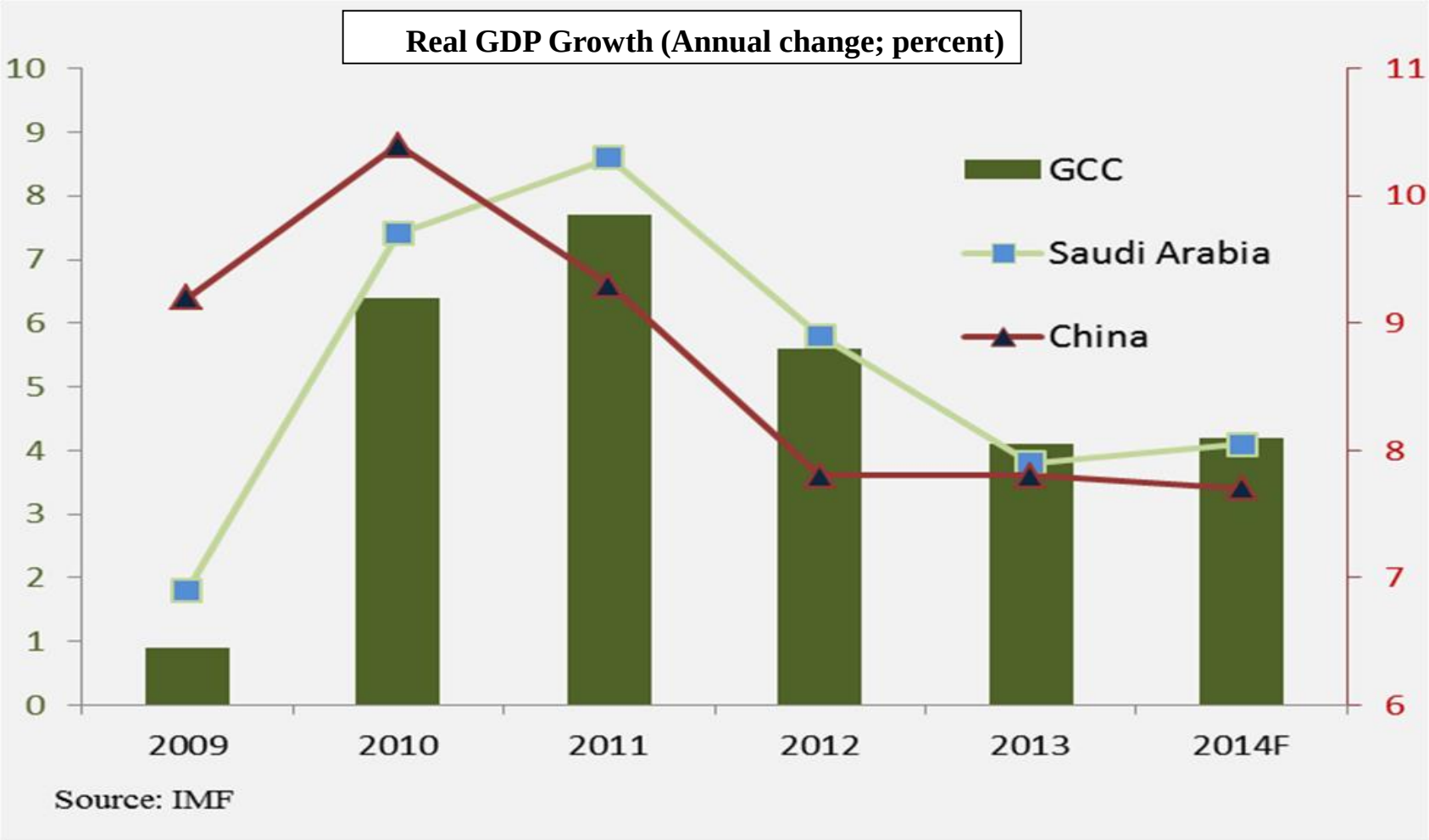
Higher GCC-Asian Trade…

Share Of GCC Exports By Region And Country



Source: United Nations Conference on Trade and Development;
Standard & Poor's 2014.

