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From Mutualized Exchange to Investor-Owned Demutualized Entity: The Case of Pakistan Stock Exchange

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Abstract

This study provides an overview of the Pakistan Stock Exchange (PSX) journey from not-for-profit mutually owned company to the for-profit demutualized entity. The wave of demutualization and public listing of stock markets around the globe is being witnessed for the last three decades. This study focuses on three main areas. First, in 2012, the stock market stood corporatized and demutualized as a public company limited by shares. Prior to 2012, the PSX (formerly called Karachi stock exchange) was a broker-owned company. The three national stock exchanges of Pakistan merged together to form PSX in January 2016. Moreover, the 40% strategic ownership of PSX is transferred to the Chinese investors. The Pakistan stock market is listed on its own exchange from June 29, 2017 (self-listing) following the IPO process. Second, this study discusses the reasons for demutualization, such as investment in technology and global competition; and regulatory implications of for-profit demutualized exchange. Lastly, selected market efficiency indicators are compared before and after integration to assess the benefit of demutualization. On a positive note, so far, the market witnessed higher liquidity, less excessive volatility, and better returns for investors in the post-merger period compared to pre-merger period.

Keywords: *Pakistan Stock Exchange, Demutualization, Self-listing, Market efficiency, Regulation*

INTRODUCTION

On June 30, 2017, a get-together was arranged by the management of Pakistan Stock Exchange (PSX) in the trading hall of PSX at Karachi. The Chairman, Securities and Exchange Commission of Pakistan (SECP) consented to be the guest of honour. The holding of get-together by the management, where all licensed brokers-dealers were invited to celebrate the successful completion of the process of "Offer for Sale of PSX Shares and its Self-Listing". The PSX listed with effect from June 29, 2017. The ceremony ended with the discussion on "Future Challenges and Opportunities" in the wake of self-listing of PSX. This historical milestone coincides with the reclassification of Pakistan's equity market from Frontier market to Emerging market status by index provider Morgan Stanley Capital Index. †

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† *See https://www.dawn.com/news/1333640*

Moreover, in January 2018, Richard Morin was appointed as a CEO of PSX, the first foreign national in the history of the bourse. However, the Canadian head of the Pakistan Securities market has to focus his energies on the important to-do list, such as improving retail investor protection, launching of exchange-traded funds, and building a new trading platform. However, Richard's appointment by the group of Chinese financial institutions who owns 40% shares was not welcomed by some brokers and members of the PSX. ‡ Hence, Richard has to struggle with two challenges: 1) unlocking the potential of Pakistan's capital market, and 2) understanding the national and stock market culture.

About PSX

The Exchange was formed in 1949. After demutualization, the Exchange stood corporatized and demutualized as a public company limited by shares, with effect from August 27, 2012. Resultantly, the two stock exchanges namely Lahore and Islamabad Stock Exchange merged into Karachi Stock Exchange to form Pakistan Stock Exchange Limited (PSX)on January 11, 2016.

PSX provides a unified electronic platform where investors can buy and sell listed companies' equities and other securities. For more than 70 years, the Exchange has facilitated capital allocation, serving a wide spectrum of participants, including retail and institutional investors, the trading community and businesses. After demutualization and change in ownership, the PSX plans to focus more on bonds and derivatives. However, for offering complex products, the top management team of PSX wants to ensure that 'Trading Rights Entitlement Certificate Holders' (TREC / Brokerages) are regulated correctly and a lot of education has to be done with Pakistani investors. Information about PSX past, present and future; see Exhibit 1.

The Corporatization, Demutualization and Integration Process of PSX

The apex regulator of Pakistan Stock Exchange, i.e., Securities & Exchange Commission of Pakistan (SECP), while approving the scheme of integration of three exchanges into one, mentioned in her order that:

> *"The integration process would increase the liquidity of the Successor Exchange and, therefore, reduce the implicit costs of trading for investors by centralizing the trading activities. It will reduce bid-ask spreads insofar as it helps intermediaries to defray fixed order processing costs, namely, the costs of access to the trading platform and of maintaining a continuous market presence; reduce adverse-selection costs, due to the presence of informed traders; reduce the inventory-holding costs of market makers. The proposed integration is likely to have a positive impact on volume through increased trading. The liquid market thus leads to lower volatility"* (Securities Market Division, 2016, p. 4).

The Stock Exchanges (Corporatization, Demutualization and Integration) Act, 2012 envisages the process of capital market reforms in three phases. In the first phase, on August 27, 2012, in compliance with the Act, the three stock exchanges were corporatized and demutualized as companies limited by shares. Thus, the major stock exchange of Pakistan, the Karachi Stock Exchange (Guarantee) Limited became Karachi Stock Exchange Limited. In the second phase, on January 11, 2016, the dawn of a new era started, when all three local bourses merged into a

‡ *See See https://tribune.com.pk/story/1510084/china-nominated-managing-director-psx-faces-opposition/*

single bourse, called Pakistan Stock Exchange.

