The Impact of Depositary Receipts on Stock Market Development: Evidence from Organization of Islamic Cooperation Stock Markets

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ABSTRACT

The issue of liquidity and the under development of the Organization of Islamic Cooperation (OIC) stock markets have been a hindrance factor for companies in those countries to seek fund and capital. Due to this reason, many companies choose depositary receipts (DRs) to raise capital internationally. Thus, this study aims at examining the financial implications of cross listing via the existing depositary receipts (DRs) on stock market development. This study employs a dynamic panel model covers sample of 146 firms from 17 OIC countries that are cross-listed as American depositary receipts (ADRs) or Global DRs from 1993 to 2016. The findings reveal that growth and expansion of international cross listings via DRs have a positive impact on domestic stock market. This study provides insights to OIC stock markets that consider accommodating Islamic depositary receipts (IDRs) in the future.

Keywords: Depositary Receipts, Islamic Finance, Organization of Islamic Cooperation Countries, Stock Market Development

JEL Classifications: G1, G10, 016

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1. INTRODUCTION

Over the last two decades, financial globalization has expanded exponentially with increasing stock exchange activities and cross-border capital flows in developed and emerging markets. These cross-border capital flows have escalated over the years, facilitated by the general reduction in informational barriers, rules and regulation. Most of these advancements are also due to technological advancement in information and telecommunications technology which make transactions instantaneous and cost efficient. Due to the pressures of global competition, capital markets around the world have little choice but to harmonise their policies and regulations in order to appeal to the global investor base. Stock markets of the Organization of Islamic Cooperation (OIC)¹ countries have not been spared the exposure. Despite this, a study by the SESRIC reveals that many capital markets of the OIC countries remain highly illiquid and segmented, with trading and capitalization concentrated in a few stocks. As a result, of the total 57 OIC countries, only 21 stock

² The Organization of Islamic Cooperation (OIC) (formerly Organization of the Islamic Conference) is the second largest intergovernmental organization after the United Nations which has membership of 57 states spread over four continents. The Organization is the collective voice of the Muslim world in ensuring to safeguard and protect the interests of the Muslim world in the spirit of promoting international peace and harmony among various people of the world.
markets fall under the purview of World Development Indicators (SESRIC, 2015). Universally, the key reasons that hinder stock market development are weak legal system and regulations, a limited supply of institutional investors, lethalargic support from the private sector, poor governance and lack of transparency and accountability. In addition, companies of OIC countries with less developed capital markets have not participated in the global consolidation waves and are still pursuing a homemade strategy in developing their own stock market (COMCEC, 2018; Hassan and Suk-Yu, 2007).

At stake here is the fate of those companies that wish to enhance their value but are being held down by their domestic stock markets. The logical solution for such company to this problem is to seek international markets more intensively. To a certain extent, in some emerging markets, this internationalization process is the outcome of companies trying to break away from poor domestic environments with poorly functioning markets and weak institutions (Karolyi, 2004; Torre et al., 2005). Claessens et al. (2003) proposes linkages as one of the three survival options. They argue that linkages are a means to establish some form of cross-border linkages with other exchanges to achieve cost savings from many different sources. These sources include economies of scale, sharing system for equity trading, and harmonizing rules and requirements between the exchanges with respect to trading and membership. Thus, over the last decades, there has been an increase in the movement of securities’ market activities to major international financial exchanges, such as London and New York. Many large corporations try to expand their investors’ base by listing their stock and raising capital in the market that can offer financing with the lowest costs.

The motivation for this study is rooted in the current gaps of existing literature. First, past studies showed that cross-border listing is beneficial to the listing firms (Domowitz et al., 1997; Hargis, 2000; Hargis and Ramanlal, 1998; Karolyi, 1998). The benefits mentioned include improved access to global capital markets, lower transactions costs, better liquidity, increased shareholder base, greater transparency and disclosure and ease of trade. However, there are studies that highlight the adverse evidence on the overall trading activity, especially in emerging markets (Levine and Schmukler, 2006, 2007; Moel, 2001). This study is thus aimed at uncovering the extent to which DRs provide benefits to the OIC countries’ stock market. It also aims to investigate whether they hinder or facilitate the domestic stock markets.