Indirect Impact of Fed's Tapering on GCC



Indirect Impact of Fed's Tapering on GCC

Real GDP

(Annual change; percent)

	2009	2010	2011	2012	2013	2014F	2015F
Bahrain	2.5	4.3	2.1	3.4	4.9	4.7	3.3
Kuwait	-7.1	-2.4	6.3	6.2	0.8	2.6	3
Oman	3.3	5.6	4.5	5	5.1	3.4	3.4
Qatar	12	16.7	13	6.2	6.1	5.9	7.1
KSA	1.8*	7.4*	8.6*	5.8*	4.0*	4.1	4.2
UAE	-4.8	1.7	3.9	4.4	4.8	4.4	4.2
GCC	0.9	6.4	7.7	5.6	**4.1**	**4.2**	**4.4**

Source: IMF, *CDSI

Indirect Impact of Fed's Tapering on GCC

Table 1: Exports of Goods and Services (Billions of U.S. dollars)

	2009	2010	2011	2012	2013	2014F
Bahrain	15.5	17.7	22.7	22.6	24.4	23.8
Kuwait	65.9	76.1	112.8	130.2	125.3	121.3
Oman	29.3	38.5	49.2	54.6	55.8	55.5
Qatar	50	77.8	121.7	143.6	150.3	148.5
Saudi Arabia	202.1	261.8	376.3	399.4	378.5	378.8
United Arab Emirates	202	225.3	314.8	365.2	404.1	430.7
GCC	**564.7**	**697.3**	**997.5**	**1116**	**1138**	**1159**

Source :IMF

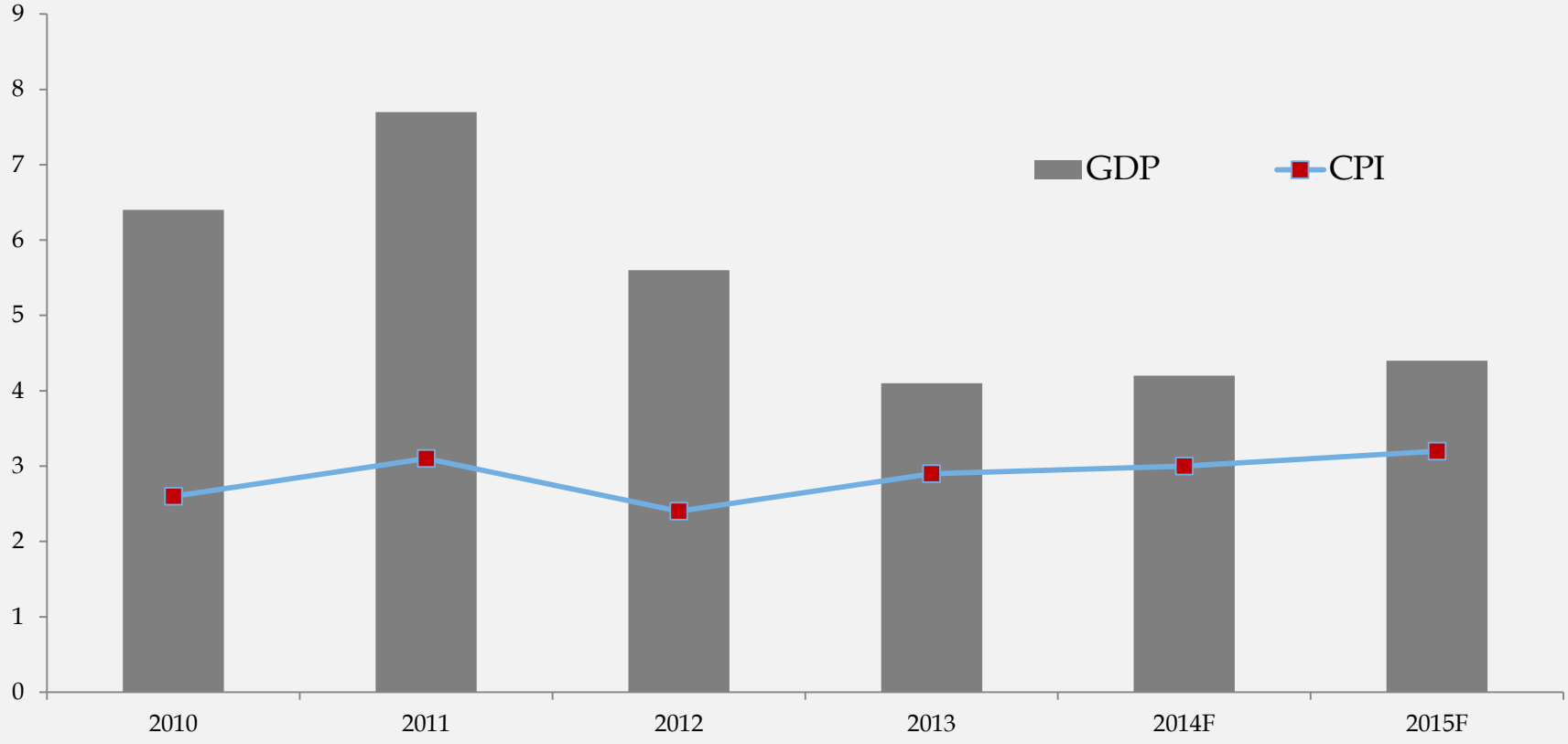
Indirect Impact of Fed's Tapering on GCC

