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The Impact of Business and Political News on the GCC Stock markets

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1 Introduction

The effects of macroeconomic news on stock prices have been analysed extensively in the more recent financial literature. The theoretical motivation comes from asset pricing models according to which factors driving macro series such as consumption and investment should also affect asset prices (e.g., Merton, 1973). Information clearly plays a crucial role in financial markets (Strycharz et. al, 2018; Tetlock, 2007 and 2008). Financial news, market announcements, corporate news, and analyst forecasts affect the expectations of investors and might generate high volatility in stock markets (e.g., Tetlock, 2008). Numerous studies have analysed their impact on stock returns (Lavrenko et al., 2000; Chan, 2003; Andersen et al., 2007; Tetlock et al., 2008; Nartea et al., 2009; Alfarano et al., 2011.). McQueen and Roley (1993) found that real news have asymmetric effects on financial markets depending on the state of the economy; Cutler et al. (1989) estimated that macroeconomic news explain approximately one-third of the variance of stock returns whilst financial news have limited predictive power for returns. Birz and Lott (2011) focused on the impact of newspaper headlines on the US stock market, whilst Caporale et al. (2016, 2018a, 2018b) assessed their impact on European stock and bond markets and the FOREX in emerging markets respectively. Studies in behavioural finance have addressed the possibility of human emotions influencing investment decisions (De Long, 1990; Shleifer and Vishny, 1997) and found that the prevailing sentiment in financial reports or news articles affects stock returns (Li, 2006 and Schumaker et al., 2012).

Most of the above papers focus on the developed countries or on a small subset of the emerging economies. There is instead hardly any evidence concerning the members of the Gulf Cooperation Council (GCC) that was established in 1981 (namely, Bahrain, Qatar, Kuwait, Oman, UAE and Saudi Arabia). These are currently classified as emerging countries engaged in the transformation of their economies through the creation of new industry segments and diversification (Shkvarya et al., 2017).

$$\left(y_{w}\right) = \sum_{n=orz}^{\mathbf{X}^{ljk}} {}^{(n)}1\{v_{w}= n\} > \left(y_{w}\right) = \sum_{n=orz}^{\mathbf{X}^{ljk}} {}^{(n)}1\{v_{w}= n\} >$$

$$\left(y_{w}\right) = \sum_{n=orz}^{\mathbf{X}^{ljk}} {}^{(n)}1\{v_{w}= n\} > \left(y_{w}\right) = \sum_{n=orz}^{\mathbf{X}^{ljk}} {}^{(n)}1\{v_{w}= n\} > (w5T)$$

where $y_{>w}=$ logarithmic change of stock market indexes, $Q S \underset{m>w}{R}=$ negative political news in country m, $Q E \underset{m>w}{R}=$ negative business news in country m. A set of control variables is also included, namely domestic macro news surprises, oil prices, domestic interest rates and the VIX as a proxy for global stock market volatility. Given the fact that v_{w} is unobserved, the estimation of (1) requires restrictions on the probability process governing it; specifically, it is assumed that v_{w} follows a first-order, homogeneous, two-state Markov chain. Therefore, the regime indicators $\{v_{w}\}$ are assumed to form a Markov chain on S with a transition probability matrix $P^{0}= [s_{orz>kl}]_{2\times 2}$, where:

$$s_{orz>kl|j}= Pr(v_{w}= k l j | v_{w 1} = orz) > 5S o> r z \quad (2)> k \quad l$$

and $s_{orz>orz}= 1 \quad s_{orz>kl|j}(l 5S) >$ where each column sums to unity and all elements are non-negative. The probability law that governs these regime changes is flexible enough to allow for a wide variety of shifts, depending on the values of the transition probabilities. For example, values of $s_{orz>orz}$ (o r $z5S$) that are not very close to unity imply that the structural parameters are subject to frequent changes, whereas values near unity suggest that only a few regime transitions are likely to occur in a relatively short realization of the process (i.e. regime persistence). $\{\varepsilon_{w}\}$ are i.i.d. errors with $E(\varepsilon_{w}) = 0$ and $E(\varepsilon_{w}^{2}) = 1$. $\{v_{w}\}$ are random variables in $S = \{1, 2\}$ that indicate the unobserved state[2] of the system at time w. It is assumed that $\{\varepsilon_{w}\}$ and $\{v_{w}\}$