The second motivation is from the need to implement the IDR itself. On October 27, 2016, the OIC Member States’ Stock Exchanges Forum was held to enhance the capacity and integration of stock markets to promote intra-investment among the OIC countries and propose the development of IDRs as a solution. Moreover, the International Organization of Securities Commissions (IOSCO)3 highlighted the dire need to speed up and intensify the Islamic product issuance onto the various international financial exchanges, together with the introduction of Islamic global depositary receipts (IDRs) as a potential approach to creating liquidity in the Islamic capital market (IOSCO, 2004). It proposed the general idea that those OIC members with surplus capital (usually oil-rich countries) could help those members who have liquidity shortage. The introduction of Islamic depositary receipts (IDRs) as a potential approach of creating liquidity in the Islamic capital market can be seen as a win-win situation for all OIC members. If this study could provide evidence on the positive impact of these DRs on domestic stock markets, then the introduction of IDRs may be well supported. In the current situation some companies have no other option but to go for international capital market situated in the Western World, to seek out cheaper capital for further expansion. Ironically some of these capitals in the Western World are petro dollar money invested by oil rich OIC countries. The noble idea is by having IDR, there is no more reliance on Western exchanges and thus forms more cooperation amongst OIC member states’ stock exchanges.

The question is, if Islamic depositary receipts (IDRs) are implemented to what extent will it benefit local markets? If IDRs are considered a desired instrument, there is a need to gather empirical evidence from existing depositary receipts (DRs) to examine their impact on domestic stock markets. However, the only yardstick to measure its benefits or costs is by conducting some empirical studies on existing DRs consisting of ADRs and GDRs. Any lessons learnt from this study could be brought forward and proposed for the establishment of IDRs. Thus, the objective of this study is to examine from an empirical standpoint the impact of DRs on the OIC stock markets.

The remainder of the paper is organized as follows. Section 2 provides an overview of the related literature. Meanwhile, section 3 discusses the data, modelling and measurements employed in the study. Section 4 reports empirical result and section 5 concludes the paper.

2. RELATED LITERATURES

There is no consensus in the literature regarding the impact of DRs on the local stock market (Karolyi, 2006). Many studies provide empirical evidence that suggests firms can attract capital at lower costs and better liquidity, broaden shareholder base, increase public image, improved financing opportunities, and increase liquid securities after venturing into depositary receipts (DRs) (Jayaraman et al., 1993; Domowitz et al., 1997; Karolyi, 1998, Hargis and Ramanlal, 1998; Forster and Karolyi, 1999; Hargis, 2000; Hales and Mollick, 2014). In the early empirical study conducted by Hargis and Ramanlal (1998), they developed a model to investigate the effect of cross-listing on domestic stock market liquidity and trading volume on four Latin American equity markets which are Argentina, Brazil, Chile and Mexico for the period from 1990 to 1996. Their findings clearly show the positive effect of international cross-listing on domestic market liquidity and volume traded. In later years, Hargis (2000) using the same sample and length of period as in the former research but adopt a different model, offers the same empirical evidence that

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3 IOSCO is an association of organizations that regulate the world’s securities and futures markets. Members are typically the Securities Commission or the main financial regulator from each country. IOSCO has members from over 100 different countries; regulate more than 90% of the world’s securities markets. Retrieved October 2018, from http://en.wikipedia.org/wiki/International_Organization_of_Securities_Commissions.
integration provides many favourable impacts on emerging stock market development. According to him, cross listing increases the underlying share prices since the domestic stock markets can offer the diversification and liquidity roles to the investors.

A subsequent study by Moel (2001) finds rather mixed and inconclusive results. He investigates the effects of DR growth in the development of 28 African and Latin American stock markets. He uses three proxies (market openness, liquidity and the growth in domestic listings), finds that ADRs have an impact on market openness, but negatively influence the other two proxies, liquidity and the growth of local market. In particular, the influential big firms that cross list via ADRs turn out to be unfavourable to the local market development.