Table 2: Current Account Balance (Billions of U.S. dollars)

	2009	2010	2011	2012	2013	2014F
Bahrain	0.6	0.8	3.2	2.2	3.9	3.5
Kuwait	28.3	37	67.2	79.8	71.9	69.4
Oman	0.6-	5.9	10.7	9.1	7.8	6.4
Qatar	6.4	23.8	52	62.3	59.2	54.3
Saudi Arabia	21	66.8	158.6	164.7	129.8	121.9
United Arab Emirates	7.8	7.2	50.9	66.6	59.1	55
GCC	**63.4**	**141.4**	**342.7**	**384.6**	**331.7**	**310.5**

Source :IMF

Indirect Impact of Fed's Tapering on GCC



Source: IMF

Concluding Remarks

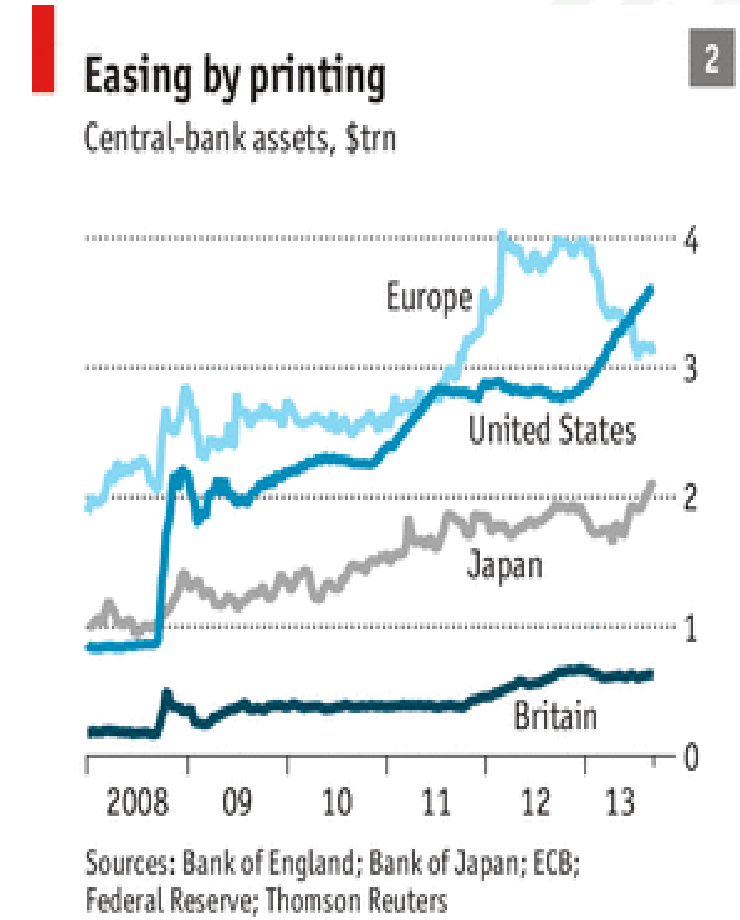
- The recent tapering of the Fed's securities purchases program has had a significant effect on emerging markets.