$$r_t = \mu + \sum_{p=1}^{X^2} \phi_p r_{t-p} + \gamma_{PN} PN_{t} + \gamma_{BN} BN_{t} + Controls + \varepsilon_t, \quad \varepsilon_t \sim N(0,1) \quad (3)$$

where the parameter vector of the mean equation(2) is defined by the constant parameters $(\mu, \phi_p, \gamma) .$

3   Empirical Analysis

3.1   Data

The series used for the estimation are negative political news (PN_t), negative business news (BN_t) and stock market returns (r_t) constructed from the stock market indices of seven GCC countries (Dubai, Abu Dhabi, Bahrein, Saudi Arabia, Kuwait, Oman and Qatar). The data are weekly and run from October 2010 to May 2018 for a total of 399 observations (the sample size reflects data availability for business and political news). The data source for stock market indices and the control variables is the IMF's International Financial Statistics (IFS), whereas data on political and business news are taken from Bloomberg. Weekly stock market returns are calculated as the percentage change in stock prices.

Concerning the negative business (political) index, we first counted the number of all business (political) news stories, then the number of stories with a negative connotation only. [3] The news variable in each case is an index defined as the ratio of the number of negative news headlines to the total number of headlines (see the blue line in Figures 2 and 3 for business and political news respectively). Previous research has found that stock returns are sensitive to both negative and positive newspaper news; however negative news have more pronounced effects on returns (Veronesi, 1999; Tetlock, 2007; Wang et al., 2009; Caporale et. al, 2018a). Therefore, in this paper, we focus on negative (political and business) news headlines as a percentage of the total. A week is defined as going from Wednesday to Wednesday in order to control for different weekends in the GCC and the US (for the VIX index). Oil prices are also included in first differences.

Furthermore, in line with the previous literature (Kim et al., 1999; and Simpson et al., 2005) we

$Q \in Q_{l,w}$ Negative business news as a percentage of all business news (i.e. positive, negative, mixed and neutral) in country l at time w

R l,w ρ

degree of correlation for negative political news occurs between Bahrain and Oman (0.436). All other correlations, albeit positive, suggest a low degree of integration with values in the range 0.029 – 0.349.

3.2   Empirical Results

A summary of the estimation results for the linear and Markov-switching models, respectively, is presented in Tables 4 and 5.[4]   Overall, the results indicate that the latter specification captures satisfactorily the shifts in mean/variance for all series considered. We select the optimal lag length of the mean equation using the Schwarz information criterion. In order to test the adequacy of the models, Ljung—Box portmanteau tests were performed on the standardised and standardised squared residuals. The results for the latter show the inability of the linear model to capture the time-varying nature of the second moment. The non-linear specification chosen aims to address this issue as well.

Please Insert Tables 4 and 5

The linear (benchmark) estimates suggest that negative business news about the largest markets in the region (Qatar, Saudi Arabia and UAE) have a significant and negative cross-border effect on all GCC countries. Domestic negative business news affect significantly the larger stock markets, but not the smaller ones (Bahrain, Kuwait and Oman). The latter seem to be more sensitive to negative news concerning the larger markets rather than to domestic ones. On the contrary, negative business news concerning the smaller markets seem to influence only the peripheral markets but not the leading ones. As for the impact of political news, the results provide very little evidence of any statistically significant effects. The only noticeable exception is given

