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Preface and Acknowledgements

The IKMAS-Nippon Foundation Young Fellowship programme was introduced in Oct 2017 which targeted students/young scholars from ASEAN, especially from Cambodia, Laos, Myammar and Vietnam (CLMV) countries to participate in the program. The objective of the fellowship is to provide young scholars with an opportunity to interact with Fellows from the Institute of Malaysian and International Studies (IKMAS) and academic staffs of National University of Malaysia (UKM) on research areas of their interest.

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The IKMAS UKM-Nippon Foundation Young Scholars 2020

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CHAPTER 1

COMPARING INDONESIA AND VIETNAM'S CHINA POLICIES: A TALE OF TWO HEAVY HEDGERS

TRAN THU MINH

Abstract

The ascendancy of China has brought both challenges and opportunities to Southeast Asia. However, as many ASEAN states are uncertain about China's foreign and security policies, they have adopted hedging strategies to maximize their economic opportunities with China. Two such ASEAN states are Vietnam and Indonesia. Both emphasize non-alignment, exhibit deference and defiance towards China and are inclined to diversify their foreign policy options. This article argues that while Vietnam and Indonesia are "heavy" hedgers, it is Vietnam which is the "heavier" hedger. The article also examines the factors which drive Vietnam and Indonesia's hedging policies: geography, their elites' domestic legitimation needs and historical experiences.

Introduction

With the appointment of Xi Jinping as General Secretary of the Chinese Communist Party in November 2012 and President of China in March 2013, Beijing has moved fast to realize the "China Dream," that is, a peaceful and stable "Community of Common Destiny" domestically, while implementing the "Belt and Road Initiative" (BRI) internationally. As the region closest to China, Southeast Asia has come under much attention as powers outside the region such as the US, India and Australia seek to increase their influence. Thus, the ASEAN states have become increasingly significant in China's foreign policy. China's status as an economic power provides the ASEAN states with opportunities for economic cooperation but China's ascendancy also raises concern about how China will use its military might and how it will manage the South China Sea (SCS) issue. Thus, the ASEAN states must consider the economic

opportunities that may be realized from cooperating with China against a backdrop of uncertainties regarding China's foreign and security policies.

Chien-peng Chung (2004) has pointed out that in the post-Cold War era, the ASEAN countries have chosen to "striv[e] for a distribution of power that allows regional countries to maintain a stable external environment conducive to the maximization of trade and investment opportunities, but at the same time deny a potential hegemon the ability to assert undue dominance".[1] Chung's position is also supported by the following studies – Evelyn Goh's "Meeting the China Challenge" (2005) and Kuik Cheng Chwee's "The Essence of Hedging: Malaysia and Singapore's Response to a Rising China" (2008). Vietnam and Indonesia, for example, are two ASEAN states that hedge. While both countries are increasingly dependent on trade with Beijing, they are involved in numerous economic and political disputes with China. Also at stake are significant geopolitical interests as some of the world's more important sea lanes pass through Vietnam and Indonesia's exclusive economic zones (EEZ). Vietnam shares a border with China, while Indonesia is much farther away. Both countries have had different historical experiences with China, different capabilities and different geopolitical perspectives. Thus, while both Vietnam and Indonesia hedge, their motives for doing so are different.

This article explores the common features and differences in Vietnam and Indonesia's China policies and determine how these differences impact Vietnam and Indonesia's hedging policies towards China.

The "hedging" concept

Considered a "smart way to compensate for smallness and lack of 'hard' means of pursuing policies" (Sherwood, 2016),[2] hedging has been defined as "a set of strategies aimed at avoiding (or planning for contingencies in) a situation in which states cannot decide upon more straightforward alternatives such as balancing, bandwagoning, or neutrality" (Goh, 2005).[3] This policy "on one hand, stress[es] engagement and integration mechanisms and, on the other, emphasize[s] realist-style balancing in the form of external security cooperation" (Medeiros, 2005).[4] Accordingly, a striking feature of "hedgers" is that they do not simply adopt a single strategy, but often combine both containment and balancing strategies, as "insurance" against the big powers' uncertainties.

"Hedging" is usually adopted by smaller states primarily to "optimize economic benefits and minimize security risks in response to an environment of uncertainty" (Chung, 2004).[5] Notably, "hedging" is resorted to when risks are uncertain and threats not yet obvious. The hedging behavior then reduces the "likelihood that a threat will materialize [and] keep[s] doors open for productive engagement" (Haacke, 2019).[6]

To unpack hedging behavior, this article adopts Kuik's framework (2020), viz., (i) efforts to avoid taking sides or making statements to emphasize "non-alignment"; (ii) signs of *both* deference (pleasing China) *and* defiance (displeasing China); and (iii) an inclination to diversify, to preserve policy independence, or to keep options open.[7]

In sum, "hedging" is a set of policies that combine balancing and bandwagoning adopted by smaller states in their relations with big powers, when smaller states are faced with uncertainty, in order to maximize their economic benefits and minimize their security risks. "Hedging" is often expressed in three domains -- economic, diplomatic and security – and, as explained above, contains 3 elements: (i) non-alignment; (ii) shows both defense and defense; (iii) and an inclination to diversify policy options.

