

Does Islamic Investing Cost?

Comparing the Performance of Conventional, Islamic and Socially- Responsible Equity Indices

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Research Questions

The research addresses three main research questions:

1. Are there differences in overall return performance among Islamic, conventional, and SRI assets?
2. To what extent are the performance of Islamic, conventional, and socially-responsible assets correlated?
3. Is there a performance penalty to investing in Islamic indices during a crisis?

Sample & Methodology

Period: 2005-2015

Sample

- 125 equity indices from markets across the world
- Providers: MSCI & Dow Jones

Data

- Frequency: weekly data
- Data Points:
 - Returns
 - Volatility
 - Index Fundamentals: price-to-book value, price-to-earnings ratio and price-to-sales ratio

Analysis

- First we analyzed the performance of each asset class aggregated across all regions
- Second we performed head-to-head comparisons of conventional, Islamic and SRI indices within and across selected regions
- Third, we conducted a correlation analysis between asset classes
- Fourth, we carried out the same set of performance analyses during financial crisis:
 - Crisis 1: the U.S. subprime crisis, 2008 to 2009
 - Crisis 2: the European debt crisis, 2011-2012
- Finally, we investigated Dynamic Conditional Correlations in crisis and post-crisis period, co-integrations between indices, and impulse response functions

Comparative Performance: Overall

	MSCI					DOW JONES				
	Return	Vola	PE	PBV	PS	Return	Vola	PE	PBV	PS
ISLAMIC										
Mean	0.08%	20.373	18.529	1.714	1.335	0.10%	18.264	17.499	2.465	1.747
Median	0.19%	16.815	14.898	1.721	1.109	0.00%	15.26	17.684	2.398	1.692
CONVENTIONAL										
Mean	0.15%	18.187	50.596	1.747	1.445	0.12%	16.908	21.067	1.726	1.593
Median	0.00%	14.98	15.288	1.702	1.193	0.00%	14.165	15.402	1.564	1.053
SRI/SUSTAINABILITY										
Mean	0.10%	17.989	18.123	2.121	1.411	0.12%	17.58	464.201	122.651	60.16
Median	0.00%	15.03	18	1.967	1.361	0.00%	15	17.166	1.723	1.168



- Mean total returns of conventional and SRI indices outperformed Islamic ones
- SRI: better fundamentals



- In general, SRI outperformed both conventional and Islamic assets, though...
- ...Islamic PE and PBV multiples were mixed

Source: Bloomberg database and Thomson Reuters Eikon database

Comparative Correlations

We analyzed correlations between each sub-category of Islamic, Conventional and SRI stock indices

- For the MSCI family, Asia-Pacific Indices have high correlations with Europe indices (~ 0.95) in all the three categories
- For MSCI both Islamic and Conventional Indices, there is very low correlation between the UAE and the other regional indices (less than 0.3)
- However, for DJ indices, correlation values are lower in most cases (less than 0.6 correlation)
- In particular, within the SRI category, Asia-Pacific indices have 0.6 or lower correlations with other regional indices

Performance in Crisis Periods

We looked at comparative performance across the three asset classes during the Subprime crisis and the European financial crisis

Subprime Crisis (2008-2009)

- During the Subprime financial crisis, the performance across the three asset classes was similar
- In the MSCI series, Islamic and SRIs slightly outperformed conventional stock indices
- In the MSCI series, Islamic indices performed best (as measured by median returns)

European Crisis (2011-2012)

- During the European crisis, mean returns for Islamic indices were quite similar to those observed for conventional indices
- Overall performance across all three assets classes was higher when compared to the Subprime crisis
- Equity indices proved to be more resilient during the European crisis as compared to the subprime crisis

Impact of Oil Prices

We ran impulse response functions to observe how each set of indices responded to movements in the oil price

- Overall, all indices responded positively to changes in oil prices (index performance and oil price performance moved in the same direction)
- For European indices, we observed a more pronounced impact for the Islamic indices, where as the impact for SRI and conventional indices were more subdued
- For Asia-Pacific, the oil price change impact was more persistent (longer tenure) on the Islamic indices, where as the SRI and conventional indices tended to revert more quickly
- U.S. indices were and an exception, where oil prices changes had a negative impact on index performance, and the negative impact was more persistent for conventional and SRI indices when compared to Islamic indices

Impact of Volatility Expectations

We ran impulse response functions to observe how each set of indices responded to expectations of volatility

- Overall, all indices responded negatively to shocks in global equity market volatility (index performance and volatility expectations moved in opposite directions)
- Asia-Pacific and European indices behaved similarly across Islamic, conventional and SRIs categories, with an immediate sharp decline followed by a slight recovery
- Similar patterns for Emerging Market and UAE indices. In particular, we observed sharp declines in the Islamic indices immediately after shocks followed by a stabilization of the response
- U.S. indices were again an exception, showing a positive impact of volatility expectations. This effect was more persistent for conventional indices as compared to Islamic and SRI indices

Summary Remarks

There were four main findings from our research into performance and correlation comparisons between conventional, Islamic and SRI indices:

1. There was variation in historical performance across the three index groupings
2. There was no significant penalty for investing in Islamic or SRI funds neither during the overall period (2005-2015) nor during periods of crisis (2008-2009, 2011-2012)
3. Islamic and SRI funds can offer an effective strategy for conventional investors to reduce overall risk within their portfolios