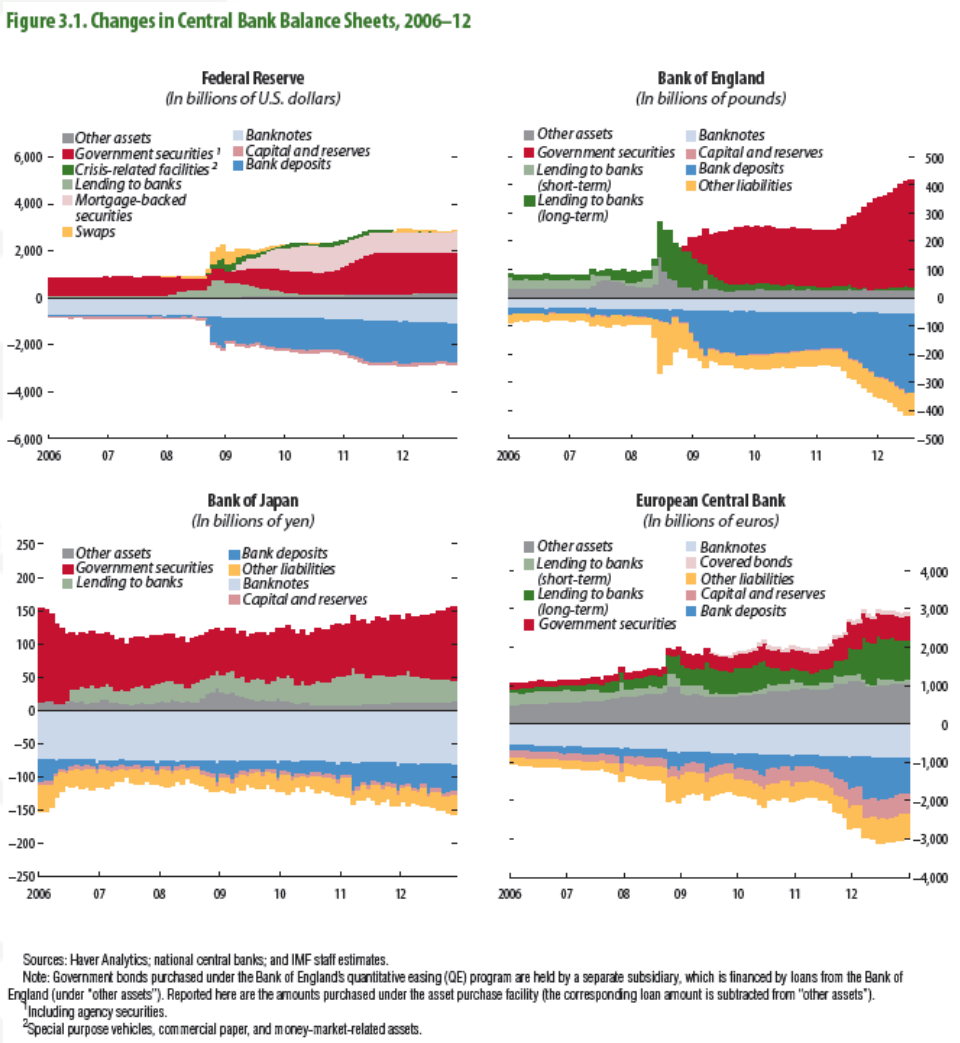
- The oil price impact of a slowdown in some key EMEs, especially resulting from the normalization of global financial conditions, is likely to be limited, short-lived and largely offset by the projected pick-up in growth in major advanced economies.

- Further appreciation in the U.S. dollar against major EMEs' currencies is expected to reduce the cost of imports in the GCC area and further curb the overall GCC inflation.

The Timing and The Effect of The Exit

Expansion of CB's balance sheets





Source: GFSR April 2013

When the Exit Will take place?

- The fed funds (FF) rate would remain at “exceptionally low levels” for “some time” (Jan 28, 2009)
- Later for an “extended period” (March 18, 2009)
- To a specific calendar date “at least through mid-2013” (August 9, 2011)
- To a later date “at least through late 2014” (Jan 25, 2012)
- To an even later date “at least through mid 2015” (Sept 13, 2012)

Timing of the Exit

- The guidance became threshold-based for the first increase of the FF target rate would be when unemployment reached 6.5 percent and inflation expectations were at 2 percent.

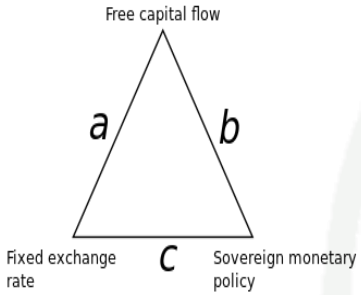
- Finally, at Jackson hall, the rise of the U.S policy rate is not set yet. The unemployment complicated the Fed's ability to assess the U.S. Job market and made it harder to determine when to adjust interest rates.

WHY DO WE CARE ABOUT KNOWING THE EXIT?

EXIT FOR THE ADVANCED ECONOMY

- Timing and pace hard to decide
  - Too early → damage to recovery
  - Too late → inflation (both in goods and asset prices)
- Good news: interest rate policies and balance sheet policies can be decoupled…
- …but it's tricky to communicate → an innocuous Fed remark on tapering in July 2013 misunderstood as interest rates tighten.

