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Prospects and Challenges of the Development of ASEAN Exchanges

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1 INTRODUTION

Recognizing that a synergized Association of Southeast Asian Nations (ASEAN) is more than the "sum of its parts", the region has progressively transformed into a formidable economic and political bloc during the past several decades. Since 2005, intra-ASEAN trade value almost doubled, reaching USD602 billion in 2012. Together, the ten ASEAN member countries— Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam—collectively ranked as the world's seventh-largest economy, with a combined gross domestic product (GDP) of US\$2.4 trillion in 2013.¹ Increasingly, ASEAN has become an instrument for regional dialogue and cooperation, establishing itself as a parallel power to neighboring giants such as India, Japan, and China. In addition, the interconnectedness of the varied economies in the ASEAN region implies substantial growth opportunities in the region.

¹ http://www.asean.org/news/asean-secretariat-news/item/asean-statistics-releases-latest-economic-updates

Against the backdrop of these developments, the finance ministers of the ASEAN countries came together and started a series of initiatives to achieve regional economic integration. Among these initiatives, the development of ASEAN Exchanges has been considered a major mechanism to stimulate both intra-ASEAN and international investment flow. ASEAN Exchanges is a collaboration of seven stock exchanges from Indonesia (IDX), Malaysia (BM), Philippines (PSE), Singapore (SGX), Thailand (SET), and Vietnam (HNX, HOSE). Together, the seven exchanges would form a notable global economic entity comprising 3,600 companies with a combined market capitalization of almost USD3.0 trillion. The vision of ASEAN Exchanges is to enhance the competitiveness of ASEAN capital markets. It aims to lower the funding cost for listed companies, improve trading cost and efficiency for investors, increase investment flows by reducing cross-border hurdles, and harness their synergies in promoting ASEAN as one asset class to regional and global investors.

The purpose of this research project is to examine the challenges surrounding the creation of regional market infrastructure and the promotion of investment flows across ASEAN. Through in-depth interviews with the CEOs and senior management of stock exchanges, clearing houses and central securities depository as well as other relevant stakeholder organizations, this research study hopes to deepen the understanding of (i) the institutional challenges in integrating the securities market across ASEAN, and (ii) how these institutional disparities are progressively bridged towards the realization of the ASEAN Exchanges vision. Our empirical findings reveal significant institutional differences across the regulatory, normative, and cognitive institutions in the securities markets of ASEAN. We also find that the vast institutional differences necessitate the adoption of a different integration approach, one that is characterized by regular engagement, informal organizing, collective but non-imposing governance, together with a gradual and incremental operating model. The recognition of their shared destiny seems to be the motivating force that has driven the progress of ASEAN Exchanges thus far.

The organization of the rest of the report is as follows. In the next section we discuss the background literature on cross-border financial market integration. We then describe and discuss our theoretical model, followed by the description of our research methodological approach. The empirical narrative and interpretation of the case findings is then presented. Finally, we conclude with the implications of this research.

2 PERSPECITVE ON CROSS-BORDER FINANCIAL MARKET INTEGRATION

The development of financial market integration across different economies has been generally built on the potential advantages to generate more capital flows and to diversify the investment risks (Obstfeld, 1998). Thus, over the past two decades, we have witnessed a series of collaboration or merger and acquisition (M&A) activities for both regional and global financial markets. To name a few, we see the convergence of European bond and money markets during the late 1990s. Other developments include the formation of Euronext in 2000 and its subsequent acquisition of London International Financial Futures and Options Exchange (LIFFE) as well as the merger among OMX, Copenhagen Stock Exchange and Iceland Stock Exchange between 2005 and 2006. In other parts of the world, the South American countries have recently started to form the Latin American Integrated Market (known as MILA). In the same manner, the ASEAN countries also set out to build a regionally integrated market, the ASEAN Economic Community by 2015.

Several scholarly studies have examined the degree of financial market integration and its subsequent impact on economic development. Some have found positive economic outcomes. For instance, Fratzcher (2002) maintains that the process of European financial market integration has helped the Euro area to gain its significance in the world financial markets. From the perspective of financial openness, Quinn (1997) argues that the liberalization of government regulation and legal restrictions, such as taxation of capital or exchange rate policies, are highly relevant to influence the degree of a country's economic growth. In his empirical coding of the domestic and international laws for 64 nations, he found that liberalization of financial regulations can benefit economic growth in the long-run. Obstfeld (1998) also contends that financial openness provides a more effective mechanism to discipline policymakers from not taking opportunistic behaviors to exploit the domestic capital markets. Others have proposed that international financial integration can help diversify risks and hence achieve economic growth via more efficient capital allocation (Acemoglu and Zilibotti 1997; Agenor 2003; Francis et al. 2008).

While the advocates have shown the benefits of economic growth and risk diversification, critics are cautious on the institutional conditions to realize such economic gains and risk

mitigation. One potential cost is the concentration of capital flow from less-developed countries with weak institutions to countries with better institutions and legal systems (Boyd and Smith 1992; Fernandez-Arias and Montiel 1996). Agenor (2003) further points out that such a the large capital flow can have an impact on inflation, exchange rates and monetary expansion, potentially hampering domestic macroeconomic stability. A number of scholars also found the effect on economic growth is contingent on other conditions such as the degree of economic development and the maturity of the financial industry (Edison et al. 2002; Guiso et al. 2003).

Focusing on the aspects of environment conditioning the development of financial markets, this stream of academic research has been developed and emerged as the institutional approach to financial markets. Researchers from the institutional perspective go beyond the viewpoint of markets as a system of economic exchange for the simple objective of resource allocation efficiency and uncertainties avoidance, and emphasize the broader level of legal, cultural, and social context. It brings scholarly attention to investigate the way in which political and social belief systems influence and shape the rules and operations of financial markets (Preda 2007; Carruthers and Kim 2011).