4. Islamic investing *doesn't* cost

Appendix

Comparative Correlations: MSCI

ISLAMIC						
	MIAPJ Index	MIEF Index	MIUS Index	MIER Index	MIAE Index	MIWO Index
MIAPJ Index	1					
MIEF Index	0.9551*	1				
MIUS Index	0.7397*	0.7635*	1			
MIER Index	0.8155*	0.8542*	0.8428*	1		
MIAE Index	0.2467*	0.2181*	0.1889*	0.2082*	1	
MIWO Index	0.8344*	0.8575*	0.9498*	0.9486*	0.2097*	1
CONVENTIONAL						
	MXAPJ Index	MXEF Index	MXUS Index	MSELE18 Index	MXAE Index	MXWO Index
MXAPJ Index	1					
MXEF Index	0.9508*	1				
MXUS Index	0.7078*	0.7438*	1			
MSELE18 Index	0.7640*	0.7959*	0.8624*	1		
MXAE Index	0.2465*	0.2049*	0.2004*	0.2271*	1	
MXWO Index	0.8213*	0.8433*	0.9427*	0.9237*	0.2258*	1
SRI						
	M2PCJSI Index	M2CXJPE Index	M5USSI Index	M5EUSI Index	M5WOSOCR Index	
M2PCJSI Index	1					
M2CXJPE Index	-	-				
M5USSI Index	0.7079*	-	1			
M5EUSI Index	0.7773*	-	0.8482*	1		
M5WOSOCR Index	0.7996*	-	0.9477*	0.9424*	1	

Source: Bloomberg database and Thomson Reuters Eikon database

Comparative Correlations: DJ

ISLAMIC						
	DJAP Index	DJIEU Index	IMUS Index	DJIEMG Index	DJIAEL Index	DJIM Index
DJAP Index	-					
DJIEU Index	-	1				
IMUS Index	-	0.8360*	1			
DJIEMG Index	-	0.8327*	0.7470*	1		
DJIAEL Index	-	-	-	-	-	
DJIM Index	-	0.9337*	0.9481*	0.8604*	-	1
CONVENTIONAL						
	DWAP Index	DWEU Index	DWCF Index	W5DOW Index	DJARB50 Index	W1DOW Index
DWAP Index	1					
DWEU Index	0.7774*	1				
DWCF Index	0.6788*	0.8304*	1			
W5DOW Index	0.8637*	0.8455*	0.7531*	1		
DJARB50 Index	0.3738*	0.3424*	0.2570*	0.3293*	1	
W1DOW Index	0.8381*	0.9410*	0.9339*	0.8773*	0.3350*	1
SRI						
	P1SUS Index	DJSEUXAT Index	AASGI Index	DJSEMDUT Index	W1XTO Index	
P1SUS Index	1					
DJSEUXAT Index	0.6887*	1				
AASGI Index	0.6610*	0.8356*	1			
DJSEMDUT Index	0.6880*	0.6198*	0.6237*	1		
W1XTO Index	0.8061*	0.9030*	0.8905*	0.7342*	1	

Source: Bloomberg database and Thomson Reuters Eikon database

Subprime Crisis: Performance

	MSCI					DOW JONES				
	Return	Vola	PE	PBV	PS	Return	Vola	PE	PBV	PS
ISLAMIC										
Mean	-1.09%	34.66	12.34	2.03	1.24	-1.20%	34.50	12.06	2.22	1.24
Median	-0.83%	25.00	12.86	2.05	1.14	-1.00%	26.29	12.68	2.31	1.30
CONVENTIONAL										
Mean	-1.17%	33.66	12.96	1.88	1.41	-1.02%	31.59	14.92	2.81	4.07
Median	-1.00%	25.31	13.48	1.90	1.17	-1.00%	23.91	16.28	3.04	4.27
SRI/SUSTAINABILITY										
Mean	-0.84%	31.75				-0.99%	32.62	1220.02	420.20	250.96
Median	-1.00%	24.73				-1.00%	25.14	16.61	1.78	0.96

During the Subprime crisis, the performance across the three groups was similar.

Source: Bloomberg database and Thomson Reuters Eikon database

European Crisis: Performance

	MSCI					DOW JONES				
	Return	Vola	PE	PBV	PS	Return	Vola	PE	PBV	PS
ISLAMIC										
Mean	-0.20%	21.088	26.696	1.629	1.268	-0.26%	22.041	13.662	2.158	1.51
Median	-0.16%	18.035	13.617	1.709	1.115	0.00%	20.1	13.531	2.116	1.572
CONVENTIONAL										
Mean	-0.21%	20.205	214.268	1.51	1.234	-0.23%	19.699	12.614	1.659	1.452
Median	0.00%	16.84	13.657	1.556	1.110	0.00%	17.02	13.148	1.671	1.257
SRI/SUSTAINABILITY										
Mean	-0.10%	19.341	-	-	-	-0.21%	20.62	557.372	181.669	101.559
Median	0.00%	16.82	-	-	-	0.00%	17.04	15.274	1.543	1.258

During the European crisis, the mean returns among the Islamic indices were quite similar to those observed in the conventional markets.

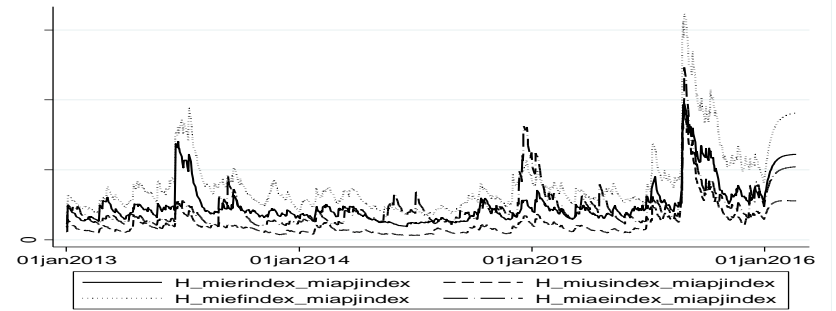
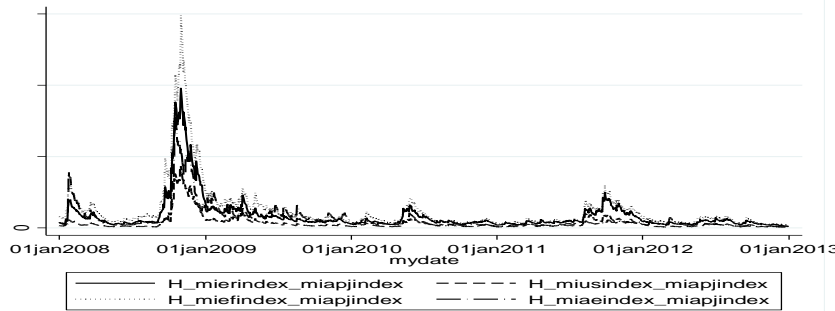
Source: Bloomberg database and Thomson Reuters Eikon database