Heavy hedgers and light hedgers:

Kuik and Rozman (2015) were the scholars who introduced the concepts of "heavy" and "light" hedgers, based on different degrees of emphasis on risk-contingency measures (See Table 1). "Heavy" hedgers are states that are more concerned about the uncertainties and risks coming from the big powers. Consequently, these countries tend to invest in both a "political hedge" and a "military hedge", in which the "political hedge" attempts to achieve "balance" through diplomacy, while the "military hedge" promotes equilibrium through developing defense relations with other major powers (Kuik, 2015).[8] While "heavy" hedgers will openly and selectively oppose the will or interests of a big power, they usually compensate for their assertive actions with efforts to strengthen bilateral relations with the big power. Meanwhile, "light" hedgers frequently try to please the big power and will only oppose the big power indirectly (Kuik, 2020).[9]

Table 1. Power-Response Spectrum

Balancing	**Hedging Behavior**					**Bandwagoning**
	Risk-Contingency Options		***Returns-Maximizing Options***			
	Indirect-Balancing **"Military hedge"**	Dominance-Denial **"Political hedge"**	Economic-Pragmatism Economic Diversification **"Economic hedge"**	Binding-Engagement	Limited-Bandwagoning	

Source: Kuik, Rozman (2015), "Light or heavy hedging: Positioning between China and the United States", *Joint U.S-Korea Academic Studies*, pp.1-9.

Vietnam and Indonesia's hedging strategy towards China

Vietnam and Indonesia's policies towards China show all three criteria of hedging policy, including: (i) avoiding taking sides; (ii) showing both deference and defiance; and (iii) diversifying policy options.

Not taking sides to emphasize "non-alignment"

The "2019 Vietnam National Defense White Paper" clearly states: "Viet Nam consistently advocates neither joining any military alliances, siding with one country against another, giving any other countries permission to set up military bases or use its territory to carry out military activities against other countries nor using force or threatening to use force in international relations".[10] A fact check will show that in the post-Cold War era, Vietnam has consistently practiced this nonalignment policy.

Geographically, Vietnam shares its northern continental border with China and its western littoral coastline borders the South China Sea. Therefore, Vietnam is more affected by China's rise than any other ASEAN country. Vietnam's geographic proximity with China brings many economic benefits and Vietnam will increasingly engage China through trade and economic ties. But this "tyranny of geography" (Thayer, 2011) and centuries of Sino-Vietnamese conflict also push Vietnam to seek security assurances from its ASEAN partners and the United States to offset the security threat from an increasingly assertive China.

Indonesia's foreign policy has typically been "independent and active", with an emphasis on its "non-alignment" character. An "independent" foreign policy means that Indonesia does not side with any powers, while an "active" foreign policy means that Indonesia is neither passive nor merely reactive on international issues but participates actively in the settlement of these issues. Thus, while Indonesia's "independent and active" foreign policy is not one that is neutral, it does not align Indonesia with the major powers or bind Indonesia to any military pact.[11]

Vietnam and Indonesia's policies towards China show both deference and defiance

Since Vietnam and China normalized relations in 1991, Sino-Vietnam relations have recovered rapidly and are considered to have transited from "hostile asymmetry" to "normal asymmetry" (Womack, 2006).[12] The two countries established a Comprehensive Strategic Cooperation Partnership in 2008 and has conducted diplomatic activities through three main channels: relations between the two governments, the two parties, and the people of the two countries. While Hanoi seeks assistance from China, it also wants to counter China's excessive influence or domination. Thus, Vietnam has adopted a "struggling and cooperating" policy towards China. As elaborated by the Communist Party of Vietnam Central Committee's Eighth Plenum: this policy means to 'cooperate' with outside powers for mutual benefit when interests converge and 'struggle' with these outside powers when they challenge Vietnam's national interests, such as sovereignty, one-party rule and human rights.[13]

On one hand, Vietnam has shown its willingness to please China in its economic pragmatism in its relations with China. Close and deep economic relations with China have important security implications for Vietnam as trade with China and investments from China have contributed to Vietnam's economic growth, which in turn has strengthened Vietnam's security posture in relation with China. In addition, although Sino-Vietnam relations are asymmetric, a growing economic relationship alleviates tensions over such issues as the South China Sea disputes.

In the area of economics, from 2004 to 2020, China has been Vietnam's largest trading partner. In 2020, Vietnam became China's 6th largest trading partner and has been China's largest ASEAN trading partner in recent years. In 2019, total import and export turnover between Vietnam and China reached US$116,866 billion, of which Vietnam's exports were US$41,414 billion and imports US$75,452 billion.[14] Vietnam is a founding member of the Asian

Infrastructure Investment Bank (AIIB) as it joined AIIB when the initiative was launched. In November 2017, Vietnam and China signed a Memorandum of Understanding on the connection between Vietnam's "Two Corridors, One Belt" framework with China's "Belt and Road" initiative. Vietnam and China have set up nearly 60 engagement mechanisms through such different channels as: (i) high-ranking visits between the two governments; (ii) cooperation between the two Parties; (iii) relations between local governments of the two countries; and (iv) people-to-people exchange.[15]

On the other hand, Vietnam has always opposed Chinese infringement of its maritime sovereignty and the South China Sea dispute is the core contradiction in Sino-Vietnam relations.[16] The May 2014 oil rig HYSY-981 incident, during which Vietnamese and Chinese naval forces were in intense confrontation for over two months, pushed tensions between Vietnam and China to the highest level in many years. The HYSY-981 incident also brought about the largest scale anti-China protests and riots in Vietnam since 2011, when Chinese vessels cut the seismic survey cables leading to a Vietnamese oil exploration ship.[17] As can be seen, when Vietnam's core interests are threatened, Vietnam does not use diplomacy; it uses its navy to show direct and high-profile defiance.