4   Conclusions

This paper uses both linear and non-linear specifications to analyses spillovers between business and political news and stock returns for a group of emerging countries belonging to the Gulf Cooperation Council (GCC) over the period October 2010 - May 2018. It makes several contributions to the existing literature: (i) it considers news in the form of newspaper headlines, that provide an interpretation of business and political releases driving agents' investment decisions; (ii) it adopts an econometric framework shedding light on the potential non-linear dynamic linkages between stock returns and their possible determinants; (iii) it focuses on the GCC countries providing extensive new evidence; (iv) it controls for domestic monetary policy and other economic and financial shocks. The non-linear specification appears to be more data congruent than the benchmark linear model. On the whole, the results suggest the existence of significant linkages between negative business news and stock returns. Importantly, business news from the larger economies have not only domestic but also cross-border negative effects. By contrast, there is weak evidence of causality running from political news to stock

Table 1: Descriptive Statistics

	Stock Market Returns						
	Abu Dhabi	Bahrain	Dubai	KSA	Kuwait	Oman	Qatar
Mean	0.019	-0.003	0.026	0.005	-0.002	-0.021	0.001
Max.	1.089	0.477	1.902	1.049	0.655	1.151	0.978
Min.	-1.603	-0.466	-2.993	-1.431	-0.608	-1.435	-1.261
Std. Dev	0.261	0.119	0.433	0.304	0.144	0.236	0.268
Skew	-0.561	0.146	-0.701	-1.057	-0.115	-0.936	-0.462
Kurt.	7.778	4.991	9.891	7.601	6.665	10.077	5.887

Table 2: Descriptive Statistics - Control Variables

	Macroeconomic News Surprises						
	Bahrain	KSA	Kuwait	Oman	Qatar	UAE	GCC
Mean	0.426	-0.464	0.088	-0.194	-0.676	0.046	-0.773
Max.	2.407	1.689	2.479	2.610	0.208	2.026	5.466
Min.	-1.868	-2.399	-1.049	-2.586	-3.871	-1.624	-6.601
Std. Dev	0.927	0.875	0.808	0.818	0.947	0.806	2.280
Skew	0.245	0.160	1.632	0.979	-1.628	0.461	-0.270
Kurt.	0.166	-0.243	2.421	2.378	2.461	-0.506	0.109
Prb.J-B.	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	Interest Rates						Others	
	Bahrain	KSA	Kuwait	Oman	Qatar	UAE	VIX	Oil
Mean	1.517	2.010	1.126	1.415	4.753	1.381	2.753	2.820
Max.	3.175	2.250	1.563	2.400	5.500	2.539	3.871	4.736
Min.	1.000	2.000	0.625	1.000	4.500	0.677	2.213	0.000
Std. Dev	0.564	0.049	0.324	0.493	0.366	0.537	0.288	2.033
Skew	1.484	4.644	0.208	0.498	1.100	0.478	0.891	-0.629
Kurt.	1.145	19.584	-1.278	-1.519	-0.273	-0.855	1.036	-1.530
Prb.J-B	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Note: The sample size covers the period October 2010 to May 2018, for a total of 399 weekly observations.