DCC-Islamic Indices (1)

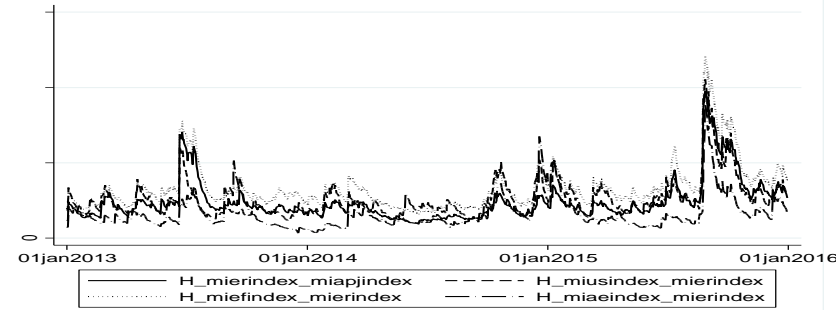
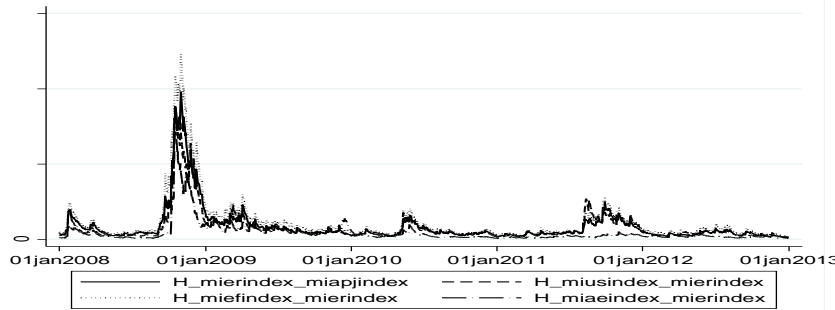
Crisis (2008-2012)

Post Crisis

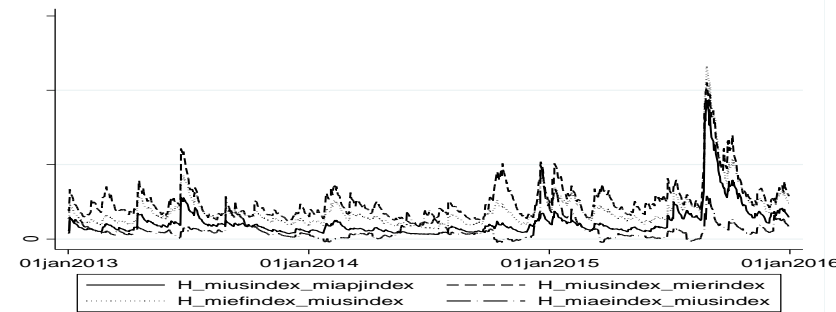
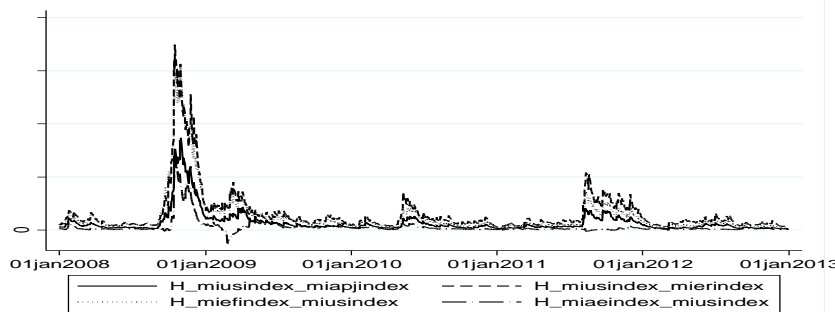
DCC AP
Vs others



DCC Europe
Vs others



DCC USA
Vs others



Source: Bloomberg database and Thomson Reuters Eikon database

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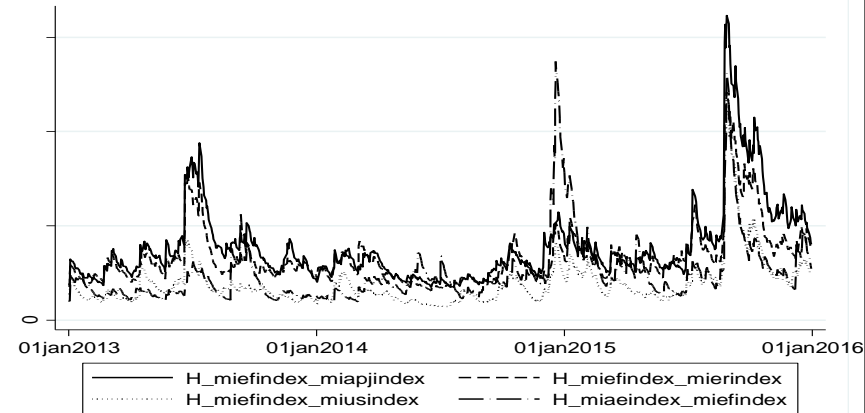
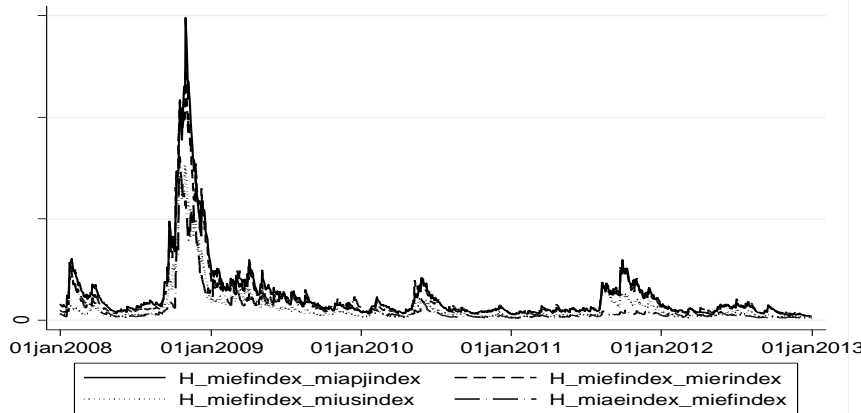