After the HYSY-981 incident, Hanoi decisively pivoted to economic hedging and began making decisions on infrastructure development plans with a renewed focus on their security implications (Liao, Dang, 2019).[18] The Ministry of Planning and Investment report, "Vietnam's dependence on China" highlighted China's dominance in Vietnam's thermal power sector and suggested diversifying Chinese investment.[19] Subsequently, Hanoi awarded thermal power projects to contractors from Japan and other countries. Vietnam's Minister of Transport Dinh La Thang also threatened to terminate the contract with a Chinese company to build the 2A metro line because of delays in funding and construction, as well as an incident which resulted in a fatality during construction.[20] In addition, Vietnam has declined Chinese financing for the Van Don-Mong Cai highway and many other projects that impact Vietnam's security.[21] Notably, although the strategic connection between the "Belt and Road" Initiative (BRI) and Vietnam's "Two Corridors One Belt" was mentioned in the 2017 Joint Statement, up to now, no new BRI infrastructure project has been launched in Vietnam, except for an additional US$250 million loan for the 2A metro line in Hanoi, which is implicitly considered to be part of the BRI. Hanoi has neither sought funding from the AIIB nor promoted BRI-related projects due to concerns about "impacts beyond the economic sector" (Le, 2017b).[22] The chain reaction of events in

Vietnam after the May 2014 HYSY-981 oil rig incident shows that Vietnam not only chooses a "political hedge" but also diversifies its economic options. It is clear that Vietnam is seeking and adopting fallback security measures to avoid dependence on China.

An important feature of hedging policy is that, after defying a bigger power, smaller states often upgrade bilateral relations to minimize security risks from the bigger power. After the oil rig crisis ended in July 2014, Vietnam and China conducted several high-level visits to reinforce bilateral relations. In April 2015, General Secretary of the Communist Party of Vietnam Nguyen Phu Trong paid an official visit to China and was received ceremoniously. In November 2015, Chinese President Xi Jinping paid an official visit to Hanoi and addressed the National Assembly of Vietnam. Within a year after the 12th Congress of the Communist Party of Vietnam (CPV), all three senior leaders of Vietnam visited China: Prime Minister Nguyen Xuan Phuc in September 2016, General Secretary Nguyen Phu Trong in early 2017 and State President Tran Dai Quang in May 2017. After being reelected as the General Secretary of the Chinese Communist Party (CCP) at the 19th Congress in 2017, Xi Jinping visited Vietnam, which highlighted Vietnam's importance to China (Le, 2017c).[23] At the beginning of 2016 and at the end of 2017, after the 12th Party Congress of the CPV and the 19th Party Congress of the CCP, the General Secretaries of the CPV and the CCP sent special envoys to report on developments at their respective congresses, indicating that the relationship between the two Communist Parties is an important channel to help Vietnam manage its asymmetric relationship with China.

Like Vietnam, Indonesia maintains good relations with China but challenges China on maritime issues. The frequency and context of visits between high-level Chinese and Indonesian officials indicate that both sides are attempting to improve bilateral relations. After President Jokowi took office in November 2014, he chose to travel to China for his first overseas trip, indicating his strong desire to cooperate with China. In April 2015, during President Xi Jinping's visit to Indonesia, the two countries signed a Joint Statement to strengthen their comprehensive strategic partnership and to promote the links between the BRI and Global Maritime Axis. Indonesia's approval of numerous infrastructure projects with China indicates a shift in Indonesia's focus where Jakarta lays out the "red carpet" for Chinese investments, for example, the selection of Chinese, instead of Japanese, investors to build the Jakarta–Bandung high-speed railway.[24] The shift in diplomatic focus arises from complementary points in Indonesia and China's development strategy. Indonesia's "Global Maritime Axis" and China's "21st

Century Maritime Silk Road" have numerous similarities in space, time, and strategy implementation, where China needs to "go out" (走出去), and Indonesia needs to encourage foreign investment to improve Indonesia's weak infrastructure. The new governments of China and Indonesia recognize the significance of strengthening bilateral cooperation to support the implementation of their own national strategies, as well as to deal with and cope with common global and regional issues.

China and Indonesia's upgrading their relations to a Comprehensive Strategic Partnership (全面战略伙伴关系) in 2013 has improved the two countries' economic relations. Under the Jokowi Government, Indonesia signed 36 MoUs with China for the three-year period from November 2014 to December 2017.[25] In contrast, for the nearly nine-year period from April 2005 to January 2013, only 34 MoUs were signed.[26] Clearly both China and Indonesia have expended tremendous effort to establish closer economic ties. In addition, China and Indonesia have established the "China-Indonesia Dialogue Mechanism" at the Deputy Prime Minister level and the "China-Indonesia High-Level Economic Dialogue" to enhance cooperation in the areas of political security and economy. These mechanisms will further deepen mutual political trust and bilateral strategic alignment, elevate pragmatic economic cooperation and trade and advance the bilateral comprehensive strategic partnership.[27]

China and Indonesia are presently changing their approaches to maritime disputes. As China increases its economic presence in Indonesia, it is also trying to determine the amount of political support it can expect from Indonesia. China's FDI in Indonesia ranked 9th in 2010, rose to 3rd in 2016 and overtook Japan to become Indonesia's 2nd largest foreign investor in 2017.[28] In tandem with China's increasing economic influence, Beijing believes that if it is not sufficiently tough on South China Sea issues, China's image and status will be reduced.