In other words, the dynamics of market development cannot be separated from an understanding of its underlying institutional context. For example, the case of European market integration and cross-border financial market integration cannot be understood alone without the consideration of embedded pan-regional law, single currency and social belief system. Fligstein and Sweet (2002) have demonstrated how political sphere and social order are embedded in the construction of European market integration. They concluded from the empirical study of the nearly 40-year European integration that institutionalization takes time and there exists evidence of dynamic interaction among market actors to drive and change the rules by which their markets worked. Millo (2007) also analyzed how legislation, exchanges and financial innovation dynamically shape the evolution of index-based derivatives.

In this research, we align our theoretical position that the study of ASEAN Exchanges project requires an empirical investigation into the institutional context in which each individual stock exchange under ASEAN Exchanges operates. Drawing from literature on international business and strategy management, country-specific characteristics such as regulation, social rule and business knowledge can lead to different institutional profile for each country (Kostova 1997). Such national differences are referred as "institutional distance" between countries (Xu and Shenkar 2002). Prior studies have shown that disparities in country institutional profiles can have a detrimental effect on the implementation of organization practices or global interorganizational information systems (Kostva and Roth 2002; Hsu et al. 2015). Therefore, we argue that to realize the opportunity of regional financial integration, the understanding of institutional distance among different members of ASEAN Exchanges is imperative. Such understanding is important to policy-makers and institutions engaging in regional financial market integration initiatives, as it involves the establishment and maintenance of legitimacy in multiple institutional environments. Inadequately addressed, it can lead to legitimacy crisis that will threaten successful implementation of ASEAN Exchanges. In the following section, we elaborate the concept of institutional distance as our underlying theoretical framework in this research.

3 INSTITUTIONAL DISTANCE AND MARKET INTEGRATION

Institutional theorists argue that the institutional environment presents a set of rules, norms and beliefs which organizations would need to conform to, for the purpose of survival (DiMaggio and Powell 1983). At the country level, these rules, norms and beliefs become a country's *institutional profile*, which "reflects the institutional environment in that country, defined as the set of all the relevant institutions that have been established over time, operate in that country, and get transmitted into organizations through individuals" (p.180, Kostova 1997). Aligning with the institutional perspective, a country's institutional profile comprises regulative, normative and cognitive pillars. Each pillar presents different mechanisms of isomorphism that shape the diffusion of organizational practices within an institutional environment, as we describe below.

The regulative pillar concerns the formal rules and existing laws in a particular national environment. According to Scott (1995), the regulative aspect deals with the establishment of regulation and the associated mechanisms that monitor and enforce regulatory compliance (i.e., coercive pressure - what people can or cannot do). The power of legal sanctioning provides legitimacy as non-compliance is penalized. The normative component refers to the societal values and norms that prescribe the desirable and appropriate behaviors (i.e., normative pressure

- what people should or should not do). This pillar directs and sometimes constrains how specific organizations or individuals should behave. Socialization in the form of accreditation or certification can be used as a means to attain desirable goals within an institutional setting. The cognitive pillar describes the prevailing cultural beliefs rooted in an institutional environment that shape the interpretive schemas or frames people use when selecting and processing information. Different from desirable norms, it addresses the symbolic and interpretative nature of human activities in a society. Organizations operating in an institutional environment must pay attention to the shared social knowledge and taken-for-granted conventions rooted in that specific environment (i.e., mimetic pressure - what people typically do or not do). These three institutional pillars comprise a country's institutional profile in exerting coercive, normative, and mimetic pressures on organizations and individuals as they seek legitimacy in operating there.

Therefore, for cross-border financial market integration such as ASEAN Exchanges, the disparities in the institutional distance (i.e., differences in the regulatory, normative, and cognitive institutions such as regulations, cultural norms, educational systems, and so on, p.71, Kostova and Zaheer 1999) among its member countries, can be a real cause of concern. If these disparities are not adequately bridged, they can pose a legitimacy challenge which can threaten the success in implementing ASEAN Exchanges. In this research, we hope to uncover the institutional disparities in integrating the stock exchanges across the ASEAN countries, and investigate how these institutional gaps are addressed. We believe that institutional lens is novel as it allows us to look beyond the dominant economic determinants in the development and implementation of the ASEAN Exchanges. Moreover, it also provides a more comprehensive perspective than the conventional culture construct when analyzing national characteristics (Kostova 1997; Hsu et al. 2015). The inclusion of regulative and normative components allows us to investigate other relevant forms of institutions among different countries.

4 RESEARCH METHODOLOGY

Our study employs an interpretive case approach in order to surface the various institutional challenges and the collaborative actions taken during the development and implementation of ASEAN Exchanges. The strengths of interpretive case studies are in particular valuable for

investigating meanings and reality that are socially constructed, embedded within natural settings, and intertwined with practices and consequences of participants' social actions.

Our data collection focuses on the discourses related to development decisions on ASEAN Exchanges, its implementation motivations and barriers for cross-ASEAN securities trading, clearing and settlement, and the related exchange of securities transactional data. We started with the secondary information gathering in order to have a broad understanding about the current state and potential challenges related to the ASEAN Exchanges initiative. Following that, we travelled to different ASEAN countries and carried out extensive interviews with various stakeholders including senior executives from stock exchanges clearing houses, CSDs, international securities brokers and service providers. Between July 2014 and early July 2015, we conducted interviews with the CEO or senior managers from the Singapore Stock Exchange, Indonesia Stock Exchange, Bursa Malaysia, Stock Exchange of Thailand, Philippines Stock Exchange, Deutsche Bank and SunGard. Over 15 face-to-face interviews and 2 email interviews were conducted. Some interviews were conducted on an individual basis while others had been organized as a group interview owing to time constraints.