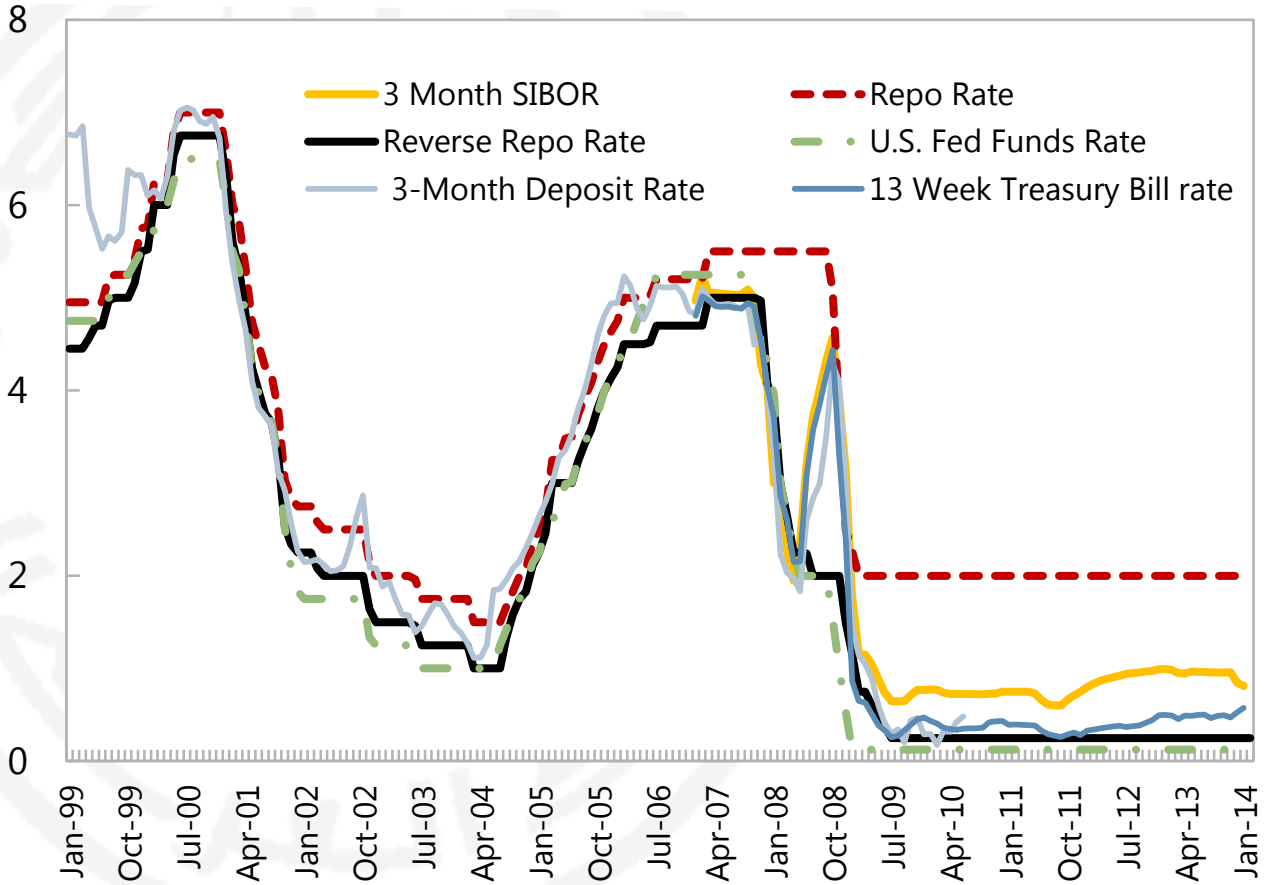
Exit for Countries with Fixed Exchange rate



A fixed exchange rate

Free capital movement

An independent monetary policy



Which interest rate matters?

Administrative

- Central Bank policy rate

Guided

- Interbank/Money market rate: Which Maturities?

- Borrowing and deposit rates in the economy more generally
- Exchange rate and buy-sell spreads
- Capital flows

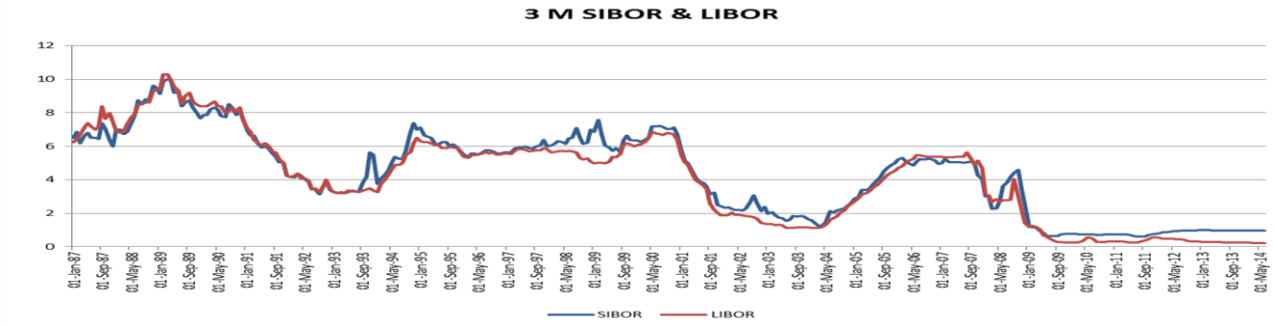
Which interest rate matters?