In 2016, there were three incidents (on 19 March, 2 May and 17 June) between Indonesia and China in the 200 nautical mile EEZ off the Natuna Islands. Nevertheless, Indonesia stated it did not have any sovereignty dispute with China. Notably, China did not react as strongly to the Natuna incidents as it had to similar incidents involving Japan or the Philippines. Another significant event was Indonesia's asserting its sovereignty by renaming the waters near the Natuna archipelago "North Natuna Sea" in July 2017. Jakarta ignored Beijing's protests over the name change. After that, there were no incidents in the Natuna waters for about three and a

half years. During this period, both countries appeared to manage their asymmetric relationship well. Despite concerns about China's growing assertiveness, the 2016 Natuna incidents did not affect economic relations between China and Indonesia (Hughes, 2018).[29]

After the Natuna incident in December 2019, however, Indonesia publicly asserted that China's sovereignty claim was "without legal basis", Indonesia has no overlapping claims with China and Indonesia would never recognize China's "nine dash line" claim, which is also not recognized by the United Nations Convention on the Law of the Sea (UNCLOS).[30] Indonesia's "red line" – using its armed forces to protect its sovereignty – became evident as the Indonesian navy and air force were deployed to the Natuna Islands.[31] It can be seen clearly that the Jokowi Administration's stance on such national interest issues as the South China Sea and foreign vessels fishing illegally in its waters is growing increasingly tougher.

Vietnam and Indonesia tend to diversify their foreign policy options

Hanoi's relations with China can be characterized by its deepening bilateral relations with the US and other major powers and more active participation in regional multilateral mechanisms. Vietnam has established strategic partnerships with numerous countries, such as Russia (2001), Japan (2006), India (2007), China (2008), Korea, Spain (2009), UK (2010), and Germany (2011). Vietnam has also upgraded its relations with Russia and China to "comprehensive strategic" level and entered into "comprehensive partnerships" with Australia (2009) and the United States (2013). The countries Vietnam has relations with typically are: (i) political powers (e.g., members of the UN Security Council, key ASEAN states, and/or influential regional middle powers); (ii) economic powers (e.g., G-20 members and/or countries with which Vietnam maintains significant economic ties); (iii) military powers (e.g. major strategic actors and/or countries that are important sources of arms and military technology transfer for Vietnam); and (iv) countries that have significant roles in the management of the SCS disputes (Le, 2017c).[32] By strengthening relations with these countries, Vietnam seeks to improve its international diplomatic position, facilitate domestic economic development, strengthen its military capabilities and better protect its interests in the SCS.

In addition, Vietnam approaches the SCS issue through multilateral mechanisms, i.e., by building international support through multilateral agreements to counter pressure from China. ASEAN is the main focus in this multilateral approach and Vietnam has always sought to place the SCS issue at the front of the ASEAN agenda. At the July 2010 17th ARF Conference in

Hanoi, for example, more than half of the 27 member countries mentioned the South China Sea issue in their remarks. However, this approach has many limitations. In 2012, when Cambodia was the ASEAN Chair, ASEAN was unable to issue a Joint Statement because of disagreements over the South China Sea issue. This indicates that the effectiveness of this multilateral approach is heavily influenced by external factors Vietnam does not control.

Jakarta's external policies demonstrate a tendency to diversify engagement with the major powers. Indonesia toughened its attitude towards China on the South China Sea issue after it strengthened its Strategic Partnership with the US in late 2015. During the March 2019 Australia-ASEAN summit in Sydney, amid growing concerns about the ascendancy of China, Jokowi even renewed calls for joint patrols in the SCS.

After the Natuna 2019 incident, Indonesia asked for the assistance of the international community in protecting its sovereignty. President Jokowi attempted to secure the assistance of such countries as Japan, the US and South Korea. On January 10, 2020, when Japanese Foreign Minister Toshimitsu Motegi visited Jakarta, Indonesian President Joko Widodo asked Japan to invest in the fisheries, energy and tourism sectors in the Natuna islands. Indonesia and Japan also agreed to "strengthen coastguard coordination". President Jokowi emphasized, "I want Japan to invest in Natuna."[33] According to Minister of Marine and Investment Coordination Luhut Pandjaitan, "American investors have expressed their interest, along with investors from Japan, Korea and China" in investing in the Natuna islands (Aditya, Suhartono, 2020).[34]

In short, Vietnam and Indonesia's China policies clearly demonstrate the three characteristics of hedging: not joining any alliance, being both deferential and defiant towards China, and tending to diversify in their foreign policies. Vietnam and Indonesia also appear to be "heavy" hedgers because they "challenge" China's wishes openly and selectively at the same time, their foreign policy choices tend to be both "political hedging" and "military hedging".

Comparing hedging policies

Since 2013, Vietnam and Indonesia's policies have shown four of the five aspects of hedging that Kuik (2008) proposed, including: binding engagement, economic pragmatism, denial of

dominance and indirect balancing (*See Table 2*). Both Vietnam and Indonesia are considered heavy hedgers because they both engage in political hedging and military hedging. However, the above analysis shows that: Indonesia is actively participating in the BRI, while there are no new infrastructure projects related to the BRI in Vietnam; Indonesia has never openly criticized China for its assertive actions in the SCS, while Vietnam has always steadfastly condemned China's actions and asserted its maritime sovereignty; and Vietnam "invests" in military links with other major countries. These developments constitute evidence that Vietnam is currently hedging more heavily than Indonesia.