For data analysis, we started with the identification of major events over the course of the ASEAN Exchanges developments. Having identified the events, we began with the narrative development from our textual data including interviews and secondary data with a focus on surfacing the institutional challenges and the collaborative actions taken to implement ASEAN Exchanges. The findings were discussed between the co-authors to ensure validity and reliability of our analysis. In due course, we will also present a chronological case of the development of ASEAN Exchanges to our key interviewees for further validation of our findings.

In the next section, we present the case findings on the development of ASEAN Exchanges. We start by presenting the background and the vision of ASEAN Exchanges. We then highlight the challenges the stakeholders have to deal with given the significant disparities across the ASEAN countries. As the development of ASEAN Exchanges unfolds, we further explicate the various collaborative actions that enable the reconciliation of these differences.

5. RESEARCH FINDINGS

Aspiring to raise their economic competitiveness, the various ASEAN countries have come together to push for deeper regional financial integration. A key commitment is the establishment of the ASEAN Economic Community by 2015. This optimism is reflected in the rapid growth of the region. According to the IMF World Economic and Financial Surveys on Regional Economic Outlook, the ASEAN economies were projected to have real GDP growth by 5.5% per annum in 2013 and 2014. One key initiative under the ASEAN Economic Community is the formation of ASEAN Exchanges, i.e., the integration of seven stock exchanges in Indonesia (IDX), Malaysia (BM), Philippines (PSE), Singapore (SGX), Thailand (SET), and Vietnam (HNX, HOSE). As shown in Figure 1, such collaboration across ASEAN Exchanges is expected to streamline access to ASEAN capital markets with various benefits such as the attraction of investment flow into the region. The aspiration is to put in place an integrated cross-ASEAN trading infrastructure that would enable greater market participation from various stakeholders and investors. This is particularly relevant to smaller stockbrokers and individual retail investors who lack access to such trading facilities. "*How do we make it easier and seamless for our own investors? It works like a travel adapter, you simply plug in, even if every country is different*".

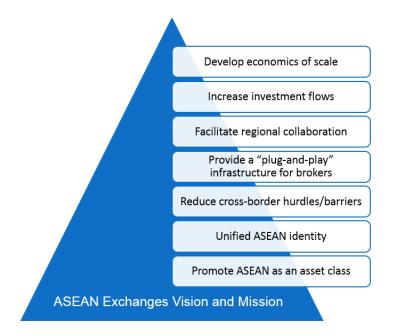


Figure 1: The Vision and Mission of ASEAN Exchanges

5.1. The Institutional Disparities across ASEAN

Although ASEAN has been established as a regional block since 1967, there remains significant disparity in the regulatory, normative, and cognitive institutions in the financial markets among the ASEAN countries. Some of the differences are attributable to the uneven developments of the respective capital markets in ASEAN. Some countries are just beginning to open up their economies while others are already established players in the global financial markets. In Indonesia, the capital market is only about 50% of its GDP. This is in contrast with Singapore, which is above 200%, Malaysia, 150%, and Thailand which is over 80% of GDP. Some ASEAN members do not even have stock markets yet, while other bourses have very few companies listed. For instance, Cambodia's stock exchange has only a few listed firms despite being established in 2012 while Brunei plans to launch an exchange in 2017, and Myanmar is only working on setting up its capital market.

Other institutional differences are rooted deep in the historical, social, political, and cultural legacies of the respective countries.

"The cultural heritage and pervading legal and social systems across ASEAN already create certain issues: Singapore and Malaysia have come from the British legal and educational traditions, the Philippines from the American, and to a lesser extent Spanish traditions, the Indo-Chinese based countries from their own, or influences of Chinese or even French persuasions. This diversity means that certain dynamics have to be addressed."

Integrating the ASEAN Exchanges thus requires careful consideration of the following institutional differences:

- **Institutional Disparities Regulatory:** There is insufficient compatibility of the regulatory, supervisory, and oversight regimes of the securities markets.
 - **Foreign investment restrictions:** Different ASEAN countries, for example, apply different foreign investment restrictions on the share ownership of key industries in their countries. Vice-versa, there are also different restrictions imposed on pension funds investing in securities outside the home countries.

- **Tax regimes:** In other instances, there are differences in tax treatment. For example, certain transactions may attract capital gain tax for the sales of shares and withholding tax for dividend incomes in some countries.
- Legal policies and jurisdictions: There are differences in the legal policies of different countries (e.g., listing requirements, anti-manipulation laws). Even the legal enforceability of trading transactions may be uncertain. For example, Indonesia inherited its legal tradition from the colonial Dutch while those of Malaysia and Singapore are from the British common law. The different legal jurisdictions are relevant in ensuring enforceability of remedies and impartiality of arbitration in situations of dispute settlement. For example, a company has to comply with the laws of a specific jurisdiction where its securities are listed. In the event of a breach, investors in another jurisdiction may not have recourse to the remedies provided under their jurisdiction's laws against the company. Other uncertainties could involve the custody arrangements and beneficial ownership structure of custody accounts, the enforceability of netting and of novation for the purpose of final settlement, and the irrevocability and finality of trade settlement.
- The number of regulatory bodies: The number of regulatory bodies also adds to the complexity in reviewing, monitoring, and enforcing the legal rules, as it makes it harder to achieve regulatory compliance. For example, the generally slow response of PSE to issues raised is partly a result of having to go through four separate and distinct regulatory authorities for approval. In other countries (e.g., MAS acts as a super-regulatory authority in Singapore), such issues are handled by fewer regulatory authorities.
- Institutional Disparities Normative: There are also significant differences in the market organizations, operating rules and practices, and technical standards or conventions, partly attributed to the level of market sophistication. The more sophisticated the market, the higher the expectation of what is to be considered as standard or acceptable market practice.
 - Market Fragmentation: Different degree of fragmentation in trading, clearing, and settlement activities engenders different "acceptable" behaviors among market players in different countries. Vietnam, for example, still has two separate exchanges

and harmonization of the two exchanges may need to be done before they are integrated into ASEAN Exchanges. Similarly, the extent of division between clearing and settlement entities also differs. These entities are separated in some countries (e.g., Indonesia, Malaysia, and Philippines) and integrated in others (e.g., Singapore, Thailand, and Vietnam).