Finding Strategic Investor

In the third phase, the Pakistan Stock Exchange has to search for a strategic investor or financial institution for divestment of 40% of its shares within one year after integration, i.e., by the end of 2016. Subsequently, in terms of the provisions of Demutualization Act, the newly integrated exchange has to perform some more tasks, including the following:

a) 20% of the shares will be sold to the general public within specified timelines

b) Establishment of Small and Medium Enterprise (SME) counter to facilitate the listing of SMEs

c) More than 50% of the members of the board of PSX would be independent directors until the divestment is made to the strategic investor

In January 2017, a Chinese-led consortium, consisting of China Financial Futures Exchange Company Limited (the lead bidder), Shanghai Stock Exchange, Shenzhen Stock Exchange and two local financial institutions, namely Pak-China Investment Company Limited and Habib Bank Limited, bought 40 percent stake in the PSX. Besides, in March 2017; as per the roadmap, four Chinese were appointed on the board of the Pakistan Stock Exchange. Moreover, in April-2017, PSX introduced Small & Medium Enterprises (SMEs) Board in order to facilitate SMEs to raise funds from equity market and get listed. §

Self-Listing of PSX

Following the book-building process and subscription of the initial public offering of shares at the strike price of Rs 28 per share, the PSX was formally listed on its own exchange on June 29, 2017. To sum up, the integration of domestic exchanges, finding strategic partner/investor, transformation of organizational setup, public offering, and setting SMEs counter was all part of roadmap provided in Corporatization, Demutualization and Integration Act, 2012 from Securities Exchange & Commission of Pakistan (SECP), the apex regulator of Pakistan Stock Exchange.

Motivation For Demutualization And Public-Listing

Aggarwal (2002) discussed the two main reasons for demutualization of stock exchanges: 1) heightened global competition and 2) advances in technology. The potential of demutualization is that, along with additional capital required to invest in technology, the owners of the recently demutualized financial markets will offer a corporate governance structure that is far more effective in exploring other sources of revenue by introducing new products/businesses in stock exchanges that would maximize the value of the firm. Further, demutualized stock exchanges want to preserve their existing revenue stream by encouraging more and more enterprises to list on the stock market. The recent introduction of SMEs board on PSX is one of the initiatives undertaken following the changes in the corporate governance structure of PSX.

Moreover, with the advent of electronic communications networks and data processing technologies, the competition among the financial markets has intensified not only at the domestic level but also at the regional level. Hence, many companies want to cross-list on overseas exchanges, such as Hong Kong Stock Exchange, London Stock Exchange, New York

§ See To understand the objective of facilitating small businesses for financing, see http://sme.psx.com.pk/

Stock Exchange etc. Besides, Euronext is a good example of demutualized exchange where most of the European listed companies are traded on a single electronic platform. Another example is the merger of NYSE-Euronext.

Lastly, Aggarwal & Dahiya (2006) discussed the global trend of a public listing of stock markets. Recently, on February 2017, Bombay Stock Exchange (BSE) listed on rival National Stock Exchange (NSE) following an overwhelming public response from initial public offering (IPO). This wave has totally transformed the corporate governance structure of stock exchanges, that is, the financial markets are being efficiently run by professionals whereby technological advancement has significantly brought down costs by allowing trading of derivatives, bonds, and stocks on a single trading platform.

On the other hand, Uppal (2009) is of the view that integrating the stock exchanges is expected to increase transaction costs, lower the incentives for regulatory compliance, and diminish the motivation for promoting capital market development. Uppal's evidence suggests that the merger eliminates inter-exchange competition, as Lahore stock exchange (LSE) also contributes to informational efficiency along with country's dominant exchange, the Karachi stock exchange (KSE).

Regulatory Concerns

The demutualization of financial markets has its own share of problems. Previously mutually-owned markets were supported (or guaranteed) by governments, but now like other enterprises, the stock markets have to generate revenues to sustain and be more entrepreneurial. Thus, this profit motive has increased regulator's worries, due to shift in the regulatory landscape, such as conflict of interest. Pakistan stock exchange, being a front-line regulator (or Self-regulatory organization) has to focus on regulating members' conduct, prevent market abuses, and setting rules for the smooth functioning of transactions. However, following the demutualization and self-listing, the profit motive becomes more important for demutualized financial markets and self-regulating functions are being compromised (e.g., Aggarwal, 2002).

Future Challenges

However, it is yet to be seen how the new management of PSX capitalize on consolidation of domestic bourses and overseas investment from China. Whether PSX will be able to attract more listings (IPOs) on the exchange. Introduce much-needed derivatives products such as Exchange Traded Funds (ETFs), Fixed Income Derivatives, and Single Stock / Index Options. Besides, how the exchange is going to attract more foreign investment by offering lower transaction costs, lower margins, and broader price limits that would ultimately generate higher liquidity and efficient price discovery. Moreover, considering the regulatory implications of demutualization, how the newly transformed for-profit stock exchange segregates the self-regulating functions and commercial objectives.