Table 2. Vietnam and Indonesia's hedging strategy towards China

Countries	**Hedging Strategy**				
	Risk-Contingency Options		***Return-Maximizing Options***		
	Indirect-Balancing	*Dominance-Denial*	*Economic-Pragmatism*	*Binding-Engagement*	*Limited-Bandwagoning*
Vietnam	Permitted the USS Theodore Roosevelt to visit Vietnam twice; Was invited to QUAD+	Always opposes China's claims regarding the SCS;	Bilateral commercial; *Economic Diversification:* still no BRI project; Declined Chinese financing for the Van Don- Mong Cai highway	Communist party relations; High-ranking visits; Local government relations;	
Indonesia	Strengthening own military; Conducted military exercises in SCS	Quiet, limited deference (2016 Arbitral Tribunal's ruling…)	Linked BRI and "Global Maritime Fulcrum"; Infrastructure development partnership; *Economic Diversification:* In 2020, invited Japan to invest in Natuna, Jakarta-Bandung HR	Vice-premier level dialogue; High-level economic dialogue	

As cooperation with China has the potential of generating major economic benefits, both Vietnam and Indonesia engage in *economic pragmatism* with regards to China. Indonesia has closely linked its GMF with the BRI, especially in the field of infrastructure construction, because this is where Indonesia and China complement each other. According to Indonesian Ministry of National Development Planning data, between 2015 and 2020, Indonesia required

7.2 million Rupiah to upgrade Indonesia's infrastructure, while the Central Government was able to come up with only 25% of the required capital.[35] Meanwhile, China is in overproduction and needs to shift production and excess goods to the outside, especially through infrastructure construction projects. China and Indonesia have agreed to jointly develop infrastructure projects in three provinces along the BRI, North Sumatra, North Kalimantan and North Sulawesi. The Silk Road Fund will invest in three sectors: transportation, industry and tourism, including the construction of ports, airports, railways and tourist terminals.[36]

While Vietnam expresses formal support for the BRI, it is also concerned about the BRI's implementation and its implications for the country. Vietnam and China took two years to negotiate a MOU, indicating there were major disagreements, in particular, regarding priorities (Le, 2018).[37] Some Vietnamese scholars have expressed concerns that the BRI has "implications that transcend economics".[38] Vietnam has refused to award important projects to Chinese investors, as Dr Pham Sy Thanh explained, because getting Chinese loans is neither "cheap" nor "easy".[39] Also, China typically imposes conditions on their preferential loans, including the use of Chinese technology, equipment and contractors. In this regard, Vietnam's abundant experience with the poor performance of Chinese contractors and faulty technology will inhibit its willingness to accept Chinese loans through the BRI, if they come with such conditions.

Thus, it has been difficult for Vietnam to maintain a balance between achieving its economic and security goals, especially after the strong 2014 anti-China sentiments in the country. In other words, the domestic political environment is an important factor driving Vietnam to choose a more pragmatic approach which minimizes security risks and economic dependence, thereby ensuring the legitimacy of the Communist Party of Vietnam.

Vietnam has always directly and immediately opposed China's claims and expansionist actions in the SCS. After the 2014 oil rig incident, Vietnam initially objected to the activities of "foreigners" in Vietnam's waters without Vietnam's permission (Ministry of Foreign Affairs spokesperson on May 5, 2014). However, on May 11, at the 24th ASEAN Summit in Myanmar, for the first time, the Prime Minister of Vietnam publicly denounced China for bringing the HYSY-981 and escort ships into Vietnamese waters. Following that, Vietnam submitted diplomatic notes against China at the United Nations and notified many international organizations that China had violated Vietnam's sovereignty in the SCS.[40] Immediately after

the Arbitral Tribunal decided for the Philippines in the China case and denied Beijing's nine-dash claim, the Vietnamese Foreign Ministry issued a statement welcoming the Tribunal's decision: “Vietnam welcomes the Arbitration Court issuing its final ruling” (VnExpress, 2016).”[41] In April 2020, when China announced the formation of the so-called “Xisha district” and “Nansha district” in the so-called “Sansha city” in the South China Sea, Vietnam “strongly protest[ed] China's establishment […] as they seriously violate Vietnam's sovereignty”.[42] Thus, Vietnam's responses and policies towards China’s expansion in the SCS have always been consistent -- Vietnam does not hesitate to strongly and directly protest against China’s actions.

Before the Natuna incident, Jakarta had never opposed China directly on SCS issues. Indonesia had always claimed there was no dispute at sea between Indonesia and China. It was only after the Natuna incident that Jakarta publicly criticized China's claim and action as illegal. This indicates that politically and diplomatically, Vietnam’s position on China on SCS issues is sterner than Indonesia’s.