- **Market practices:** Although the exchanges are increasingly adopting standardized trading platforms to stay competitive, their trading practices are still inconsistent, with different permissibility around netting and segregation of trading accounts (e.g., the use of omnibus accounts), and the different clearing and settlement cycles (e.g., T+2, T+3). Even the differences in time zones, business calendars (e.g., holidays) or operating hours (e.g., lunchtime trading) can lead to trading or settlement delays. The use of different currencies in ASEAN also results in a myriad of settlement arrangements across countries.
- Exchange Ownership: Some exchanges (e.g., Indonesia) remain pure private companies and are controlled and owned by broker members. Other exchanges (e.g., SGX, BM) are demutualized and established as shareholder-owned and profit-driven entities. As a result, the exchanges are subjected to different business norms and employ different criteria in assessing business decisions. The commercial orientations are stronger among some of these exchanges, resulting in differences in their strategic priorities. Exchanges owned by members typically follow a more democratic decision making process and can be slower in implementing new changes.

• Institutional Disparities – Cognitive

Sophistication of Investors' Profiles: The investors in some countries are already well-versed with international trading. But other investors (e.g., Thailand) "invest very little overseas." These investors are still very much in a saving rather than a trading culture. In Indonesia, for example, the challenge is still about how to transform Indonesia "from a savings society to a trading society". For IDX, about 477,000 people, or just 0.19% of the total population, were listed as registered

investors. Malaysia had 5-6 million registered investors, about 20% of its total population.² The number in Singapore is about 30%.

- People's recognition of investible ASEAN companies: In addition, at the people-to-people level, integration across ASEAN is still relatively limited. People are generally unaware of investible companies in ASEAN. Trading transactions, if any, are focused largely on local listed companies. Even for experienced investors, it is hard for them to name a handful of the listed companies in the other ASEAN countries as they typically do not see these companies in their social and cultural surroundings.
- High information cost: The geographical distance, the cultural and language differences among the ASEAN countries also make it difficult to obtain information on foreign securities. The diversity in accounting practices presents further obstacles. As the national accounting and disclosure norms vary, people lack a common business language for consistent comparison and analysis of their investments in ASEAN.

The uneven developments in the capital markets thus highlight the need for a more cautious approach towards the integration of ASEAN Exchanges. Each ASEAN country has to carefully consider how fast to proceed with the market integration, and how to manage it in a way so that their local businesses will not be disadvantaged.

"All the ASEAN leaders want integration, but they are also concerned. They want a pace that they are comfortable with. Most are still in their infancy stage. They first want to nurture the market, reach teenager maturity status, and they can compete. They are making sure that the locals don't lose out"

The disparities in ASEAN thus require a different approach - an approach that appropriately recognizes that each exchange is operating in its own unique environment, and each organization needs to creatively address the limitations posed by the diversity of their institutional contexts, while at the same time, being sufficiently committed to work together to resolve difficult

² Analysis: Comparing RI financial market with other ASEAN countries. (2015, April 1). The Jakarta Post.

collaboration issues. What we observe is a highly fluid and flexible collaborative approach that seems to have made ASEAN Exchanges work.

5.2 Making ASEAN Exchanges Work

5.2.1 Collaborative Practice #1 - Regular Engagement but "Loose" Organizing

One basis of collaboration in ASEAN Exchanges is characterized by a series of regular highlevel engagement, supplemented with informal organizing to mobilize specific agendas. These specific agendas are driven by relatively ad hoc committees. Project leadership is fluid, dependent on "issues of the moment."

In order to deepen collaboration, the CEOs of the different ASEAN Exchanges meet every quarter to discuss various issues relating to knowledge sharing and market integration. The locations of meetings are rotated across ASEAN. Specifically, to boost the development of ASEAN Exchanges, five working committees with equal representation from the ASEAN countries were established, with each country taking charge of one key aspect (see Figure 2):

- The **Technology** Working Group is coordinated by Thailand. It is tasked with the responsibility of assessing the technology infrastructure and interface to enable cross-ASEAN trading and to coordinate the development with the relevant technology vendors.
- The **Regulatory** Working Group is coordinated by the Philippines³. It seeks to identify regulatory incompatibilities or gaps in cross-ASEAN trading and explores ways to harmonize inconsistencies.
- The Market Operations Working Group is coordinated by Malaysia. It is in charge of finding a streamlined and cost-efficient way of handling cross-ASEAN post-trade clearing and settlement.
- The **Business Development** Working Group is coordinated by Singapore. It is responsible for selling ASEAN Exchanges both within ASEAN and outside ASEAN, to both brokers and investors.

³ Philippines, however, subsequently decided to come on board the ASEAN Trading Link later. The regulatory harmonization issues were handled by the other countries: Singapore, Malaysia, and Thailand.

 Overall, these working committees are coordinated by the Strategy Working Group (with Thailand as the secretariat). The committee provides overall guidance on planning and execution of ASEAN Exchanges, and oversees the other working groups. It also drives the CEO meetings and determines what goes into the agenda. On a routine basis, the Strategy Working Group reports to their respective CEOs on various relevant issues of the day.