Brief Analysis

In this section, we want to see how the response of market efficiency measures following the integration of Pakistan stock exchange. The market measures are shown in Exhibit 2; before and after the merger. The first proxy depicts the volatility of PSX, which is the difference between high price and low price divided by the average of high & low price. We can see that the excessive volatility has slightly declined in the post-period (18-month period) compared to pre-period. The average daily price volatility of KSE-All Share Index decreased to 0.996% from 1.072% in the pre-period. This suggests that excessive volatility owing to speculators and sentiment drove traders has slightly declined. The other reason could be that mutual funds, not brokers, dictate the bourse now. ** In the past brokers used to manipulate the stock market through pump-and-dump trading strategy (Ijaz & Mian, 2005). Pakistan stock market considered to be one of the volatile markets in the region. Hence offer higher returns.

Next, we look at liquidity proxy, before and after the integration, i.e., trading volume. Again we observe that trading activity has increased to 295.125 million shares (daily average) in the post-merger period compared to 225.472 million shares changed hands in the pre-merger period. Hence, following the merger of three national bourses into one, the management has been able to attract more public/investors through awareness programs across the country. We also investigated the returns accrued to investors in the post-period compared to pre-period. Returns are an 18-month daily average of KSE All-Share Index calculated by taking the natural logarithm of today's index value divided by previous day's index value. The market participants have earned slightly higher returns of 0.098% in the post-merger period compared to 0.065% in the pre-period. Thus the market has performed well during the 18-month post-period compared to 18-month pre-period.

Finally, Exhibit 3 reports the correlation of Pakistan's All-Share Index and aggregate indices of selected countries. It appears that the correlation of Pakistan's capital market with developed and emerging markets has significantly declined in the 6-month post-merger period compared to 6-month pre-merger period. However, the result seems to be surprising, since we expected that after the consolidation of three exchanges, the correlation between Pakistan and other regional markets would have increased. The evidence suggests that PSX offers foreign investors and global fund managers huge diversification potential. Javed (2012) also find a lower correlation of Pakistan's financial market with other global markets.

CONCLUSION

This study has discussed the journey of PSX from member-owned, non-profit entity to investor-owned, for-profit company. After the demutualization in 2012, the three domestic stock exchanges merged together in January 2016. In late 2016, a consortium of Chinese financial institutions acquired 40% ownership of PSX and in June 2017, the PSX listed on her own bourse through public offering process. The study discussed the benefits that would accrue from the major changes in the structure and operation of PSX. We also linked the transformation and demutualization of Pakistan equity market with the wave of demutualization and public listing across the globe. The case also focussed on the challenges faced by senior management of PSX, as to how they steer the market by beefing up investor protection and unlocking the potential.

The major reasons/motivation for transformation and regulatory implications were also discussed briefly. In the end, a brief statistical analysis is conducted to document the market efficiency of PSX in the pre- and post-merger period. Overall, we find slightly higher liquidity and better returns in the post-period compared to pre-period. Similarly, the excess volatility

*** See https://www.dawn.com/news/print/1345870* following the merger has also declined to a certain extent. However, the results obtained cannot be generalizable based on the sample period of only one and a half-year period, since at times markets respond to various policy initiatives at a slow pace.

Exhibit 1: Information about PSX past, present and future

PAST
Established on March 10, 1949, as a company Limited by Guarantee
Stock market having 200 brokers
Started with 5 firms with a paid-up capital of Rs. 37 million
Trading was performed through an open outcry system
KSE 50 was the first benchmark index
PRESENT
Electronic Trading through KATS
Internet Based Order Routing System-KITS
Markets Index to MSCI Emerging Markets Index with effect from June 2017
A Company limited by shares, with the initial share capital equally allotted to 200 initial members after integration is now allotting share capital to around 400 members
562 companies listed on PSX
Market Capitalization US $ 89.6 billion (March 31, 2018)
Both short & long-term Government Debt Securities Trading
Real Estate Investment Trusts
Bond Market Index (Beta Version)
Future: Products in the pipeline
Pakistan Exchange Traded Funds listed on Chinese Stock Market
Fixed Income Derivatives
Index Options
Single Security Options
Small & Medium Enterprises Board
Securities Lending & Borrowing (Short selling and Margin buying)

Source: PSX website

Exhibit 2: Selected market efficiency measures before and after integration of stock exchanges

Variables	Pre-period (Jan 01, 2014 to June 30, 2015)	Post-period (Jan 11, 2016, to June 30, 2017)
Price Volatility	*0.01072*	*0.00996*
Trading Volume	*225.472 million*	*295.125 million*
Index Returns	*0.065%*	*0.098%*

Exhibit 3: Correlation of Pakistan's Stock Exchange with the World Markets (before and after integration)

Market	US (S&P's 500)	UK (FTSE 100)	Japan (Nikkei 225)	India (BSE Sensex)	Hong Kong (Hang Seng Index)	Malaysia (Bursa Malaysia KLCI)	Indonesia (Jakarta Composite Index)	Australia (All Ordinaries Index)	France (CAC 40 Index)	Germany (DAX Index)
Correlation (Jul–Dec 15)	*0.302*	*0.482*	*0.422*	*0.539*	*0.48*	*0.311*	*0.38*	*0.394*	*0.45*	*0.442*
Correlation (Jan-Jun 17)	*0.034*	*0.099*	*0.056*	*0.082*	*0.117*	*0.207*	*0.004*	*0.079*	*0.153*	*0.155*

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