DCC-Islamic Indices (2)

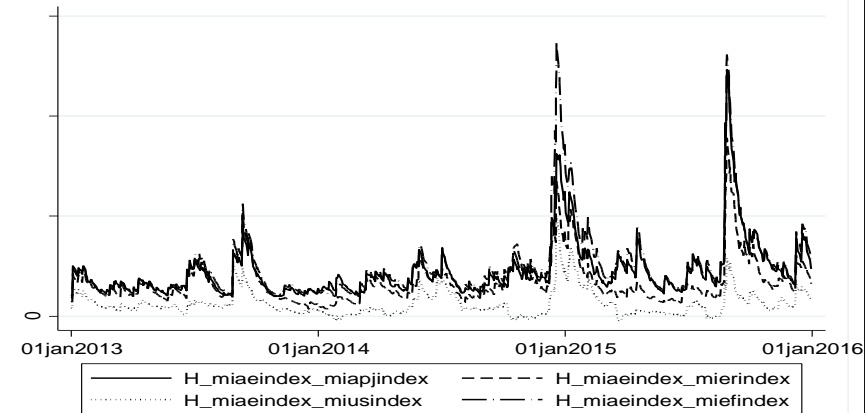
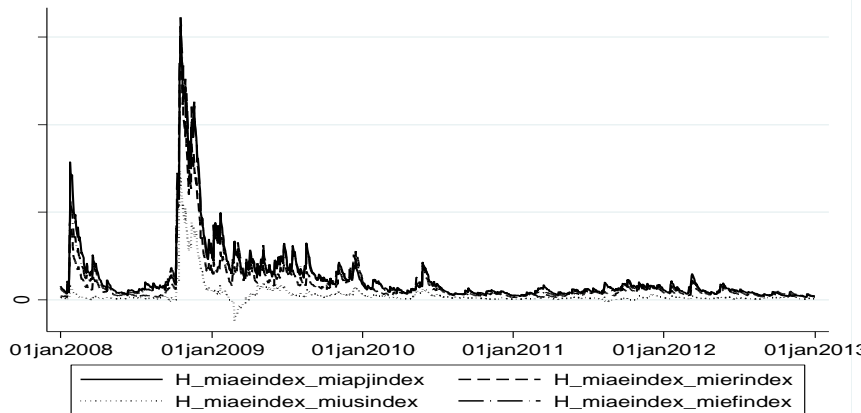
Crisis (2008-2012)

Post Crisis

DCC EM
Vs others



DCC UAE
Vs others



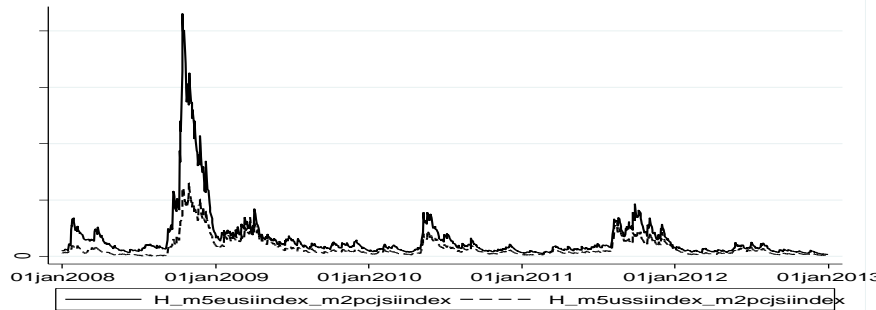
Source: Bloomberg database and Thomson Reuters Eikon database

DCC-SRI Indices (3)

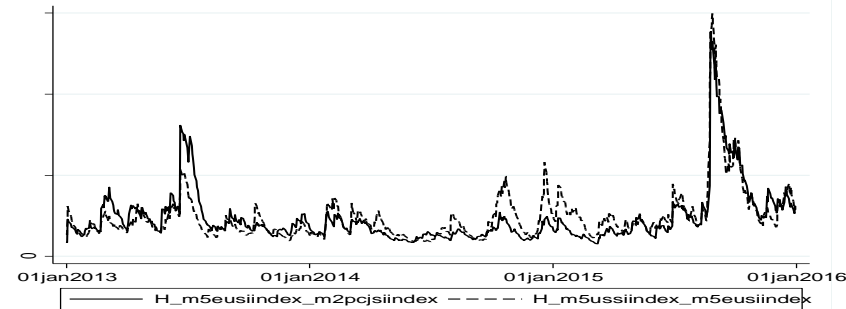
Crisis (2008-2012)