In later years there appears to be more support for the view that the diversion of investment may have a deteriorating impact on stock market development. According to Karolyi (2004), to some extent the market for other domestic stocks turn out to be less integrated or segmented from international markets. He stresses that instead of providing greater efficiency and integration of local markets, the expansion of DR programs of a country may be a “hindrance” by diverting investment flows and trading activities away from the local market. Thus, this diversion worsens the quality and even growth of local markets. His study covers twelve emerging markets in Latin America. He discloses that the expansion of DR programs do have positive effects only for those firms subscribing to ADRs, not for the non-ADR firms. Consequently, for non-ADR firms in these emerging countries, the growth and the quality of emerging stock markets are falling.

Claessens et al. (2002) show that when more firms go international, trading volumes in home stock market further decrease, but the cost of financing the fixed overhead of maintaining market oversight, clearing, and settlement systems remains unchanged. In this study, they conclude that it will become even harder for smaller emerging markets to stimulate and produce sufficient activities for local brokers, businesses for local investment banks, accounting firms, and other supporting services. Promoting this trend of internationalization will make it even harder for small stock markets to foster growth. In their view, rather than concentrating in establishing full-fledged stock markets, policy is better off focussing on vital tasks such as increasing shareholder rights, reducing cross border restrictions, improving the legal structure that encourage the internationalization activities for local firms. Karolyi’s findings are further supported by Levine and Schmukler (2006). They reveal that firms that go international will in a way divert some of the activities to international markets. They conclude that rational firms go international not to escape poor domestic environments, but due to the countries’ fundamentals.

All the above studies on stock market development focus on the developed and emerging markets but very few focus on the OIC countries. With the exception of a few countries such as Malaysia, Indonesia and Turkey which are frequently mentioned, the rest of the OIC countries are left out. A key reason could be data availability. It is hoped that this study will fill this gap and contribute to the existing literature about these OIC countries.

3. DATA AND ECONOMIC MODELLING

The initial sample includes all the companies in the OIC countries that deal in DRs. The data on these DRs are extracted from DataStream International at the end of 2016. Following this, only 17 OIC countries have been selected as listed in Table 1.

Figure 1 shows the number of companies in the OIC countries listing through depositary receipts (DRs) from 1993 to 2016. Whilst Figure 2 shows the composition of the countries that subscribe to DRs, as Turkey is the leader followed by Indonesia.

The two types of data namely, the firm-level and country-level data were collected during the period of 1993 to 2016. As expected, the number of observations varies across sample countries leading to imbalance panel data. The study covers sample of 146 firms from 17 OIC countries that are cross-listed as ADRs or GDRs from 1993 to 2016.

3.1. Measuring Stock Market Development

The objective of this paper is to investigate whether DRs hinder or help home stock market development in 17 OIC countries. Two measures of stock market development are used as proxy which are the stock market capitalization relative to GDP (STGDP) and the number of publicly traded companies, scaled by GDP (LISTGDP).

3.2. Measuring DR Activity

As to measure the DR activity, several indicators are being used. The first variable is the total number of DR listed firms relatively to the total number of listed firms in the respective home market. Then there are share market capitalization and share volume captured by issuing firms and also a Herfindahl-type concentration index. The first three indicators measures the activity of DRs firms in the home market. The later measure, according to Moel (2001), provides an indicator of “crowding out” effect of investor interest and capital by large firms on the development of the rest of the local stock market.

3.3. Model Specification

This study incorporates the dynamic panel data model. The two-step system GMM is applied in this analysis. The dynamic system GMM model is chosen due to its improvement over the Fixed Effects, Random Effects, and Difference GMM Model and perceived as more powerful than other models.