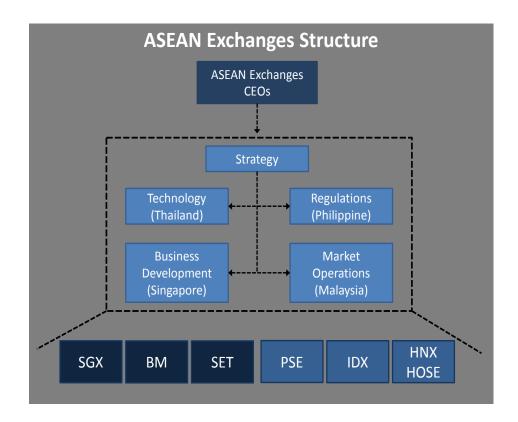


Figure 2: The Working Committees in ASEAN Exchanges

The various working groups meet at regular intervals and are active at different stages of the development towards ASEAN Exchanges. For instance, the Technology Working Group was very active when the ASEAN Trading Link was first set up. But now with the focus shifting to post-trade, it has taken a back seat. There is no formal leader in these groups as they operate on a peer-to-peer basis. It is like, in their own words, "an orchestra with no conductor" in reference to the Orpheus Chamber Orchestra, a Grammy Award-winning orchestra that has been a showcase of collaborative leadership. Initiatives are taken by those countries which feel most motivated to

do so. Besides the regular meetings, a lot of informal communication and information sharing take place "offline".

Members of the working groups also drive the project within the respective countries, with the support of their Exchange CEOs. For example, the CEO of Bursa Malaysia continually emphasizes the criticality of ASEAN Exchanges and is hands-on in managing it. The status of the progress of ASEAN Exchanges is reported every month to the CEO. There is even a separate steering committee in Bursa Malaysia that is tasked with driving ASEAN Exchanges.

The high-level engagement is not just within ASEAN Exchanges, but also with relevant bodies in ASEAN. For example, the Strategy Working Group also provides regular updates (e.g., once in 6 months) to ASEAN Capital Market Forum (ACMF) to ensure that their voices and feedback are heard. This has been particularly useful as issues of regulatory harmonization requiring high-level intervention are highlighted.

5.2.2 Collaborative Practice #2 - Collective but "Non-Imposing" Governance

The collaboration in ASEAN Exchanges is also characterized by the constant attempt to achieve consensus among the ASEAN countries. Issues are collectively discussed and debated. Yet, there is substantial respect for the unique context of each country that these decisions are "non-imposing" on each member.

As these working groups come together, their commitment is always to strive for consensus in driving the course of actions. Collective agreement is preferred over formal voting by majority. "There would be a discussion, but never vote." "It's always friendly but sensitive. Everyone wants to work together. They want a win-win situation. Win–win means you have to listen to each other, and that also means it takes time." If some countries feel that the proposed solution is not appropriate, then the idea will be modified. Sometimes, it also requires that "one party backs down, for the sake of ASEAN solidarity". For example, different ways of connecting the ASEAN Exchanges together (e.g., through new special purpose vehicle model) led to debates among the different countries. It was only through listening to understand the regulatory constraints of some countries and the willingness of other countries to settle for an intermediate solution that issues such as these were resolved.

Yet, these collective decisions are not imposed upon each member. The respective ASEAN countries have the discretion to participate at the pace they are comfortable with. This is especially evident in the decisions of the respective countries in joining the ASEAN Trading Link. At present, only 3 of the 7 exchanges (SGX, BM, and SET) are linked up to the regional system. Such flexibility recognizes that "the exchanges are at different stages of development" and hence, need different time frames to come on board.

"From the very beginning, there was already an appropriate level of awareness and understanding that each exchange is operating in its own unique environment. This reality has enabled the group to really be creative in thinking of ways to address limitations posed by the diversity of each jurisdiction, and has fostered a culture of consultation to resolve especially the difficult issues. This is especially evident in the smaller exchanges being allowed to develop their respective markets at their own pace without necessarily being forced to immediately join the trading link."

Working together helps the ASEAN countries see that "there are many angles to the problems" and that the integration across ASEAN Exchanges needs to be "a dynamic evolving process." Each country needs time to be "prepared":

"The basic step to our preparedness is really anchored on how on the one hand, we can be ready to compete with our counterparts, and on the other, how ready our infrastructures are to take advantage of the bigger opportunities we now have in expanding our market and accelerating growth."

A CEO of one of the exchanges summarizes the need for time to grow their relationships; from their relative isolation to becoming comfortable with one another, like a social club, then learning to forge deeper cooperation for common goals, and then further to delineate and be respectful of their cooperative and competitive boundaries. Only then they can fortify the identity of ASEAN Exchanges and sustain the next level of financial integration (see Figure 3).



Figure 3: Growing the Relationships in ASEAN Exchanges

5.2.3 Collaborative Practice #3 – Gradual and Incremental Operating Model

At the same time, the respective ASEAN countries also recognize that full harmonization of regulations and business practices across ASEAN (e.g., to change a country's legislation) would not happen overnight. The evolution of the cross-border trading model is thus characterized by non-disruptive changes, leveraging as far as possible existing or outsourced infrastructure, rather than developing new infrastructure from scratch. Progress is made by targeting incrementally more difficult components of the overall trading infrastructure.

One essential non-disruptive principle is the notion of "Home Rules Apply", where investors are required to abide by the business rules of the home country where shares are transacted. Cross-ASEAN trading does not bypass home brokers. Trading is conducted via an "inter-broker system", a model where the originating brokers, who are not exchange members of the country where a trade is executed, are required to have a bilateral agreement with a sponsoring broker in the local country. This principle allows brokers in one jurisdiction to execute trades through another broker, who is licensed in the corresponding market, and enables the investor to sidestep regulatory issues that would arise if a direct link was established. The onus is on the investors in the originating countries to understand the local rules.

As shown in Figure 4, gradual changes were made to integrate the securities trading across ASEAN, targeting increasingly more difficult aspects, i.e., moving from integrated trading, to integrated settlement and depository, and possible integrated clearing in the future.