Post Crisis

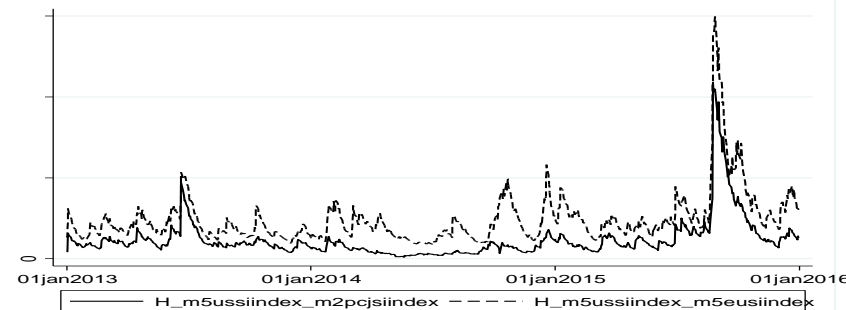
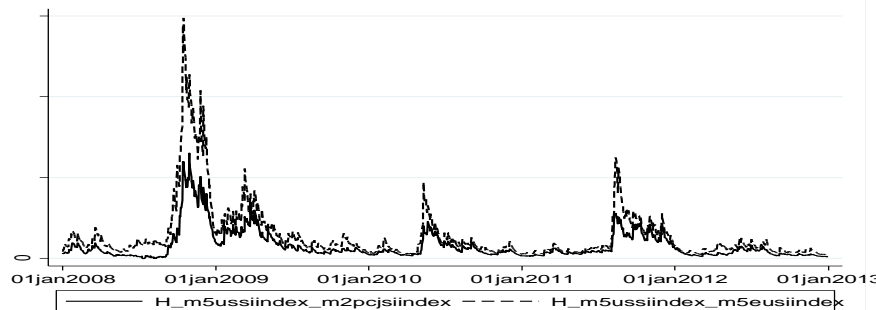
DCC AP
Vs others



DCC Europe
Vs others



DCC USA
Vs others



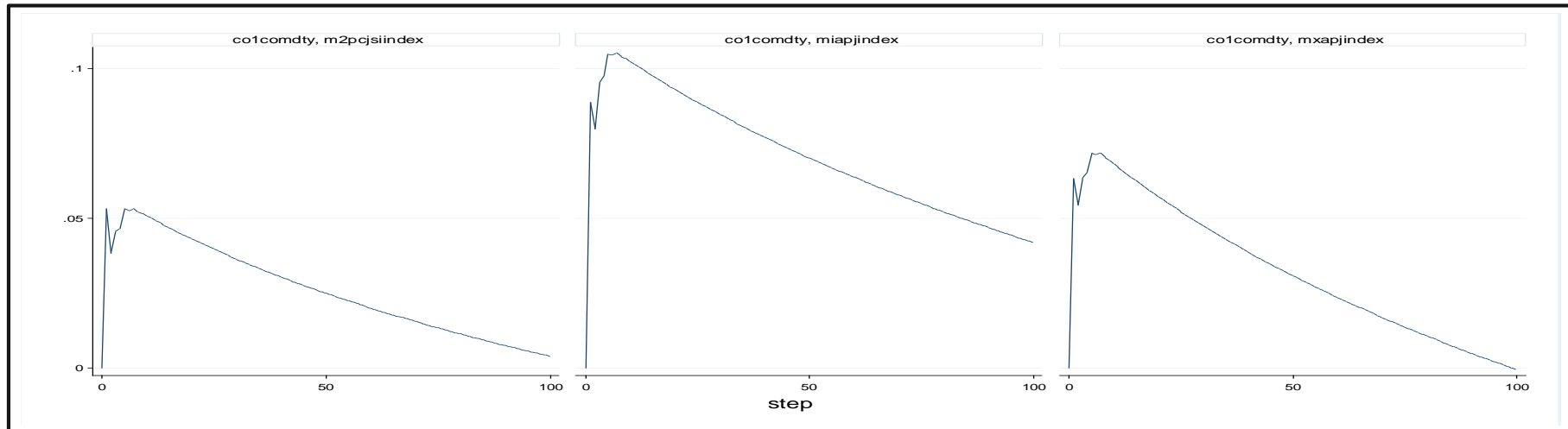
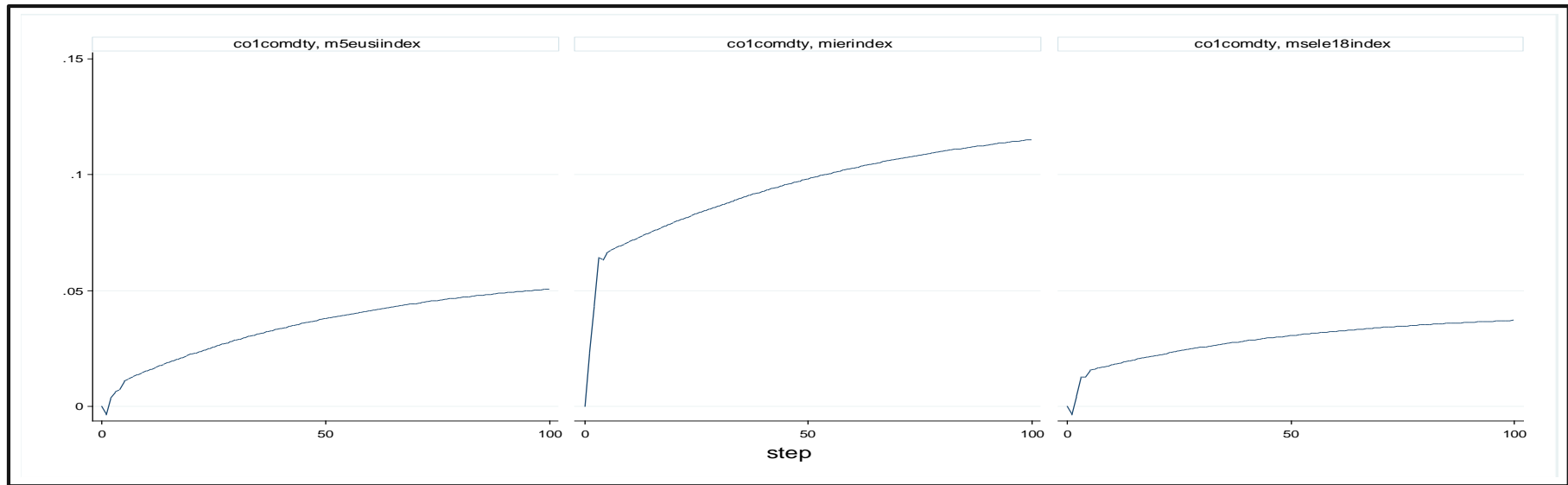
Source: Bloomberg database and Thomson Reuters Eikon database