Indonesia's reaction to the 2019 Natuna event is considered high-profile as its foreign ministry further reiterated that Indonesia did not have any overlapping jurisdiction with China and that Jakarta would “never recognise China’s nine-dash line because it is contrary to UNCLOS in accordance with the 2016 tribunal’s ruling”.[43] There are three factors driving Indonesia's increasingly proactive and tough maritime policy. First, Jakarta’s primary concern is development, which includes protecting the livelihoods of 2.4 million Indonesian fishermen. After practicing a policy of sinking illegal foreign fishing vessels encountered on Indonesian fishing grounds, Indonesia's fish stocks doubled, and at the same time, almost 10,000 illegal foreign fishing vessels, mainly from China and Vietnam, have disappeared (Heydarian, 2018).[44] Next, Indonesia is concerned about China’s "nine-dash line" which partially overlaps the energy-rich sea beds near the Natuna islands. In recent years, Indonesia has increased its military presence in the Riao islands and increased its defense budget, with a focus on its navy and air force. Last but not least, President Jokowi’s just underwent a second election, with “China issues” being considered. Therefore, President Jokowi needs to show his determination to protect Indonesian sovereignty in order to strengthen the populace’s confidence in his government.

Despite Indonesia’s invoking the Arbitral Tribunal’s 2016 ruling after the 2019 Natuna incident, officials from both countries, such as the Chinese Ambassador Xiaoqian and the

Indonesian Minister of Coordination of Maritime Affairs and Investment Luhut Pandjaitan, have stated that the Natuna incident would not affect economic cooperation between the two countries.[45] Both sides seem to want to ease tensions in the Natunas as Indonesia's nationalism is on the rise and the Jokowi administration does not want the country to shift its focus away from economic development (Suryadinata, 2020).[46]

While the Jokowi Administration's response following the 2019 Natuna incident is considered to be the toughest ever, Indonesia's military hedging primarily consists of increasing the strength of its military by purchasing up-to-date arms and equipment and engaging in joint exercises. Since the Natuna incident, Indonesia's armed forces have established a Maritime Information Center to track and intercept vessels deemed to be violating its EEZ. However, such moves may be moot in view of Indonesia and China improving their defense relations, in the context of coping with the Covid-19 pandemic. On December 15, 2019, Indonesian Defense Minister Prabowo Subianto embarked on his first working visit to China to discuss cooperation in the defense sector.[47] On March 23 and May 12, 2020, Indonesian and Chinese military aircraft transported medical equipment and supplies from China to Jakarta.[48] In July 2020, Indonesia conducted exercises in the vicinity of the Riau islands in the South China Sea to build up strategic capabilities, with an eye towards defending the Natuna islands.[49]

In the context of China being involved in numerous South China Sea incidents, the USS Theodore Roosevelt's visit to Vietnam from March 5 to March 9, 2020 is not only an important symbol of Vietnamese-US cooperation, but also expresses the readiness and ability of the US to participate in SCS issues.[50] While Vietnam steadfastly maintains its position of not aligning militarily with another power, the second visit of the USS Theodore Roosevelt since Vietnam's liberation in 1975 indicates the possibility of "hedging" militarily when relations with China are uncertain.

On March 20 and 27, 2020, Vietnam, South Korea and New Zealand participated in video teleconferences with the QUAD countries (Australia, India, Japan, and the United States) to discuss coronavirus remedies and post-pandemic strategies to revive their economies.[51] Vietnam's joining "QUAD Plus" is currently unlikely because of its "Three Nos" policy, especially since QUAD is ambiguous about the difference between a "military" and an "economic" alliance.[52] But Chinese interference with projects in Vietnam's territorial waters is motivating Vietnam to shore up its defense relationships with partners, including Australia,

Canada, India and the United States.[53] Thus, it can be seen that, in terms of military hedging, Vietnam's approach seems to be "heavier" than Indonesia's.

Factors driving Vietnam's and Indonesia's hedging policies

Why do Vietnam and Indonesia hedge?

Both Vietnam and Indonesia have chosen hedging, not balancing or bandwagoning, as their optimal choice.

First, neither country chooses balancing. Regarding Indonesia, although there are tensions regarding overlapping claims around the Natuna islands' EEZ in the South China Sea, they are not sufficient to become an existential threat to Indonesia.[54] Besides, in these disputes, China's attitude toward Indonesia in these disputes is not as severe as its responses to similar situations involving Japan and the Philippines. Meanwhile, as Indonesia is benefiting from its economic relations with Beijing -- in 2018, China surpassed Japan to become Indonesia's second-largest investor -- there is no reason for Indonesia to adopt a balancing policy towards China. Vietnam's relationship with China, considering China's overwhelming economic strength and population, can only be an asymmetric one. The power imbalance makes balancing an imprudent choice for Vietnam. In addition, of the four ASEAN states with territorial disputes in the SCS with China, Vietnam is the only one which shares a land border with China, bearing the most risks because of the "tyranny of geography" if its dispute with China deteriorates into conflict. As balancing is rigid, Vietnam has chosen not to balance in its relations with China.

Second, neither country has adopted bandwagoning. Both countries have important sea lanes traversing their respective EEZs and are thus important to China's development plans. Vietnam bridges China and mainland Southeast Asia, while Indonesia connects China and maritime Southeast Asia. In addition, Vietnam and Indonesia are two regional powers which have exercised their power to establish hegemonic order in their immediate neighborhoods (Emmers, 2005).[55] Bandwagoning is likely to lead to political and economic concessions, undermining the legitimacy of the Vietnamese and Indonesian governments and provoking anti-China sentiment. Indonesia has experienced social unrest during which Chinese Indonesians and their businesses were targeted, when anti-China sentiments were high because of the use of Chinese

labor in BRI projects. The "Chinese issue" was an important one in the 2019 Indonesian Presidential election. In Vietnam, the HYSY-981 oil rig incident led to unprecedented large-scale protests. Thus, the Indonesian and Vietnamese governments cannot adopt bandwagoning as they will face domestic opposition, which may lead to a crisis in legitimacy and domestic instability.