Table 3: Correlations

Stocti744rk31.79.3(M43.744rar)14aaR0.17cao

Table 5: Markov switching Model - Summary Results

Effects from	Bahrain News		KSA News		Kuwait News		Oman News		Qatar News		UAE News	
	Bus.	Pol.	Bus.	Pol.	Bus.	Pol.	Bus.	Pol.	Bus.	Pol.	Bus.	Pol.
Effects to						Low Regime						
Bahrain	(+)	(-)	(-)	(+)	(+)	(+)	(+)	(+)	(-)**	(+)	(-)**	(-)
KSA	(+)	(+)	(-)**	(+)	(+)	(+)	(+)	(+)	(-)***	(+)	(-)	(-)*
Kuwait	(-)	(+)	(-)**	(+)	(-)	(+)	(-)	(+)	(-)	(-)	(-)*	(+)
Oman	(-)**	(+)	(-)**	(+)***	(+)	(-)	(+)	(+)	(-)**	(-)	(-)***	(+)
Qatar	(-)	(+)	(-)*	(+)**	(+)	(+)	(-)	(+)	(-)***	(+)	(-)***	(+)
UAE (Abu Dhabi)	(-)	(-)	(-)*	(+)***	(-)	(+)	(+)	(+)	(-)	(+)	(-)	(-)
UAE (Dubai)	(-)	(-)	(-)	(+)*	(+)	(+)	(+)	(+)	(-)*	(-)	(-)**	(-)
Effects to						High Regime						
Bahrain	(-)	(+)	(-)***	(-)	(-)	(-)	(-)**	(+)	(-)***	(+)	(+)	(+)
KSA	(+)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)*	(-)***	(+)
Kuwait	(-)**	(+)	(-)**	(+)**	(-)	(+)	(-)	(-)	(-)*	(-)*	(-)**	(+)*
Oman	(-)***	(-)	(-)**	(-)	(+)	(-)	(-)	(-)	(-)**	(-)	(-)	(+)
Qatar	(-)	(+)	(-)**	(+)	(-)**	(+)	(-)	(+)	(-)***	(+)	(-)**	(+)
UAE (Abu Dhabi)	(-)	(+)	(-)*	(+)*	(-)	(+)	(-)	(-)*	(-)***	(+)	(-)**	(+)
UAE (Dubai)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(+)	(-)*	(+)	(-)*	(+)

Note: Parameters signs are reported in brackets. *, ** and *** refers to 10%, 5% and 1% statistical significance.

Bus. and Pol. refer to Business and Political News, respectively.

Figure 1: GCC Stock Market Returns

Note: Stock returns in country I are the weekly returns of the stock market index for country I at time W It is calculated as $100 \times ((\vee w r_{I,f,n} \vee w r_{I,f,n}) @ \vee w_{I} r_{f,n})$.

Figure 4: Stock Market Returns and Smoothed Probabilities

Note: Stock returns in country i are the weekly returns of the stock market index for country i at time w. Smoothed probabilities refer to the probability to be in the high regime for country i at time w.

5 Appendix

Table A1: Linear Results for the Bahrain & Kingdom of Saudi Arabia Stock Markets

News from -A	Bahrain		KSA		Kuwait		Oman		Qatar		UAE	
					Bahrain Stock Market							
Variable	Coe.	Prob.	Coe.	Prob.	Coe.	Prob.	Coe.	Prob.	Coe.	Prob.	Coe.	Prob.
	0.099	0.064	0.100	0.001	0.102	0.007	0.094	0.166	0.126	0.001	0.102	0.003
Business News	0.002	0.448	-0.008	0.024	-0.013	0.049	-0.007	0.528	0.004	0.407	-0.012	0.055
Political News	0.000	0.931	0.003	0.038	0.002	0.308	0.003	0.314	0.001	0.552	-0.001	0.671
$r_{w\,1}$	-0.078	0.512	-0.039	0.572	-0.025	0.748	-0.134	0.400	-0.072	0.361	-0.080	0.275
$r_{w\,2}$	-0.015	0.935	-0.095	0.331	-0.155	0.182	-0.054	0.819	-0.109	0.360	-0.009	0.937
Oil	-0.002	0.333	-0.001	0.467	-0.002	0.223	-0.001	0.735	0.000	0.805	0.000	0.778
VIX	-0.007	0.000	-0.003	0.011	-0.003	0.007	-0.005	0.022	-0.004	0.004	-0.004	0.002
Bah. Surprises	0.002	0.014	0.000	0.718	0.001	0.177	0.001	0.273	0.000	0.859	0.000	0.722
Bah. Interest	-0.003	0.106	0.001	0.493	-0.001	0.261	-0.001	0.446	-0.001	0.247	0.001	0.576
	0.098	0.000	0.095	0.000	0.101	0.000	0.094	0.000	0.096	0.000	0.095	0.000
$Q_{(4)}$	1.565		3.443		4.098		2.112		3.086		3.331	
$Q^2_{(4)}$	13.567		14.543		13.976		14.012		14.784		13.998	
Log-lik	400.67		412.65		442.02		315.12		426.07		371.12	

