MEASURING THE EFFECT OF THE PRIVATIZATION OF THE KUWAIT STOCK EXCHANGE ON ITS PERFORMANCE

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Abstract—The main objective of this research is to measure if there have been any notable changes in the trading actives of the Kuwait stock Exchange (KSE) after the privatization process that took place on the 25th of April 2016. The data that are used to test if there is any change in the KSE market performance are the daily indices for the period from the 25th of April 2016 till the 24th of October 2016 (after privatization) and a similar six months period before the date of the privatization from the 24th of October 2015 till the 24th of April 2016. In addition, as a control, the study included a period that is a period parallel to the six months period after the privatization. The results indicate that privatization is associated with lower variability for the majority of variables, but that the observed switch in slope direction is not actually a product of privatization, but rather one of serial correlation. In addition, there is no evidence to suggest that privatization has, as of yet, affected the average closing price of assets quoted on the KSE.

Keywords: Privatization, Kuwait Stock Exchange (KSE), Market Capitalization (MCAP), Capital Markets Authority (CMA), Boursa Kuwait Securities Company (BKSC).

I. INTRODUCTION

Stock exchanges are currently facing a complicated and a competitive environment in the different markets. Some of the key forces behind these changes and developments are the ever growing use of more sophisticated technology and the evolution of financial regulations. In light of these changes to the market and environment and in order to strengthen their competitive powers , stock exchanges are moving towards the privatization.

Kuwait Stock Exchange (KSE) was established in 1983 to regulate and organize public trading activities in Kuwait. KSE over its years of operation have witnessed various changes and developments through introducing different investment tools such as the introduction of options, futures and forward markets. In addition, the KSE worked on facilitating the trading process through implementing an electronic trading system and then later extended to include an online trading platform. It is worth mentioning that in 2010, the regulatory responsibilities of the KSE moved to be under the Capital Markets Authority (CMA).

Commencing from April 25th 2016, the KSE started to be operated by Boursa Kuwait Securities Company (BKSC). BKSC was established by the CMA commissioner's council in 2014 mainly to run KSE operations efficiently and effectively in line with international standards.

The KSE is classified into 16 sectors with a market capitalization (MCAP) of around KD 25 billion as of May 2016. The banking sector alone represents nearly half the MCAP of the market with around KD 12 billion for the same mentioned period. Telecommunication comes next according to with around KD 2.6 billion which is equivalent to around 10% of the total MCAP (May 2016).

This study is based on the daily index figures for three periods. The first period starts from the first date of privatization which is the 25th of April 2016 till the 24th October 2016. The second period is before the privatization date from the 24th of October 2015 till the 24th of April 2016. The third is a parallel period is from 25th of April 2015 till the 24thof October 2015.

Our main source of data and information are the Kuwait Stock Exchange, Boursa Kuwait Securities Company, and Zawya research reports.

II. LITERATURE REVIEW

During 1960's, Germany privatized its stock exchange and was one of the first to carry out this transformation (Esser, 1994). The promotion of investors' participation and the renewal of national exchanges have been top priorities of privatization programs not only in the United Kingdom, but also in France, Spain, and Italy (Vickers and Yarrow, 1988; Dumez and Jeunemaitre, 1994; Chiri and Panetta, 1994).

As per Boutchkova and Megginson (2000), a significant increase in wealth is shown to be correlated with privatization and the financial market development. For example, in developed countries outside the US, the stock trading volume grew from USD 460 billion in 1983 to around USD17 trillion in 1998.

Pagano, 1989; Subrahmanyam and Titman, 1999, suggest that privatization contributes to stock markets via improving diversification opportunities for investors. Academic and otherwise, a multitude of literature has examined effects of privatization. Inparticular, Megginson and Netter, 2001; Bortolotti et al., (2002) offer several papers that have

documented major developments and improvements in the economic and the financial performance of privatized institutions (.

Privatization involving the floating of shares in both domestic and international exchanges is said to reduce informational barriers to foreign investment, thereby boosting liquidity in the domestic market (Hargis and Ramanlal, 1998; Chiesa and Nicodano, 2003). Ryden, 1997; mentioned that since the privatization of the Stockholm Stock Exchange took place as of January 1993, the market witnessed a substantial growth in market values and trading volume.

The Organization for Economic Co-operation and Development report that "the privatization of exchanges globally was done through either a strategic sale or a self-listing (The Organization for Economic Co-operation and Development "OECD" 2014). The ownership of an exchange by the companies listed on it is extremely rare and in the MENA region, only the Palestinian stock exchange is predominantly owned by one of the largest companies listed on it. This is due to some circumstances particularly related to the Palestinian economy, the fact that the exchange was never owned by the government.

Despite the importance of these issues, there is no enough empirical research focuses on the impact of privatization on the development of the financial markets and especially in the Arab world in general and Kuwait in particular.

III. METHODOLOGY

The statistical tools used in this analysis are standard variance ratio tests (f-tests), and t-tests for comparing the various means between the three time segments. In addition a semi-log OLS regression is ran on each of the four variables (Closing price, number of shares traded, value of deals and the number of deals, in which the independent variable is time.