Administrative

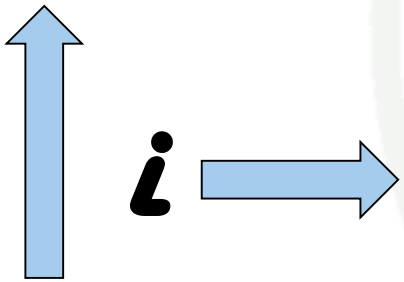
- Central Bank policy rate
- Fed Fund Rate
- LIBOR

APPLIED

- 3M SIBOR



Impact of the interest rate on various economic indicators



Variable/Measure	Theoretical
GDP	(-)
Investment	(-)
Consumption	(-)
Total Bank Credit (BC)	(-)
Bank Credit for Building & Construction (BCB)	(-)
Bank Credit for Transport and communications (BCT)	(-)
Bank Credit for Manufacturing and Processing (BCM)	(-)
Bank Credit for Miscellaneous (BCMIS)	(-)

Methodology

To do our policy analysis, the methodology consists of two steps:

- **Step 1**: The basic VAR model (the reduced-form) as follows:

$$Y_t = \Gamma_0 + \Gamma_1 Y_{t-1} + \cdots + \Gamma_p Y_{t-p} + d08 + t + u_t$$

$$Y_t \equiv (GDP\_1_t, CPI\_1_t, SBR_t)'$$

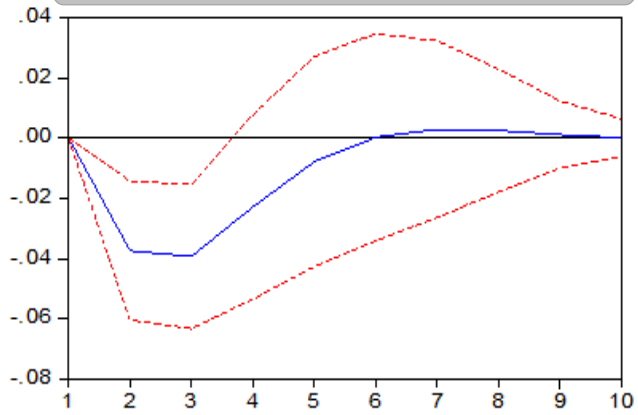
$$u_t \equiv (u_{gdp,t}, u_{cpi,t}, u_{sbr,t})'$$

- **Step 2**: Impulse Response Function analysis which is the tool used to analyze the impact of rising interest rate to different sectors.

Impulse Response Results

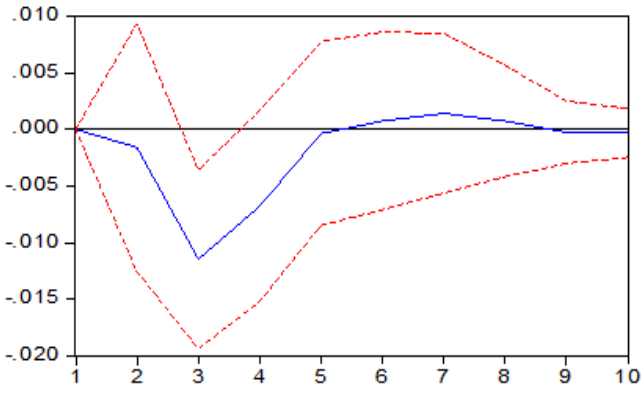
(Response to one positive standard deviation Shock (Increase in the SIBOR)

Response of GDP



The response of GDP is -0.037 in Q1 and -0.039 in Q2. The impact of rising interest rate on GDP

Response of Non-Oil GDP

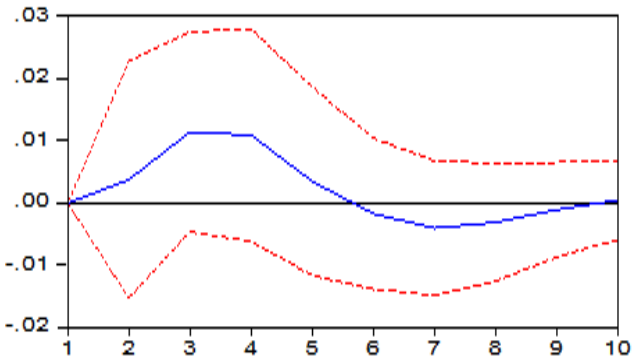


The response of non-oil GDP is -0.011 at Q3

Impulse Response Results

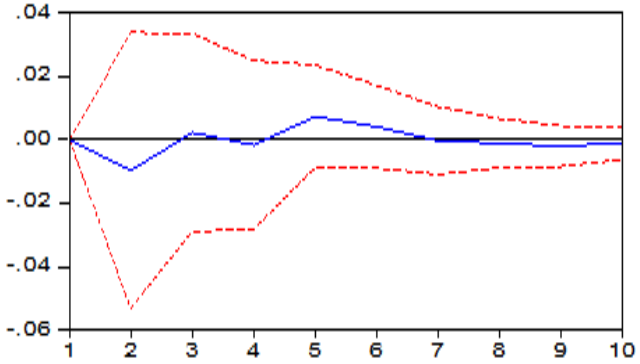
(Response to one positive standard deviation Shock (Increase in the SIBOR)