News from -A	Bahrain		KSA		Kuwait		Oman		Qatar		UAE	
					KSA Stock Market							
Variable	Coe.	Prob.	Coe.	Prob.	Coe.	Prob.	Coe.	Prob.	Coe.	Prob.	Coe.	Prob.
	0.129	0.127	0.043	0.325	0.010	0.890	-0.125	0.277	-0.043	0.488	0.005	0.913

Table A2: Linear Results for the Kuwait & Oman Stock Markets

	Kuwait Stock Market										
News from -A	Bahrain		KSA		Kuwait		Oman		Qatar		UAE	
Variable	Coe.	Prob.	Coe.	Prob.	Coe.	Prob.	Coe.	Prob.	Coe.	Prob.	Coe.	Prob.
	0.087	0.261	0.088	0.021	0.001	0.984	0.094	0.265	0.087	0.064	0.093	0.020
Business News	-0.002	0.734	-0.022	0.000	0.004	0.305	-0.039	0.002	-0.006	0.353	-0.021	0.001
Political News	-0.002	0.380	0.004	0.041	0.000	0.946	0.002	0.505	-0.002	0.452	0.000	0.840
r_{w1}	-0.043	0.695	-0.036	0.527	-0.018	0.815	-0.028	0.808	-0.023	0.713	0.002	0.969
r_{w2}	0.039	0.796	-0.006	0.947	-0.297	0.008	-0.117	0.512	0.019	0.832	-0.052	0.532
Oil	0.003	0.329	0.000	0.894	0.004	0.066	0.007	0.072	0.002	0.279	0.004	0.053
VIX	-0.002	0.376	-0.002	0.115	0.002	0.345	-0.002	0.517	-0.003	0.118	-0.004	0.010
Kuw. Surprises	0.000	0.544	0.000	0.381	-0.001	0.249	0.001	0.269	0.000	0.501	0.000	0.452
Kuw. Interest	0.001	0.841	-0.001	0.728	0.005	0.038	0.003	0.418	0.001	0.923	0.001	0.586
	0.132	0.000	0.131	0.000	0.137	0.000	0.135	0.000	0.141	0.000	0.036	0.000
$Q_{(4)}$	2.996		2.553		3.006		3.111.39.-0.06		3.111.39.-0.06		3.111.39.-0.06	

Variable	Coe.	Prob.	Coe.	Prob.	Coe.	Prob.	Coe.	Prob.	Coe.	Prob.	Coe.	Prob.

Table A3: Linear Results for the Qatar & UAE (Abu Dhabi) Stock Markets

Qatar Stock Market

News from - A	Bahrain		KSA		Kuwait		Oman		Qatar		UAE	
Variable	Coe.	Prob.	Coe.	Prob.	Coe.	Prob.	Coe.	Prob.	Coe.	Prob.	Coe.	Prob.
	0.063	0.313	0.058	0.179	0.066	0.157	0.027	0.741	0.116	0.040	0.053	0.245
Business News	-0.007	0.457	-0.032	0.000	0.006	0.649	-0.001	0.958	-0.001	0.885	-0.034	0.005
Political News	0.001	0.870	0.002	0.601	-0.001	0.831	-0.003	0.611	0.006	0.410	0.000	0.892
$r_{w\,1}$	0.133	0.133	0.055	0.290	0.033	0.538	0.162	0.073	0.054	0.404	0.051	0.371
$r_{w\,2}$	-0.180	0.215	-0.114	0.131	-0.023	0.784	-0.120	0.444	-0.226	0.022	-0.107	0.217
Oil	-0.010	0.002	-0.003	0.126	-0.001	0.639	-0.003	0.352	-0.002	0.544	-0.003	0.188
VIX	-0.005	0.210	-0.002	0.350	-0.006	0.023	-0.005	0.289	-0.004	0.236	-0.006	0.053
Qatar Surprises	-0.002	0.126	-0.001	0.538	-0.001	0.352	-0.001	0.615	0.000	0.798	-0.001	0.284
Qatar Interest	0.002	0.517	0.001	0.823	0.001	0.565	0.004	0.254	0.003	0.314	0.002	0.392
	0.155	0.000	0.153	0.000	0.162	0.000	0.149	0.000	0.158	0.000	0.199	0.000
$Q_{(4)}$	3.556		4.098		4.112		4.336		4.068		3.995	
$Q^{2}_{(4)}$	11.098		12.345		11.954		10.886		10.739		12.976	
Log-lik	438.48		386.56		397.11		290.49		362.64		445.02	