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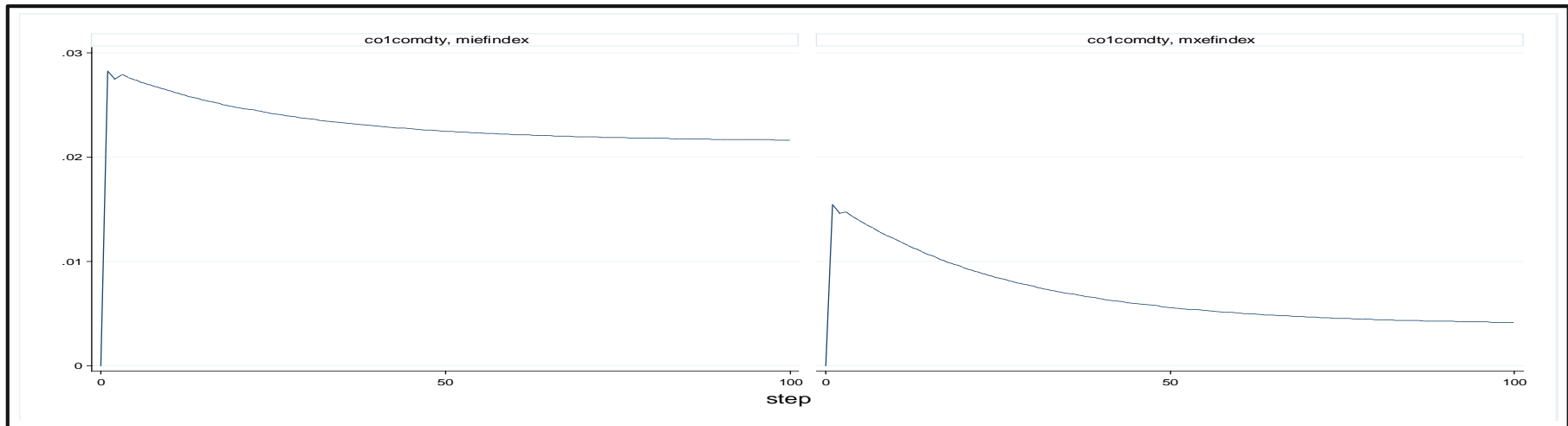
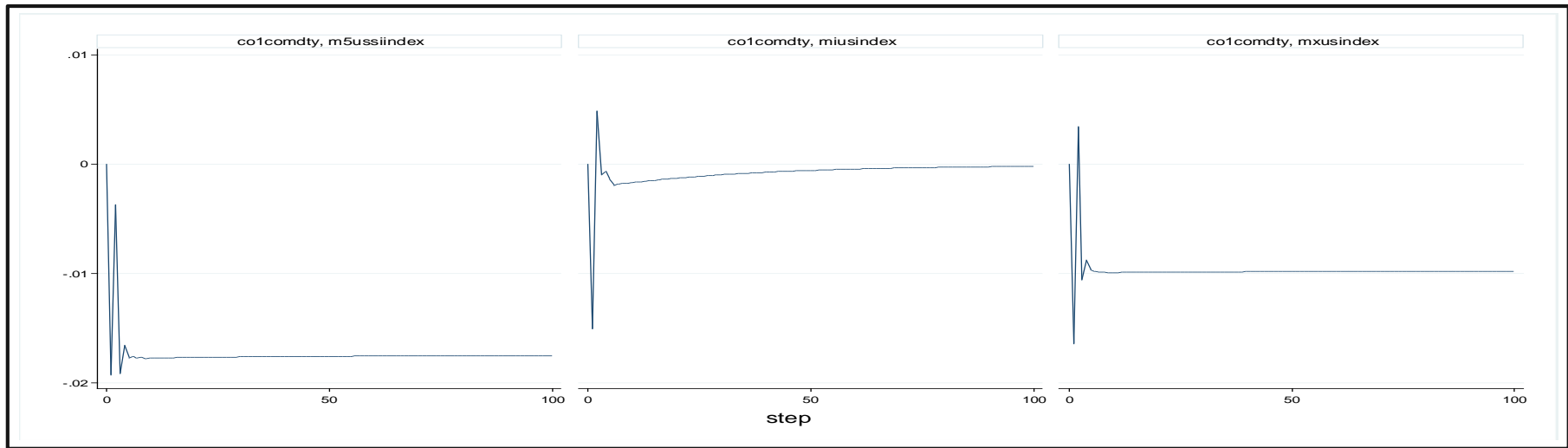