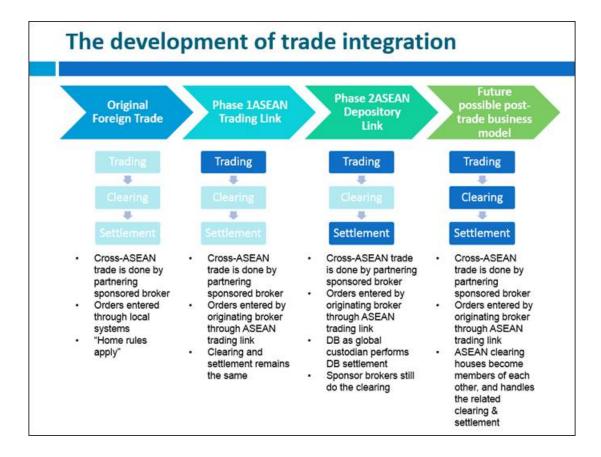


Figure 4: Incremental Development of ASEAN Exchanges

• Phase 1: Integrated Trading - ASEAN Trading Link

A cross-ASEAN trading technology infrastructure – the ASEAN Trading Link was launched in September 2012 (see Figure 5). It provides a standard interface for ASEAN trades, with a single point of access for market data and order routing. There are two main components in the ASEAN Trading Link that facilitates efficient straight-through processing. The technology infrastructure - Intra ASEAN network (IAN) - comprised a fiber network that connects the various national exchanges. The other component is the ASEAN Common Exchange (ACE) gateways, a series of hubs located at each exchange, which provide the connecting point among brokers and exchanges. The development and maintenance of the entire technology infrastructure is outsourced to SunGard as a third-party vendor.

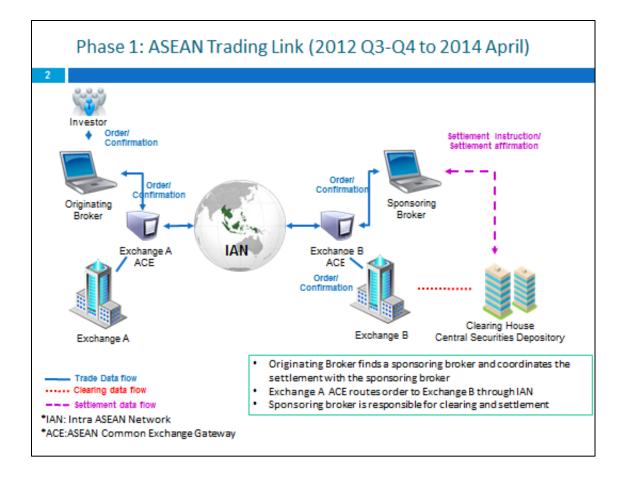


Figure 5: The ASEAN Trading Link

In terms of operations, the Originating Broker (OB) in country A should have a bilateral agreement with a Sponsoring Broker (SB) in country B to facilitate the trade (i.e., in trading, clearing, settlement, and custodian functions). The OB in country A receives an order from its investors to buy shares in country B. Market data will be made available to members and exchanges over ASEAN Trading Link locally at each ACE. The OB will then send orders to the ACE hosted by their local exchange, much like the way they conduct a normal trade. Once the order is received at the local ACE, it is then sent through the IAN where it is then received at the Exchange B's ACE and then continues to Exchange B's matching engine. The order messages are tagged with the SBs' membership IDs. SBs receive "drop copy" feeds of the inbound orders and execution reports. Payment and transfer of securities will be handled by SBs whom the OBs have assigned. Each acknowledgement, change, cancellation, or update is sent back along Exchange B's ACE over the IAN back to Exchange A's ACE, and then back to the OB. For

international investors outside ASEAN, the Trading Link also provides neutral access points for them to access ASEAN orders.

The ASEAN Trading Link not only streamlines the trading arrangements for brokers, but also reduces the investment and operational costs to access the exchanges in other ASEAN countries, particularly for mid-and-small brokers. It is a "plug and play" infrastructure. These brokers only need to be connected to their respective exchanges, which will take care of the technology infrastructure and help their members access other exchanges. The service offerings by SunGard are also scalable and flexible – dependent on usage, additional modules required, etc. and member countries can choose to join the ASEAN Trading Link later without causing any disruption.

• Phase 2: Integrated Settlement and Depository: Deutsche Bank as Global Custodian

With the ASEAN Trading Link providing an integrated platform for trading, the next challenge facing the ASEAN Exchanges working groups is the integration of post-trade operations. Feedback from the market participants indicated that "the true value of the ASEAN Trading Link is in post-trade." Yet, "post-trade is the most challenging part⁴" as it involves many risk mitigation and regulatory compliance issues. There are differences in settlement times (including holiday coverage), settlement currencies, permissibility around netting and segregation of positions (e.g., SGX applies omnibus accounts but SET applies segregated accounts), accounting for change in securities ownership, consistencies in the scope and eligibility requirements for collaterals.

A global payment/custodian bank model was proposed and implemented. Deutsche Bank, with its local presence in the various ASEAN countries, was contracted to act as the common paying agent and custodian for the cross-ASEAN trades. Once an ASEAN trade is executed through the ASEAN Trading Link, both the originating and executing depositories will send the settlement information to the global payment/custodian bank for cross check (see Figure 6). On T+3, the executing depository in country B would notify the global payment/custodian bank on

⁴ (DBWP, 2013) Post-trade integration in the ASEAN

the execution of pre-settlement. The global payment/custodian bank would then convey the information to OB in country A. After receiving this notice, the OB would send payment instruction via the local exchange to the global payment/custodian bank, and the global payment/custodian bank then sends the payment information to the executing depository to effect the transfer of securities. The settlement is then related back to the global payment/custodian bank which will update OB's securities account on the settlement of the trade. The cross-ASEAN payments are facilitated through the global payment/custodian bank model which offers better foreign exchange rates and streamlined cash movements. Net settlement of funds can be done. Payments would now have 1-2 days turnaround time. The whole process is straight-through. The global payment/custodian bank model also simplifies the handling of subsequent corporate actions (e.g., dissemination of information, distribution of cash entitlement, voluntary right issues) which used to be difficult.