UAE (Abu Dhabi) Stock Market

News from - A	Bahrain		KSA		Kuwait		Oman		Qatar		UAE	
Variable	Coe.	Prob.	Coe.	Prob.	Coe.	Prob.	Coe.	Prob.	Coe.	Prob.	Coe.	Prob.
	0.051	0.390	0.075	0.071	0.106	0.040	-0.089	0.166	0.016	0.719	-0.011	0.812
Business News	-0.005	0.596	-0.060	0.000	-0.013	0.501	0.019	0.398	-0.044	0.000	0.002	0.844
Political News	0.000	0.963	0.005	0.232	-0.002	0.760	-0.003	0.669	0.008	0.069	0.003	0.475
$r_{w\,1}$	0.183	0.041	-0.050	0.463	-0.020	0.810	-0.083	0.470	-0.093	0.201	-0.062	0.411
$r_{w\,2}$	-0.347	0.013	0.106	0.230	0.164	0.130	0.008	0.958	0.281	0.004	0.035	0.746
Oil	-0.007	0.123	-0.005	0.181	-0.002	0.725	-0.003	0.581	-0.003	0.369	0.001	0.952
VIX	-0.004	0.383	-0.002	0.639	-0.007	0.103	0.002	0.684	0.001	0.788	-0.003	0.446
UAE Surprises	0.002	0.456	0.001	0.974	-0.002	0.523	0.007	0.053	0.001	0.928	0.002	0.583
UAE Interest	-0.007	0.032	-0.009	0.001	-0.008	0.004	-0.001	0.781	-0.005	0.026	-0.004	0.096
	0.271	0,000	0.266	0.000	0.283	0.000	0.279	0.000	0.291	0.000	0.288	0.000
$Q_{(4)}$												

Table A4: Linear Results for the UAE (Dubai) Stock Market

News from -A	UAE (Dubai) Stock Market											
	Bahrain		KSA		Kuwait		Oman		Qatar		UAE	
Variable	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.
	0.123	0.137	0.287	0.001	0.073	0.353	0.091	0.345	0.065	0.413	0.059	0.459
Business News	0.001	0.948	-0.111	0.782	-0.031	0.401	-0.027	0.387	-0.113	0.001	-0.141	0.005
Political News	-0.005	0.372	0.481	0.081	0.011	0.336	0.006	0.616	-0.006	0.541	0.012	0.371
r_{w1}	-0.136	0.008	0.203	0.001	-0.048	0.361	-0.045	0.469	-0.091	0.077	-0.061	0.219
r_{w2}	0.188	0.019	-0.091	0.193	0.152	0.059	0.157	0.083	0.159	0.043	0.157	0.048
Oil	0.009	0.191	0.012	0.079	0.006	0.339	0.001	0.834	0.009	0.178	0.002	0.732
VIX	-0.001	0.846	-0.017	0.001	-0.004	0.511	-0.008	0.265	-0.001	0.333	-0.001	0.807
UAE Surprises	0.001	0.775	-0.073	0.002	0.005	0.352	0.001	0.992	0.004	0.369	0.002	0.693
UAE Interest	-0.006	0.141	-0.005	0.050	-0.009	0.029	-0.005	0.247	-0.009	0.024	-0.009	0.021
	0.421	0.000	0.427	0.000	0.410	0.000	0.424	0.000	0.412	0.000	0.409	0.000
$Q_{(4)}$	1.754		3.667		2.113		1.532		1.978		1.963	
$Q^2_{(4)}$	6.445		7.554		8.112		8.445		9.223		8.554	
Log-lik	435.55		399.03		421.97		470.51		432.77		446.44	

Note: See notes Table A1.