Differences in Vietnam's and Indonesia's hedging strategies

As Vietnam and Indonesia have had different experiences with China, the degree of their hedging differs. The rationales behind the differences in Vietnam's and Indonesia's China policies are as follows.

First, regarding geography, Vietnam is geographically proximate to China. Moreover, Hanoi is a thorn in China's side regarding the SCS disputes. So, changes and developments pertaining to China impact Vietnam faster and more heavily than other ASEAN states. Indonesia does not share a land border with China and it is not a major player in the SCS disputes. Thus, Chinese assertiveness is less of an immediate threat to Indonesia. Consequently, Vietnam is more sensitive to any development pertaining to China, which requires Vietnam to carefully "build" protective fences as security fallbacks against an assertive China. In an asymmetric relationship, smaller states have a greater need to assert their autonomy before a bigger state. As Vietnam cannot readily rely on China for security and cannot "exchange security interest for economic benefits," it is cautious about BRI-related projects. Meanwhile, Indonesia positively seeks BRI cooperation because geographical distance provides Indonesia "hedging" space in its relations with China.

Second, regarding elite domestic legitimation, since taking office, President Jokowi has upheld economic nationalism as a response to the domestic dynamics that challenge the legitimacy of his government. Jokowi's development strategies focus on improving public services, primarily infrastructure, health care and education. The politicization of economic and social issues is a serious challenge since Indonesian parliamentarians have a duty to carefully review executive policies and propose changes, if required. As the Jokowi coalition holds only about 40% of the seats in the House of Representatives, there is great pressure on the Jokowi administration to promote economic development to maintain their legitimacy to rule. The Jokowi administration even significantly reduced oil subsidies to develop the infrastructure necessary to boost the manufacturing sector. Thus, economic and infrastructure development are key tasks which

strengthen the legitimacy of the incumbent government.[56] While the potential for conflict with China in the SCS is real, Indonesia is not a claimant. As the BRI focuses on building infrastructure, it is pragmatic for Indonesia to promote connectivity and cooperate with China's BRI.

For Vietnam, the legitimacy of the Communist Party of Vietnam (CPV) is based not only on economic development but also nationalism. From its establishment in 1930 to 1975, the CPV's legitimacy has been based on its historical role in liberating and unifying Vietnam. By the mid-1980s, when the historical sources of legitimacy have diminished, socio-economic performance emerged as the single most important source of legitimacy for the CPV. However, socio-economic development requires extensive external exchanges, which is a difficult task for the CPV. Thus, the CPV has used nationalism, as in its response to rising tensions with Beijing in the SCS, to protect its legitimacy.[57] Vietnam is one of the four ASEAN states that have maritime disputes with China, has undergone a thousand years of Chinese domination and has also won numerous military conflicts against China. For this reason, the Vietnamese people, as well as the Vietnamese elite, cannot accept Chinese dominance again. Consequently, regarding such core interests as the SCS issue, Vietnam never "gives in" when it makes statements opposing China, even though it is the smaller state in the asymmetric relationship. Therefore, while Vietnam appreciates the economic benefits from relations with China, the Vietnamese government always upholds the spirit of nationalism. This explains why Vietnam fiercely opposes China's expansionist actions in the SCS and is not willing to participate in questionable economic projects with security impact. Meanwhile, although anti-China and anti-communism issues have historically existed in Indonesia, since China does not challenge Indonesia on maritime issues, the SCS dispute is not a high-profile issue in Jakarta. Accordingly, Indonesia, before the Natuna incidents, never made any direct statements against China in disputes at sea. Indonesia's stronger response to the 2019 Natuna incident was due to President Jokowi being newly re-elected and thus has to show his determination to protect Indonesian sovereignty.

Third, regarding historical experiences, Vietnamese elites remember how it relied on Soviet power to counter threats during the Cold War, while Indonesia remembers its bitter history fighting the Dutch to gain its independence. Hence, both countries are reluctant to forge relationships which are too close with any power.

Vietnam has relied on one power to balance threats from another. Specifically, Vietnam relied on Soviet help to oppose French imperialism from 1950 to 1954 and the U.S. from 1954 to 1975. The former Soviet Union provided Vietnam with weapons aid, military equipment, and military advisors (nearly 11,000 advisors were sent). Besides sharing the same ideology as the Communist Party of Vietnam, the Soviet Union provided aid to Vietnam to prevent the spread of American influence in Southeast Asia. The Soviet Union considered Vietnam to be an outpost of the socialist faction in Southeast Asia.[58] In addition, according to Radchenko (2018), because the new Soviet leader was facing a lack of legitimacy, helping Vietnam in its fight against imperialism would accord them the right to succeed to the socialist leadership.[59] Help from the Soviet Union contributed greatly to Vietnam's victory in its two resistance wars against the French colonialists and the U.S. As Vietnam has successfully relied on one power to reduce its asymmetry with other powers, it is willing to consider the possibility of "investing in military hedging" with other powers, without "crossing the red line" of entering into alliances.