Response of Total Consumption



The response of Total consumption is 0.003 in Q2 and 0.011% at Q3

Response of Total Investment

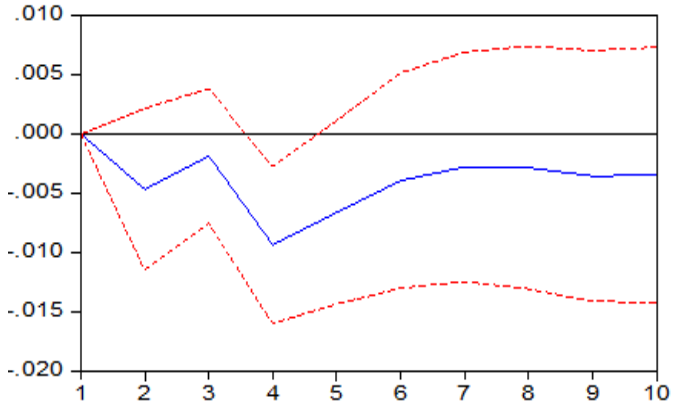


The response of total investment is -0.014 at Q2

Impulse Response Results

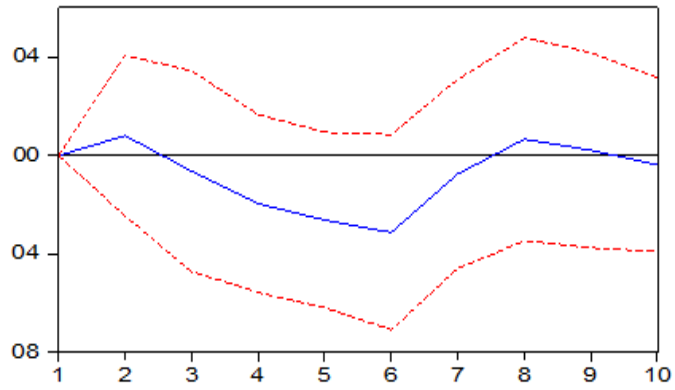
(Response to one positive standard deviation Shock (Increase in the SIBOR)

Response of Total Bank Credit



The response of total bank credit is 0.01 at Q4

Response of BC for Building & Construction

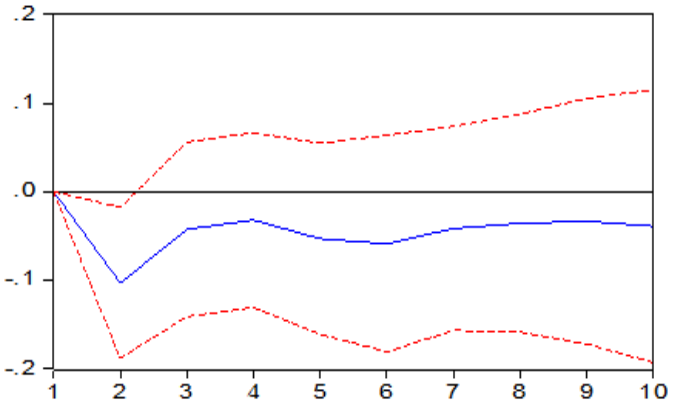


The response of BC for Building & construction is -0.03% at Q6

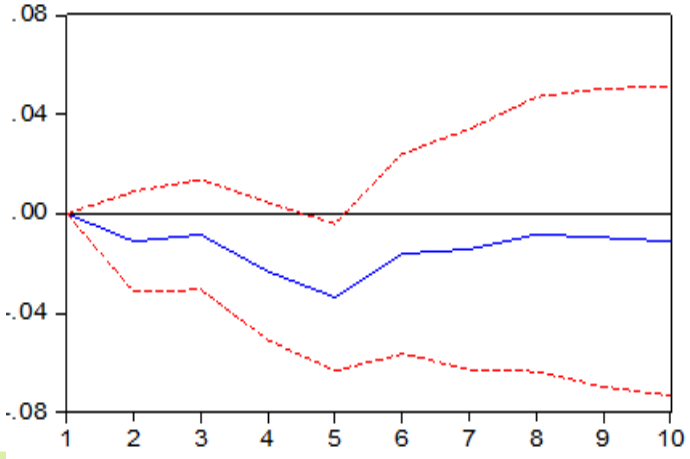
Impulse Response Results

(Response to one positive standard deviation Shock (Increase in the SIBOR)