Table A5: Markov Switching Results - Bahrain Stock Market

News from - A	Bahrain		KSA		Kuwait		Oman		Qatar		UAE	
Variable	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.
Regime Low												
o	0.037	0.052	0.057	0.003	0.064	0.006	0.024	0.301	0.056	0.000	0.067	0.003
Business News	0.071	0.181	-0.088	0.290	0.003	0.694	0.043	0.456	-0.136	0.025	-0.481	0.041
Political News	-0.014	0.662	0.015	0.618	0.158	0.102	0.032	0.897	0.033	0.465	-0.047	0.339
o	0.033	0.000	0.027	0.000	0.028	0.000	0.031	0.000	0.051	0.000	0.032	0.000
Regime High												
k	0.089	0.003	0.333	0.000	0.106	0.002	0.081	0.006	0.132	0.000	0.079	0.008

Table A6: Markov Switching Results - Kingdom of Saudi Arabia Stock Market

News from - A	Saudi Arabia		Bahrain		Kuwait		Oman		Qatar		UAE	
Variable	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.
Regime Low												
o	0.042	0.070	-0.067	0.512	-0.031	0.701	-0.013	0.875	0.110	0.033	0.092	0.075
Business News	-0.998	0.018	0.413	0.515	0.324	0.654	0.051	0.866	-0.397	0.000	-0.282	0.404
Political News	-0.066	0.156	-0.042	0.817	0.550	0.461	0.398	0.676	0.005	0.336	0.196	0.096
o	0.057	0.000	0.047	0.000	0.049	0.000	0.044	0.000	0.045	0.000	0.055	0.000
Regime High												
k	0.112	0.039	0.053	0.045	0.106	0.046	0.129	0.024	0.125	0.181	0.276	0.013
Business News	-0.042	0.104	0.238	0.546	-0.101	0.791	-0.046	0.509	-0.982	0.100	-4.081	0.014
Political News	-0.104	0.188	-0.019	0.185	-0.056	0.594	-0.007	0.791	-0.952	0.090	-0.398	0.360
k	0.081	0.000	0.087	0.000	0.081	0.000	0.061	0.000	0.056	0.000	0.068	0.000
Control Variables												
r_{w1}	0.194	0.000	0.198	0.000	0.193	0.000	0.161	0.000	0.154	0.000	0.147	0.000
r_{w2}	-0.085	0.109	-0.058	0.301	-0.105	0.736	-0.048	0.216	-0.075	0.207	-0.054	0.291
Oil	0.254	0.000	0.221	0.000	0.255	0.000	0.239	0.000	0.248	0.000	0.247	0.000
VIX	-0.013	0.000	-0.085	0.000	-0.017	0.000	-0.064	0.000	-0.012	0.000	-000 47IX87f	.6752K652(0

Table A7: Markov Switching Results - Kuwait Stock Market

News from -A	Kuwait		Bahrain		KSA		Oman		Qatar		UAE	
Variable	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.
					Regime Low							
^{o}	0.041	0.040	0.025	0.645	0.037	0.049	0.037	0.005	0.046	0.039	0.051	0.025
Business News	-0.043	0.753	-0.055	0.280	-0.257	0.078	-0.288	0.463	-0.143	0.305	-0.358	0.055
Political News	0.018	0.492	0.007	0.568	0.141	0.749	0.055	0.410	-0.065	0.181	0.071	0.259
^{o}	0.042	0.000	0.031	0.000	0.042	0.000	0.041	0.000	0.036	0.000	0.037	0.000
					Regime High							
^{k}	0.056	0.028	0.032	0.049	0.045	0.337	0.047	0.049	0.148	0.015	0.086	0.201
Business News	-0.997	0.314	-0.241	0.028	-0.982	0.012	-0.180	0.102	-0.985	0.034	-0.476	0.045
Political News	0.355	0.464	0.044	0.161	0.784	0.004	-0.103	0.473	-0.348	0.056	0.040	0.058
^{k}	0.048	0.000	0.051	0.000	0.047	0.000	0.048	0.000	0.045	0.000	0.045	0.000
					Control Variables							