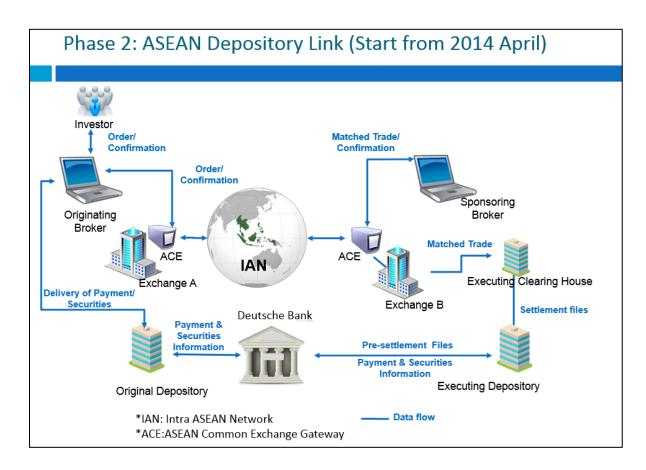


Figure 6: The ASEAN Depository Link

Again, coming on board the global payment/custodian bank model is relatively easy as no changes are needed to existing post-trade processing in each country. Deutsche Bank, as the selected bank to operate the global payment/custodian bank model, works closely with the respective exchanges to cater to their unique local requirements (e.g., initial system customization to accommodate different account structures or market regulatory requirements).

5.2.4 Collaborative Practice #4 – Build upon Shared Aspirations

Finally, the collaboration in ASEAN Exchanges is also characterized by a deep recognition of the shared destinies among the ASEAN countries as they continuously seek out synergies as they operate together. One such effort is the marketing of a single ASEAN identity to attract international attention to ASEAN. As a member country noted, "The recognition and being seen as ASEAN is important. By promoting ASEAN, you are promoting [his country]."

Substantial efforts have been channeled into the development of the ASEAN Exchanges website as a key publicity platform. Various "Invest in ASEAN" roadshows and networking sessions have been organized. Specifically, the marketing efforts are targeted at smaller local brokers and retail investors who lack access to such trading infrastructure. The objective is to elevate the competitive position of these smaller domestic brokers and retail investors for cross-ASEAN trades. The initiatives include "match-making" sessions between brokers of different countries, where they meet up to establish partnerships. Some fund companies and regional listed companies with attractive investment potentials are also invited to participate. The brokers from the 3 ASEAN Trading Link members, especially Thailand, have responded positively to these publicity campaigns.

In addition, the ASEAN countries also collaborate to increase the attractiveness of ASEAN as an investment destination. Part of the efforts involves the development of ASEAN as an asset class. The ASEAN Stars, for example, are 180 ASEAN Stocks representing the most exciting 30 companies of each country as selected based on market capitalization and liquidity. The ASEAN Stars will provide an easily identifiable reference for investors as they are the ASEAN "blue chips". In addition, indices such as the FTSE ASEAN Stars Index have been launched. These indices can be used as tools for the creation of index tracking funds (e.g., CIMB ASEAN40 US\$

ETF), derivatives and as performance benchmark. For example, as at January 23, 2015, the FTSE ASEAN Stars had registered a 12-month 10.8% total return in terms of market performance⁵. "This is where the foundations of ASEAN collaboration should be. It's where we can demonstrate how the ASEAN economy is doing. For the respective exchanges, there are already indications of what is going on within the country. The indexes would give a view of ASEAN as a whole."

Another significant initiative is the development of ASEAN corporate governance scorecard driven by the ASEAN Capital Markets Forum in ranking the corporate governance practices of the ASEAN public-listed companies. Each ASEAN country appoints a domestic ranking body to carry out domestic ranking exercises and participate in regional ranking for these ASEAN companies. The scorecard serves as a tool for the ASEAN companies to increase their visibility and investability to regional and global investors.

6. DISCUSSION

Based on the above findings, we discuss the implications of collaborative practices in moving the aspiration of ASEAN Exchanges forward.

In terms of regulatory institutional disparities across ASEAN, institutions such as the ASEAN Capital Markets Forum, comprising the securities regulators of the 10 ASEAN countries, have been successful in fostering a Mutual Recognition Framework to harmonize the rules and regulations across the various jurisdictions. For example, the ACMF developed the ASEAN Disclosure Standards Scheme, which is based on standards on cross-border equity offerings set by the International Organization of Securities Commissions (IOSCO). The scheme comprises a single set of fully-harmonized disclosure standards to be adopted by all ASEAN members. It will allow issuers to comply with one single set of disclosure standards without additional standards as prescribed by the respective jurisdictions. Other priority regulatory issues

⁵ Source: FTSE ASEAN Indices Weekly Report, January 23, 2015.

that have been raised for review include the registration of securities, distribution of research materials, enforcement actions, and market surveillance.

The active lobbying efforts of the ASEAN working groups are also helping to bring down regulatory barriers for ASEAN Exchanges. Thailand, for example, has made several important regulatory changes to facilitate cross-ASEAN trading. Bank of Thailand now allows investors to hold a foreign currency account. The Thailand government has also relaxed its capital gains tax and the withholding tax on dividends. Similarly, while retail investors in the Philippines cannot currently buy non-locally registered securities, this policy may be relaxed soon to facilitate trading on ASEAN Exchanges.