The dynamic panel model includes lagged stock-market development as an explanatory variable.

$$SMD_{it} = \mu_i + \lambda SMD_{it-1} + \beta DR_{it} + \theta X_{it} + \eta_i + \epsilon_{it}$$  

(1)

Table 1: List of countries

| Country       | Country       | Country   |
|---------------|---------------|-----------|
| Bahrain       | Kuwait        | Pakistan  |
| Bangladesh    | Lebanon       | Qatar     |
| Egypt         | Malaysia      | Tunisia   |
| Indonesia     | Morocco       | Turkey    |
| Jordan        | Nigeria       | UAE       |
| Kazakhstan    | Oman          |           |

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Where \( i \) designates country and \( t \) represents number of periods \( t = 1,2,\ldots,n \) years

SMD is stock market development;

\( \text{DR}_{it} \) represents the set of explanatory variables on DR activities;

\( X_{it} \) is control variable;

\( \eta \) is an unobserved country-specific effect;

\( \epsilon \) is the error term.

All these variables can be expanded and illustrated as in equation 1.1. In the equation 1.1, the control variable KAOPEN\(^4\) is used to measure the degree of financial openness of a country. Many attempts have been made to construct proxies for the degree of financial openness. Chinn and Ito (2008) provide an index, which they call KAOPEN, based on the IMF’s AREAER tabulation with the goal of incorporating the extent and intensity of capital controls (SESRIC, 2015). This index takes on higher values on the openness of the country to cross-border capital transactions.

\[
SMD_t = \mu + \lambda SMD_{it-1} + \beta_1 \text{DRLISTED}_{it} + \beta_2 \text{DRMCAP}_{it} + \beta_3 \text{VOLUME}_{it} + \beta_4 \text{CONCEN}_{it} + \eta_i + \text{KAOPEN}_{it} + \epsilon_{it} \\
(1.1)
\]

SMD is represented by \( \text{STGDP} \) total market capitalization of all listed shares divided GDP (%) and \( \text{LISTGDP} \) total number of all listed shares divided GDP (%).

DRLISTED is total number of DRs divided by total number of listed companies;

DRMCAP is total market capitalization of all DR-linked companies divided by total market capitalization in US million;

VOLUME is the total trading volume of all DR-linked companies divided by total market capitalization in US million and;

CONCEN is concentration index of DR-linked companies over total market capitalization.

KAOPEN is a proxy for financial openness of a country.

Since the data are in panel form, panel estimation techniques is used to estimate equation 1. As mentioned earlier, the standard panel models such as fixed effect and random-effect panel model were not suitable due to the presence of the country-specific effects and the lagged dependent variable or potential endogeneity of explanatory variables. Thus, our analysis is based on dynamic system GMM model as this model is an improvement over the Fixed Effects, Random Effects, and Difference GMM Model and perceived as more powerful than other models.

\(^4\) KAOPEN is based on the four binary dummy variables reported in the IMF’s Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER). There are the variables indicating the presence of multiple exchange rates, restrictions on current and capital account transactions, and the requirement of the surrender of export proceeds. Index is the first standardized principal component of these variables. The updated dataset is available at http://web.pdx.edu/~ito/Chinn-Ito_website.htm
Table 2: Summary statistics for proxies of DR activity

| Country | Bahrain | Bangla | Egypt | Indonesia | Jordan | Kazakhstan | Kuwait | Lebanon | Malaysia | Morocco | Nigeria | Oman | Pakistan | Qatar | Tunisia | Turkey | UAE |
|---------|---------|--------|-------|-----------|--------|------------|--------|---------|----------|---------|---------|------|----------|-------|---------|--------|-----|
| Mean    | 1.691   | 0.105  | 1.845 | 1.345     | 1.362  | 8.746      | 0.109  | 31.573  | 0.776    | 2.718   | 1.209   | 0.423| 0.975    | 4.504 | 2.918   | 7.740  | 0.479|
| Median  | 0.000   | 0.000  | 0.867 | 1.342     | 1.499  | 7.307      | 0.000  | 41.667  | 0.786    | 3.604   | 0.995   | 0.000| 0.816    | 6.004 | 4.124   | 8.321  | 0.000|
| Std. Dev.| 3.407   | 0.174  | 2.301 | 1.100     | 0.956  | 9.778      | 0.316  | 20.692  | 0.133    | 1.568   | 1.464   | 0.740| 0.604    | 4.504 | 2.918   | 7.740  | 0.479|