Response of BC for Transport and communications



Response of BC for Manufacturing and Processing

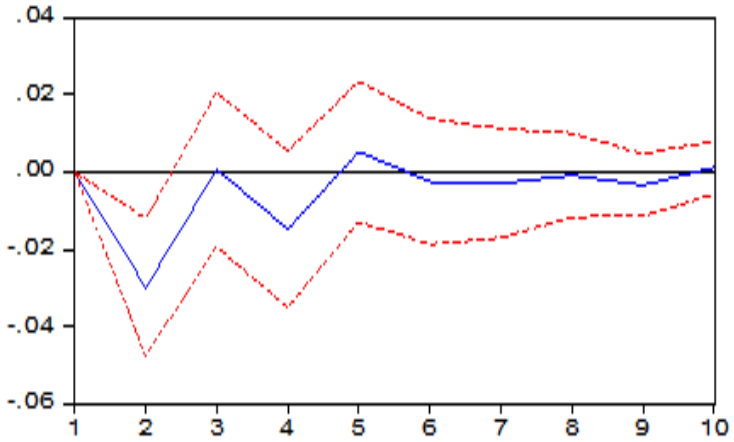


The response of BC for Transport and communications is -0.102. Also, for Manufacturing and Processing , the response is -0.03

Impulse Response Results

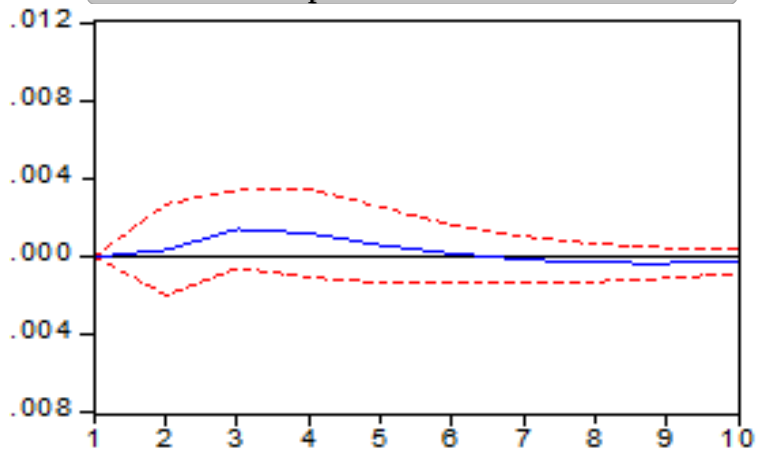
(Response to one positive standard deviation Shock (Increase in the SIBOR)

Response of BC for Miscellaneous



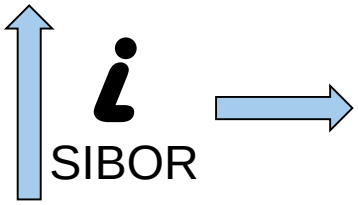
The impact is somewhat large, which is 0.03 at Q2.

Response of Inflation



Insignificant Relationship

SUMMARY



Variable/Measure	Impact	Response	Theory	Findings
GDP	-0.037% to -0.039%	2nd & 3rd Quarters	(-)	(-)
Non oil-GDP	-0.01%	3rd Quarter	(-)	(-)
Investment	-0.01%	2nd Quarter	(-)	(-)
Consumption	0.003% to 0.011%	2nd & 3rd Quarters	(-)	(+)
Inflation	NA	NA	(-)	NA
Total Bank Credit (BC)	-0.01%	4th Quarter	(-)	(-)
Bank Credit for Building & Construction (BCB)	-0.03%	6th Quarter	(-)	(-)
Bank Credit for Transport and communications (BCT)	-0.10%	2nd Quarter	(-)	(-)
Bank Credit for Manufacturing and Processing (BCM)	-0.033%.	5th Quarter	(-)	(-)
Bank Credit for Miscellaneous (BCMIS)	-0.03%	2nd Quarter	(-)	(-)

SUMMARY

- The exact date of the exit is still unknown.
- We saw that understanding the effect of the exit is important.
- This model gives you a glance of what could happen if there is only a shock of one standard deviation of the interest rate.
- The above model does not take into account changing of the other variables such as the increase in oil prices (assumes all the variables to be constant).
- It does not take into account the exchange rate appreciation effect (dollar).