IV. RESULTS AND DISCUSIION

The outputs below relate to a three-way comparison of four variables, in three time periods: six months prior to privatization, six months post-privatisation, and a six months parallel of pre-privatization months in the previous year. Table 1 compares the descriptive statistics, while table 2 compares the slope betas from several simple OLS regression in which time is the x variable.

Table 1: Mean and Variance Comparison

	Before		After		Parallel	
	Mean	SD	Mean	SD	Mean	SD
Closing Price	5353.49*	244.97*	5407.38	44.47	6101.26*	252.28*
No. of shares traded	147074196*	53789986*	90369565	44097762	154253866*	63069251*
Value of Deals	12975455*	4323061*	8637545	3363011	13683959*	4057633*
No. of Deals	3373.62*	839.9	2285.86	794.38	3441.53*	1009*

* Significantly different from the 'after' (post-privatization) period (minimum of 95% confidence)

There is a significant difference between the vast majority of variables, but this in itself is not particularly insightful. What is more telling is when the post-privatization period appears to universally distinguish itself from the two other periods, and as such, they are the points we focus this discussion on. The different mean returns in regards the closing price appears largely insipid, but the reduction in variance is noteworthy. Indeed, except for the *'number of deals'* variable, variance is lower for all variables in the after period. Analytically speaking, the near universal reduction in variance is probably indirectly responsible for many of the other observed differences. Focusing on the two remaining means, the '*number of shares'* traded appears to be markedly lower in the after period. A similar observation stands in regards the '*value of deals'* variable.

Table 2: OLS Slope Coefficient

$$\log(y) = \hat{\beta}_0 + \hat{\beta}_1 t$$

Y	Before	After	Parallel
	Beta-1	*Beta-1*	*Beta-1*
Closing Price	-0.0009	0.0001	-0.001
No. of shares traded	0.0068	-0.0107	-0.0023
Value of Deals	0.0021	-0.0085	-0.0021
No. of Deals	0.0039	-0.007	-0.0013

Being a semi log model, the coefficients have a percentage based interpretation. For what it's worth, with the exception of*'closing price'* which is weakly significant in the parallel set, all other relationships are highly significant. However, as there are no independent variables outside of time itself, it's not so much a matter of significance per se, but rather one of analysing comparative trends and spotting pattern anomalies. And so that is what wefocus our attention on. At first glance, the most compelling story told by the models is the near universal 'turn of sign' post-privatisation. The one exception is 'closing price'. And indeed, in terms of what one would expect from an OLS regression, closing price is the least well behaved out of all our variables, and accordingly, the one from which we candraw least in the way of a conclusion. Closing price to one side for now, this general reversal enables us to see that, if one were inspecting the first six months of privatization, these data alone would be highly misleading, as one may be tempted to conclude that privatization is associated with a dramatic reversal of trends. The parallel data period on the other hand serves as a control to favor the suggestion that what we are observing is more likely to be serial correlation (cov $(u_t, u_{tj}) \neq 0$) across time segments. In which case, the more legitimate comparison to focus on is between that of the parallel and the post-privatization periods. Therefore, based on confidence interval analysis, the other most notable observation emerges is that, all slopes are significantly different post-privatization. There appears to be an accelerated decline in regards the number of *'shares traded'*, and the actual *'value of deals'*. Previously, a one-unit change in time was associated with a decline of 0.0023 percent, post-privatization it moved four-fold be 0.01 percent. The *'value of deals'* trend shifted by a similar magnitude from, negative 0.02 to negative 0.085 percent. However, the *'number of deals'* variable poses a different pattern. It undergoes moderation. The parallel period is associated with a decline of 0.0013 percent, whereas from privatisation onwards this flattens by to be 0.007%.

SUMMARY AND AVENUES FOR FUTURE RESEARCH

The firmest conclusion relates to characteristic variance. With the exception of the '*number of deals*' variable, the evidence suggests that privatization is associatedwith lowervariability. It's hard to rationalise why this may be. Actually, it's a touch counterintuitive, as one would expect the withdrawal of public administration (and its implicit moral hazard inspired safety net) to perhaps be associated with more volatility not less. Indeed, that reasoning would still punctuate our long run expectation, and in turn, constitutes an avenue for future research.

For the time being, as we have taken the 'immediate period', and we attribute the tighter variance to indicative of investors having possibly adopted a *'test the water'* sort of mentality towards the newly privatized KSE. The second most conclusive finding relates to what appears to be a dramatic reversal of trends in relation to all but one of the chosen variables. Viewed as just the immediate aftermath,the *number of shares tradedvalue of deals* and the *number of deals* all switch to negative slopes after privatization, evidencedoes, however, suggest that this is a misleading turn; it is not a post-privatisation switch, but rather the segment of a wider pattern of serial correlation. And while it is noteworthy that the paralleled relationships display significantly different gradients, that in itself is ultimately a limited finding. One could consider an area for research to be to assess whether that is a transitory or persistent change. As is to be expected from an orthodox assessment of equity markets, *closing price* is a particularly slippery variable to deal with, and other than a significant fall variability, there is no evidence to suggest that privatisation has, as of yet, affected the average closing price of assets quoted on the KSE.

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