$^r{}_w$

Table A8: Markov Switching Results - Oman Stock Market

News from - A	Oman		Bahrain		KSA	Kuwait	Qatar	UAE
Variable	Coe .	Prob.	Coe .	Prob.	Coe			

Table A9: Markov Switching Results - Qatar Stock Market

News from - A	Qatar		Bahrain		KSA		Kuwait		Oman		UAE	
Variable	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.
Regime Low												
º	0.158	0.000	0.041	0.401	0.043	0.120	0.081	0.029	0.041	0.420	0.148	0.000

Table A10: Markov Switching Results - UAE (Abu Dhabi) Stock Market

News from - A	UAE		Bahrain		Kuwait		KSA		Oman		Qatar	
Variable	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.
						Regime Low						
o	0.168	0.001	0.064	0.000	0.082	0.194	0.093	0.084	0.048	0.446	0.112	0.006
Business News	-0.185	0.142	-0.085	0.238	-0.147	0.131	-0.457	0.093	0.491	0.950	-0.194	0.619
Political News	-0.077	0.110	-0.019	0.294	0.002	0.941	0.023	0.003	0.217	0.632	0.014	0.614
o	0.047	0.000	0.048	0.000	0.066	0.000	0.047	0.000	0.049	0.000	0.048	0.000
						Regime High						
k	0.234	0.005	0.103	0.120	0.108	0.000	0.101	0.003	0.118	0.003	0.219	0.005
Business News	-0.311	0.047	-0.032	0.826	-0.497	0.263	-0.275	0.061	-0.158	0.497	-0.998	0.010
Political News	0.088	0.279	0.006	0.853	0.213	0.212	0.029	0.043	-0.012	0.059	0.092	0.794

Table A11: Markov Switching Results - UAE (Dubai) Stock Market

News from - A	UAE		Bahrain		Kuwait		KSA		Oman		Qatar	
Variable	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.	Coe .	Prob.
					Regime Low							
$^\circ$	0.237	0.000	0.121	0.260	0.161	0.106	0.172	0.105	0.133	0.217	0.239	0.000
Business News	-1.021	0.001	-0.239	0.721	0.794	0.653	-0.577	0.407	0.360	0.735	-0.639	0.077
Political News	-0.097	0.245	-0.051	0.887	0.774	0.102	0.084	0.091	0.786	0.726	-0.148	0.213
$^\circ$	0.079	0.000	0.075	0.000	0.071	0.000	0.072	0.000	0.077	0.000	0.073	0.000
					Regime High							
$^\circ$	0.406	0.000	0.155	0.003	0.203	0.000	0.229	0.000	0.161	0.009	0.359	0.000
Business News	-3.052	0.098	-0.221	0.486	-0.577	0.152	-0.153	0.736	-0.476	0.342	-2.211	0.084
Political News	0.237	0.273	-0.085	0.368	-0.111	0.315	-0.355	0.164	0.087	0.479	-0.075	0.842
$^\circ$	0.105	0.000	0.114	0.000	0.121	0.000	0.108	0.000	0.099	0.000	0.096	0.000
					Control Variables							
r_{w1}	0.228	0.000	0.344	0.000	0.245	0.000	0.246	0.000	0.368	0.000	0.246	0.000
r_{w2}	-0.043	0.095	-0.012	0.746	-0.052	0.265	-0.609	0.409	-0.076	0.212	-0.023	0.320