Impulse Response Function – Oil 1



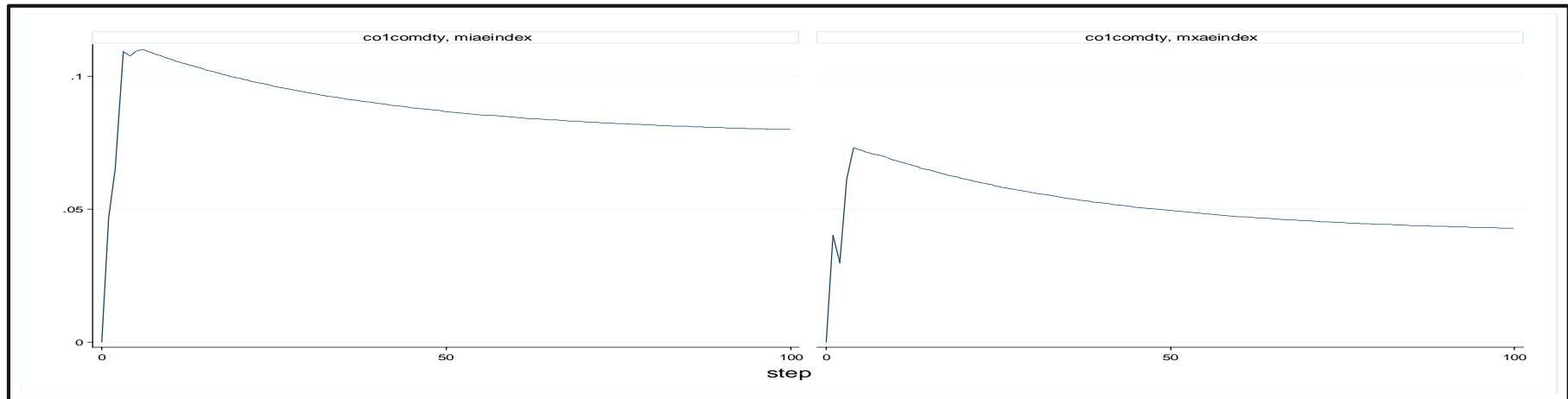
Source: Bloomberg database and Thomson Reuters Eikon database

Impulse Response Function – Oil 2



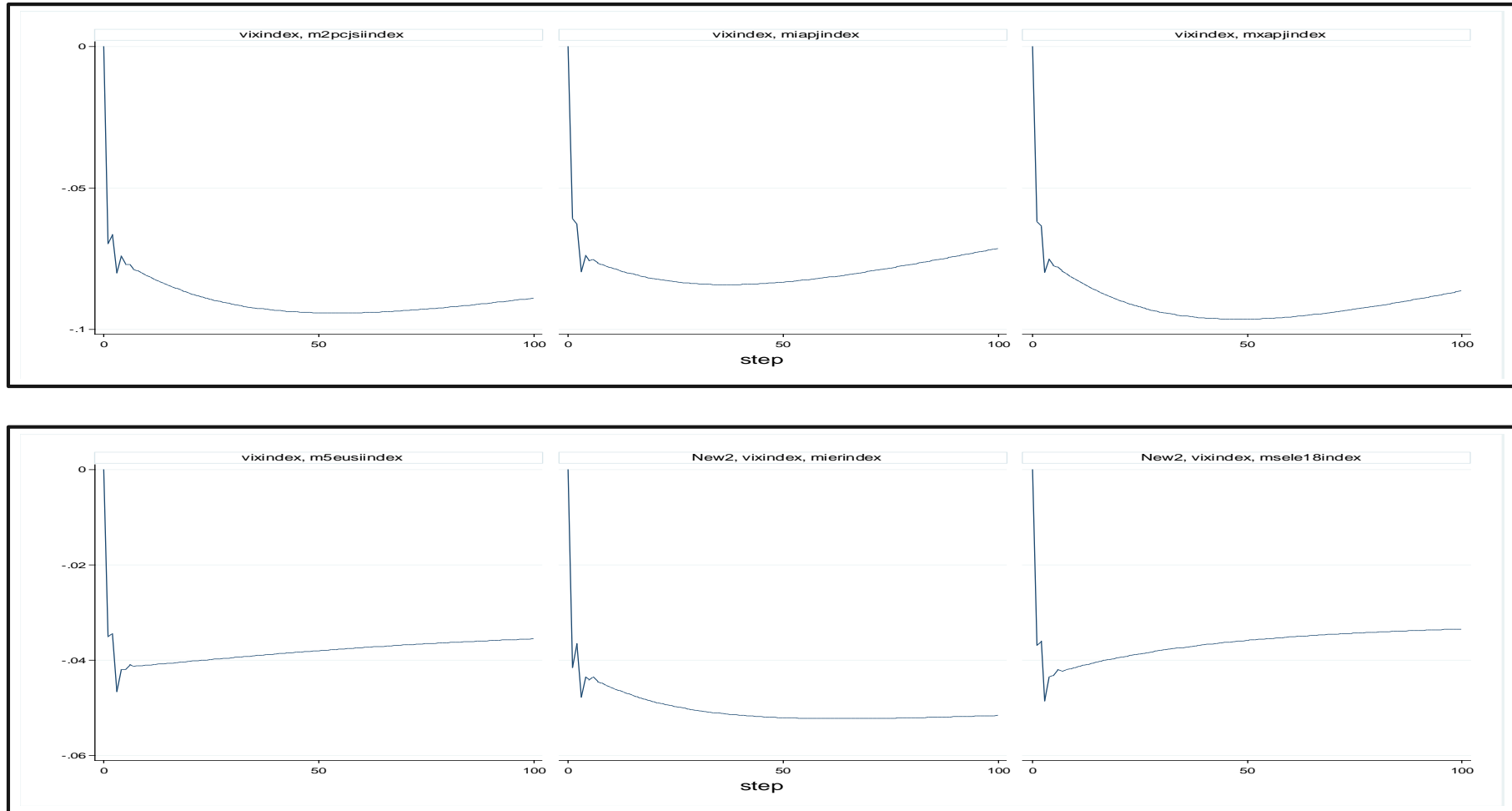
Source: Bloomberg database and Thomson Reuters Eikon database