Total number of DRs divided by total number of listed companies per country (%) (DRLISTED)

| Country | Bahrain | Bangla | Egypt | Indonesia | Jordan | Kazakhstan | Kuwait | Lebanon | Malaysia | Morocco | Nigeria | Oman | Pakistan | Qatar | Tunisia | Turkey | UAE |
|---------|---------|--------|-------|-----------|--------|------------|--------|---------|----------|---------|---------|------|----------|-------|---------|--------|-----|
| Mean    | 2.905   | 0.538  | 12.124| 17.261    | 11.109 | 11.791     | 0.224  | 27.377  | 8.794    | 1.821   | 4.857   | 4.535| 27.554   | 7.597 | 3.892   | 28.174 | 2.207|
| Median  | 0.000   | 0.000  | 4.712 | 15.668    | 13.267 | 5.372      | 0.000  | 31.337  | 8.539    | 2.138   | 1.901   | 0.000| 25.739   | 2.863 | 5.979   | 31.708 | 0.000|
| Std. Dev.| 6.117   | 0.989  | 14.848| 13.781    | 8.149  | 18.452     | 0.837  | 19.396  | 5.459    | 1.047   | 9.529   | 8.438| 17.840   | 9.866 | 3.700   | 21.206 | 4.508|

Total market capitalization of all DR-linked companies divided by total market capitalization per country in US million (%) (DRMACAP)

| Country | Bahrain | Bangla | Egypt | Indonesia | Jordan | Kazakhstan | Kuwait | Lebanon | Malaysia | Morocco | Nigeria | Oman | Pakistan | Qatar | Tunisia | Turkey | UAE |
|---------|---------|--------|-------|-----------|--------|------------|--------|---------|----------|---------|---------|------|----------|-------|---------|--------|-----|
| Mean    | 0.002   | 0.177  | 0.547 | 12.251    | 0.013  | 0.002      | 0.014  | 0.042   | 0.334    | 0.000   | 2.106   | 0.054| 10.618   | 0.003 | 0.004   | 7.064  | 0.017|
| Median  | 0.000   | 0.093  | 0.415 | 13.016    | 0.020  | 0.000      | 0.000  | 0.047   | 0.321    | 0.000   | 0.580   | 0.000| 6.363    | 0.000 | 0.004   | 5.913  | 0.000|
| Std. Dev.| 0.004   | 0.093  | 0.415 | 13.016    | 0.020  | 0.000      | 0.000  | 0.047   | 0.321    | 0.000   | 0.580   | 0.000| 6.363    | 0.000 | 0.004   | 5.913  | 0.000|

Total trading volume of all DR-linked companies divided by total market capitalization per country in US million (%) (VOL)

| Country | Bahrain | Bangla | Egypt | Indonesia | Jordan | Kazakhstan | Kuwait | Lebanon | Malaysia | Morocco | Nigeria | Oman | Pakistan | Qatar | Tunisia | Turkey | UAE |
|---------|---------|--------|-------|-----------|--------|------------|--------|---------|----------|---------|---------|------|----------|-------|---------|--------|-----|
| Mean    | 0.004   | 0.000  | 0.014 | 0.014     | 0.009  | 0.031      | 0.000  | 0.000   | 0.043    | 0.033   | 0.000   | 0.005| 0.017    | 0.076 | 0.013   | 0.034  | 0.004|
| Median  | 0.000   | 0.000  | 0.003 | 0.012     | 0.000  | 0.000      | 0.000  | 0.000   | 0.001    | 0.000   | 0.000   | 0.000| 0.021    | 0.000 | 0.000   | 0.000  | 0.000|
| Std. Dev.| 0.008   | 0.000  | 0.021 | 0.012     | 0.014  | 0.054      | 0.000  | 0.000   | 0.000    | 0.000   | 0.000   | 0.000| 0.000    | 0.000 | 0.000   | 0.000  | 0.000|