In terms of the normative institutional disparities, the visibility of market practices and benchmarks across ASEAN has accelerated the efforts by the respective ASEAN countries to catch up with their peers. Even for countries that have not yet come on board ASEAN Trading Link, significant efforts have been invested to develop the trading infrastructures and to adopt market-standard systems and standards. Such infrastructures would enable these countries to plug in when they are ready. Indonesia, for example, has standardized and upgraded its IT system to enable straight-through processing. Similarly, the PSE launched a new SETradex online trading platform developed by NASDAQ in June 2015. NASDAQ's trading technology is also used by the ASEAN Exchanges such as BM, SGX and IDX. Many of these improvements are a result of the knowledge sharing that occurs across ASEAN Exchanges.

In ASEAN Exchanges, one thing we compare is how different we are with each other, and then we get the benefits from the gap (analysis) with the neighbors. We take their experiences, and we adjust locally.

In a similar attempt to enhance the appeal of its stock market, PSE also works with its ASEAN counterparts (Bursa Malaysia, Indonesia Stock Exchange) to develop a list of syariahcompliant stocks. At the same time, it also works with SGX in launching the SGX-PSE MSCI Philippine Index Future.

At the stock market, we recognize where we place against our peers and it is important that we at the very least, have more than one product offering for investors here and abroad. We are getting there though. In fact, it is for this reason that we have focused our strategic plan towards providing more products and services to our different stakeholders. As good and unprecedented as our market run has been, we need to become more than just a one-product market.

Finally, in terms of the cognitive institutional disparities, the ground work has been laid in the strong emphasis on retail investor education across to nurture a 'culture of investing' among the people. Such efforts include investment roadshows (ASEAN Exchanges), partnership with universities and setting up investment outposts (Indonesia), TV and media publicity (Thailand), etc., to reach out to potential investors. Other initiatives such as the corporate governance scorecard should also help to create recognition and awareness of credible public-listed companies in ASEAN. Bridging the cognitive disparities is the most tacit of the institutional distance as much of it hinges on the ability to translate the ASEAN Exchange concept to the level of people's daily interaction and their surrounding social context, such that investing in ASEAN stocks is something that they see, they hear, they know, and talk about.

With our above findings, one might be interested about the future direction of integration and the potential impact on market liquidity resulting from ASEAN Exchanges. In terms of model of regional capital market integration, our analysis shows that given the extent of institutional distance and the amount of effort required, the creation of a single pan-ASEAN trading, clearing and settlement entity vertically or horizontally for the ASEAN capital market would not be a preferred option. Compared with such cases of regional capital market integration in Europe and the U.S, the condition of multiple currencies and the likely persistence of institutional distance would make a single entity across the different markets an unrealistic option. But with the development of modern information communication technologies, it allows ASEAN Exchanges to have the benefits of implementing "home rules apply" cross-border linkages (i.e. trading link and the depository linkage via a global custodian), while tackling institutional disparities.

While a quantifiable evaluation of market efficiency and liquidity is not within the core scope of this research, our social and institutional analysis of ASEAN Exchanges can offer some points of discussion. First, Singapore, Malaysia and Thailand are the three exchange exchanges participating in the trading link. Prior to the linkage, brokers in these countries, in particular Singapore and Malaysia, had already engaged in cross-border transaction activities. Therefore, the added-value of the trading link may be less significant. However, our interview with executives from Stock Exchange of Thailand revealed that the trading link has lowered the barrier to entry for the medium-sized Thai brokers who otherwise would have to bear a relatively high infrastructure cost for cross-border transactions themselves. Despite the readiness of technological infrastructure, our interview analysis show that the active development of equity culture would be needed to encourage cross-border transactions. As we mentioned earlier, a series of activities has been undertaken by different members of ASEAN Exchanges to cultivate the investment culture of the general public. We anticipate that with time, the growing equity culture would contribute to generate cross-border market liquidity of traded stocks. Second, we believe that the collective effort of ASEAN Exchanges in promoting ASEAN as an asset class at the outset of building ASEAN equity culture would help to reduce certain level of home bias problem in investment decision. Nonetheless, the promotion of ASEAN stocks has primarily concentrated on ASEAN Stars representing top 30 companies of each country as ranked by market capitalization. While these top ASEAN stocks might be valuable in boosting the initial cross-border trading volume, prior literature has shown the concentration of benefits on big firms with a strong foreign exposure resulting from market integration (Nielsson 2009). Thus, we argue for a more balanced effort in promoting both large traded stocks as well as the stocks for other strong but less well-known companies in ASEAN. Third, our field interview revealed that the ability to increase cross-border market liquidity also depends on the level of integration for post-trade clearing and settlement services. Currently, the clearing mechanism is still handled within the national boundaries. We believe that a higher level of post-trade integration would help to improve the stock liquidity in ASEAN Exchanges further.

7. CONCLUSION

In this research project, our research objective has been to investigate the institutional conditions and the corresponding strategies in addressing the problem of institutional distance among ASEAN countries. Our empirical findings indicate that with the bridging strategies noted above, some institutional disparities have been successfully eliminated (e.g., in harmonizing some legal rules). Other institutional disparities are in the process of being addressed but need

more time to show results (e.g., the development of ASEAN indices, the development of equity culture). Yet others are such deep-rooted institutional differences that possible bridging strategies are still on the drawing board, adopting a largely wait and see stance (e.g., the idea of integrated clearing which requires radical changes to allow cross-membership among exchanges).

We believe there is still some way to go to achieve the full vision of ASEAN Exchanges. But what is consistent among the ASEAN countries is the recognition of such institutional disparities and the acknowledgement that it is important to take a long-term perspective in developing ASEAN Exchanges. Significant patience is required in bridging such institutional disparities (i.e., regulative, normative, and cognitive). Going forward, time, flexibility, and continuous nurturing of shared commitment seem to be the key strategies in sustaining the development of ASEAN Exchanges in the long run.

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