Impulse Response Function – Oil 3



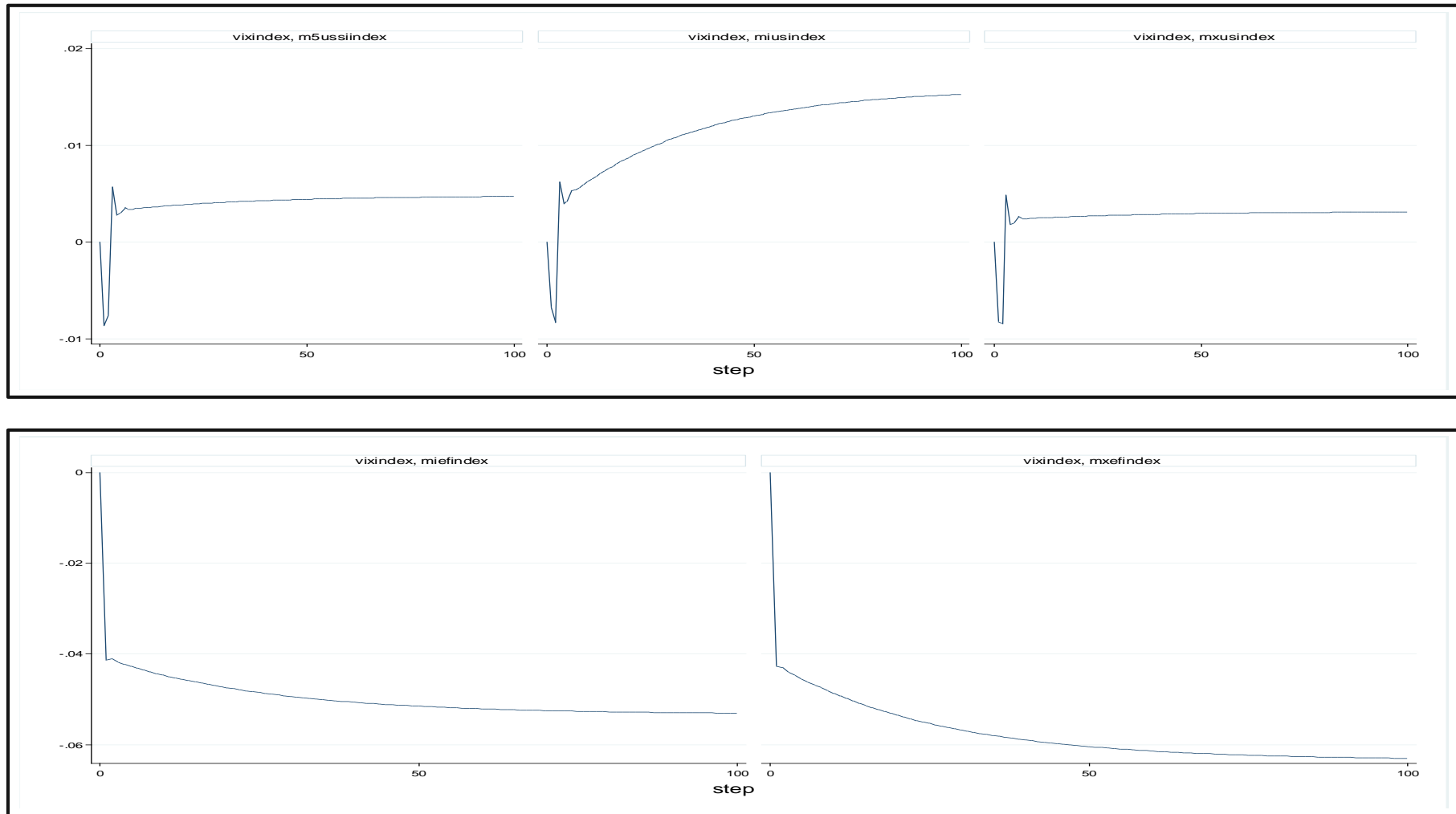
Source: Bloomberg database and Thomson Reuters Eikon database

Impulse Response Function – VIX 1



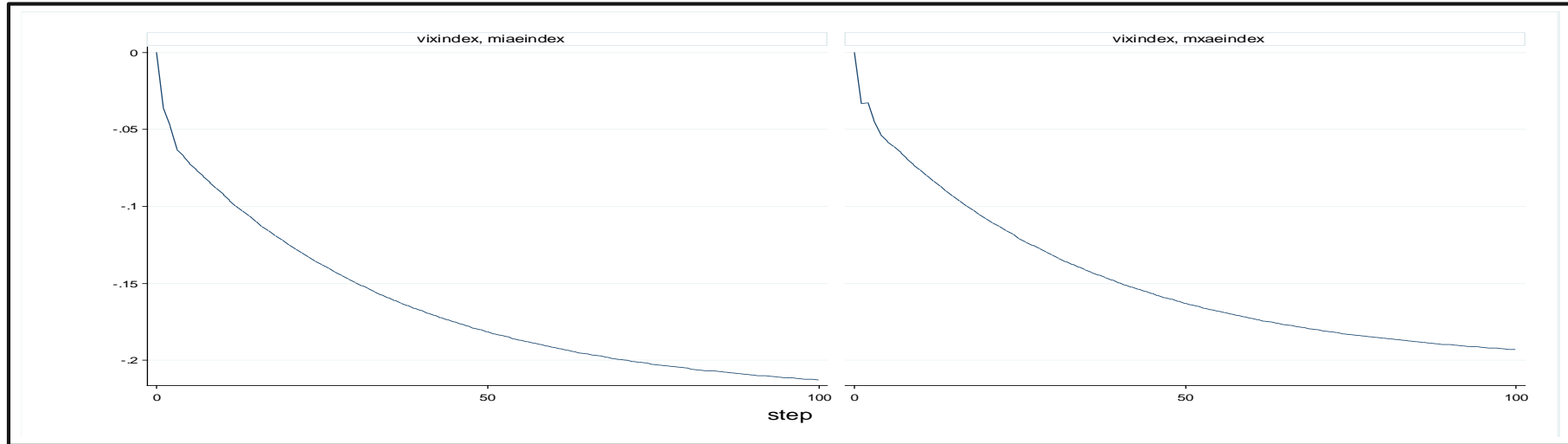
Source: Bloomberg database and Thomson Reuters Eikon database

Impulse Response Function – VIX 2



Source: Bloomberg database and Thomson Reuters Eikon database

Impulse Response Function – VIX 3



Source: Bloomberg database and Thomson Reuters Eikon database

Research Collaboration by :