Concentration index (CONCEN)

| Country | Bahrain | Bangla | Egypt | Indonesia | Jordan | Kazakhstan | Kuwait | Lebanon | Malaysia | Morocco | Nigeria | Oman | Pakistan | Qatar | Tunisia | Turkey | UAE |
|---------|---------|--------|-------|-----------|--------|------------|--------|---------|----------|---------|---------|------|----------|-------|---------|--------|-----|
| Mean    | 2.308   | −1.148 | 1.931 | 1.288     | 2.118  | −1.148     | 1.338  | 1.358   | 0.181    | −1.148  | −0.700  | 1.952| −1.198   | 2.478 | −1.148  | −0.970 | 2.478|
| Median  | 2.478   | −1.148 | 2.345 | 1.148     | 2.478  | −1.148     | 1.148  | 1.148   | −0.097   | −1.148  | −0.514  | 1.952| −1.148   | 2.478 | −1.148  | −1.148 | 2.478|
| Std. Dev.| 0.285   | 0.000  | 0.661 | 0.350     | 0.678  | 0.000      | 0.353  | 0.580   | 0.446    | 0.000   | 0.441   | 0.545| 0.186    | 0.000 | 0.000   | 0.452  | 0.000|

KAOPEN index per country (KAOPEN)
4. RESULTS AND DISCUSSION

All the summary statistics such as mean and standard deviation for sample period taken from year 1993 until 2016 are presented in Table 2. The data demonstrates a noticeably wide range of DR activities across the seventeen markets and describes different patterns across countries and regions. The mean percentage of DRLISTED was markedly greater in countries like Turkey, Lebanon and Kazakhstan. Mean DRLISTED is around 7.74% in Turkey and reaches as high as 31.57% for Lebanon. The high value of DRLISTED for Lebanon and Kazakhstan was due to the small number of listed companies, only 10 and 60 companies respectively.

The second variable, DRMACAP showed a different kind of distribution; the mean percentage of this variable was higher for Lebanon, Pakistan and Turkey, ranging from 27.37, 27.55 and 28.17 respectively. The best indicator is that the largest firms by market capitalization are the most likely to list shares abroad (Reese and Weisbach, 2002; Doidge, 2004).

When it comes to VOLUME, the highest percentage activity occurred in Indonesia (12%), Pakistan (11%) and Turkey (7%). However, there seemed to be almost no change in volume of trading in Morocco, Kazakhstan, Bahrain, Qatar and Tunisia. The concentration index indicated that the large firms are dominating DR listings. If the value is closer to 1, it is an indication that the DR listings are concentrated in large firms (Moel, 2001). In this study, we found that all the sample countries with the exception of Pakistan, had low concentration index, which was <5%. Clearly, for our sample countries, DR listings were not concentrated in large firms.

The evidence from Table 3 reveals the distribution of the dependent variable, stock market development. For STGDP, interestingly, Jordan and Malaysia were among the top by having 148% and 142% respectively. Kuwait came in third with 104%. The lowest STGDP with 5% was Bangladesh. Nonetheless, when it comes to LISTGDP, more or less, all the sample countries had <1% except for Jordan.

Tables 4 and 5 present the results of panel technique for each stock market development indicator (LISTGDP and STGDP). All results from OLS fixed-effects, random-effects, Difference GMM and system GMM are shown in these tables but the discussion will be focused more on the System GMM. The two-step GMM model is relatively well specified after passing the diagnostic tests. In the Sargan test, the absence of first order serial correlation is rejected while the absence of the second-order serial correlation is not rejected. Furthermore, the lagged dependent variable is statistically significant which implies the dynamic GMM is an appropriate estimator.

Turning to DR activity variables, the first variable DRLISTED, had a positive and significant impact on the stock market development measure, LISTGDP. Similarly, VOLUME also had a positive influence on LISTGDP. On the other hand, the second measure, DRMACAP, had a negative and significant impact on LISTGDP.
Meanwhile CONCEN on the other hand, showed mixed results. CONCEN had a positive impact on LISTGDP, but negative influence on STGDP. Meanwhile, the 1-year lagged effect on all stock market development measures had a statistically positive influence on all the dependent variables. The control variable KAOPEN was statistically significant and positive for only STGDP, but had no impact at all on LISTGDP.

Overall, the results suggested a positive impact of depositary receipts (DRs) activity on domestic stock market development. Three independent variables indicated a positive relationship with stock market development and thus confirm the efficacy of this instrument in fostering the local stock markets. Obviously, firms were able to attract funds at lower costs and better terms more easily, and had tapped into wider investor bases. The investors were able to acquire and sell shares at more liquid exchanges.

Our results are consistent with previous studies that claim cross listing provides positive effects on the domestic stock markets (Hargis, 2000; Domowitz et al., 1998; Foerster and Karolyi, 1999). The positive effects on stock market development could be in various forms such as broadening shareholder base and improving transparency and corporate governance of the home market. Their findings show that firms that cross list in larger and more transparent markets but come from smaller and less liquid markets with greater foreign ownership restrictions will show greater improvement in their domestic market development.

Nonetheless, the evidence also points to an adverse impact of DRs on measures of stock market development, as pointed out by the relationship of variables CONCEN and DRMACAP. This result is parallel with the findings by Moel (2001) and Karolyi (2004). They argue that ADRs appear to be influential in decreasing the stock market liquidity and limiting the economic growth of the local market. In particular, the effect of large firms listing ADRs is found to be detrimental to the development of the local market.
Furthermore, according to Claessens et al. (2007) the process of developing a local stock exchange also increases the domestic firms’ access to international exchanges. In their view, while better fundamentals lead to an increase in domestic activity, more and more of these activities will occur abroad as better fundamentals spur the degree of migration in capital raising, listing, and trading to exchanges abroad. As a result, migration makes it more difficult for countries to sustain a fully-fledged local stock exchange. They further add that, as trading volumes further decrease, financing the fixed overhead of maintaining market oversight, clearing, and settlement systems, and generating enough order flow for local brokers and enough business for local investment banks, accounting firms, and other supporting services will become even harder, especially for smaller emerging markets. The trend towards increased migration will thus make it more difficult for small exchanges to survive which in this case applies to most of OIC countries stock market (Lee and Valero, 2010).

5. CONCLUSION

We find that the cross listing via DRs does have a positive impact on the stock market’s development of OIC countries. Our findings reveal that growth and expansion of international cross listings via DRs of companies from these OIC market have a positive impact on domestic stock market development. There are many limitations and weaknesses of the OIC stock markets such as weak legal system and regulations, a limited supply of institutional investors, less support from the private sector, lack of transparency and accountability. Thus, these factors inevitably imply higher cost of capital to the growing companies in these markets and lead to reduced competitiveness. These barriers have an impact on how the pricing of stocks in their local markets. Naturally, for firms in markets with greater investment barriers, the impediment will translate to lower price and higher cost of capital. The way to mitigate any negative effects arising from DRs is to adopt policies that promote the positive effects of international diversification. Depositary receipts (DRs) could be one of the means to increase competitiveness of domestic firms internationally. Additionally, for international investors, investing in shares via DRs could provide a platform for diversifying their portfolio. As mentioned earlier, OIC countries are in dire need to come up with mechanism for enhancing cooperation and intra-investment among them.

Based on our results, the introduction of Islamic depositary receipts (IDRs) would be one of the best alternative instruments to address the issue. For example organizations like Islamic Development Bank and SESRIC have identified the need to have IDRs as one of the means in harnessing capital and addressing capital inadequacy problems faced by the companies listed in OIC country stock exchanges. The recommendation is that OIC countries with surplus capital can invest in IDRs of companies from countries with inadequate capital. As these are companies currently issuing DRs and so have met the needed quality threshold, there is no additional risk. Instead, investors from capital rich OIC countries get the benefits of diversification. Current investors from rich OIC countries invest in Western financial institutions that then recycle these as “loans” or investments to poorer OIC countries. This not only lucrative but gives extensive power to the Western intermediates. The proposed IDR would disintermediate the middlemen role of Western institutions or markets and channel the funds directly to their poorer brethren.

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