Meanwhile, Indonesia has had negative experiences with the "help" provided by other powers. When World War II ended, British troops restored the political situation in several countries to their pre-war state, suppressing communist and national liberation movements in the process. After Japan surrendered to the Allies in August 1945, British troops entered Indonesia to force Japanese troops out of Indonesia, while simultaneously paving the way for the return of the Dutch. British intervention in Indonesia in 1945-1946 led to fierce conflict among the Indonesian nationalist forces and the Japanese and the Dutch. During the 14-month period of British intervention, about 620 British and Indian soldiers were killed, 1447 wounded, and 327 missing.[60] In addition, during the East Timor crisis, the Indonesian elite felt betrayed by the West, especially Australia.[61] They felt that, instead of supporting Indonesia's territorial integrity, the West took advantage of its predicament to separate East Timor from Indonesia. Even before East Timor became the independent state of Timor Leste, Indonesian political elites had been disappointed with their country's "over-dependence" on the West, especially the U.S.[62] Due to these negative experiences, Indonesia is reluctant to forge relationships which are too close with other powers in military matters, including the U.S.

Because of these historical experiences of relying on one power to counter another, Vietnam has invested more in strengthening its own military and strengthening military links with other major countries, including the United States. This explains why Indonesia also strengthened

itself militarily. It held military exercises in July 2020 and invited other countries to invest in Natuna, while keeping its distance from major powers. Consequently, Vietnam is viewed as having stronger military linkages as it calls for defense cooperation with other major countries and allowed US military ships to visit twice in two years.

Conclusion

Hedging has emerged as the optimal strategic choice for ASEAN states because balancing and bandwagoning are detrimental to their domestic interests. More importantly, domestic political factors make the hedging policies of different countries different in practice. Vietnam and Indonesia are "heavy hedgers". Differences in geographical location, elite domestic legitimation requirements and historical experiences have led Vietnam to hedge more heavily than Indonesia. Comparing how ASEAN states hedge helps identify the differences in China's policies towards them. Further research should be conducted on how small states manage the asymmetry in their relations with China.

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CHAPTER 2

LINKING BOARD COMPOSITION, GENDER DIVERSITY AND FINANCIAL PERFORMANCE: A REVIEW OF LITERATURE

LAU SHU CHUI & ANDIKA AB WAHAB

Abstract

In the past few decades, there has been significant development of global corporate governance, particularly in the area of gender diversity. As firms commit to increasing boardroom diversity, there has been a ripple effect in the emerging markets, especially among developing countries where gender equality in the corporate sector has been less emphasized. This article reviews the existing theoretical and empirical research on the convergence between board composition, gender diversity and their links to financial performance. Our literature review found mixed results on the impact of gender diversity on firms' financial performance. While some empirical research suggested that the increased participation of women directors on corporate boards enhanced decision-making, others indicated that the presence of women directors constrained strategic change (or transformation), which eventually resulted in performance volatility. We conclude that this article provides useful insights and lessons, especially for such developing countries as Malaysia.

Introduction

In the past few decades, the developed countries have led in the significant development of corporate governance and practices, specifically in the area of gender diversity. In the United Kingdom (UK), for instance, the publication of the Cadbury Report in 1992 paved the way for such legislative developments on corporate governance as the establishment of the UK Corporate Governance Code, which requires corporations to increase boardroom diversity. In 2013, Norway became the first country to implement a gender-balancing quota requiring that at least 40 percent of the board of directors of publicly listed Norwegian firms are female. Currently, countries such as Austria, Finland, the Netherlands, Spain and Sweden have adopted

a voluntary target of between 25 and 40 percent of female representation on their boards of directors.

These significant corporate expectations and practices around gender diversity in board composition have had little effect in developing countries, where gender equality in the corporate sector is less emphasized and regulated. Existing studies indicate that corporations in such developing countries as Malaysia are unconvinced that gender diversity in board composition would have positive impact on their financial performance (Yap et al., 2017). Corporations have also claimed that the slow progress in making their boards more diverse is due to the lack of eligible women candidates (CG Monitor, 2019), despite the steady increase in the number of female university graduates who can fill corporate positions and eventually move up the corporate ladder.

This article reviews the impact gender diversity on corporate boards has on financial performance. We present the existing theoretical discourse linking board composition, gender diversity and firms' performance. We then consider the insights provided by empirical studies into the links among board composition, gender diversity and firms' performance. Finally, we suggest areas worthy of further research. This article relies on readily available secondary sources to provide a baseline understanding for future empirical research.

Theoretical Discourse on Board Composition, Gender Diversity and Performance Nexus

The typical responsibilities of a board of directors include: (i) monitoring and directing managers; (ii) providing information and counsel to managers; (iii) monitoring compliance with applicable laws and regulations; and (iv) linking the firm with its external environment (Carter et al. 2010). The composition of a board of directors has significant influence on how these responsibilities are performed and partially determines the firm's financial performance (Carter at al., 2010). When it comes to gender diversity in board composition, scholars have contended that the link between gender diversity in board composition and firm financial performance is tenuous, where no single theory can fully explain this symbiotic relationship (Terjesen et al., 2008; Carter et al., 2010; Mateos de Cabo et al., 2011). In this section, we

review the existing theoretical discourse on board composition, gender diversity and corporate performance.

The role of a board of directors in monitoring and controlling managers is a fundamental concept in agency theory (Carter et al., 2010). Drawing on agency logic (see Jensen & Meckling, 1976), scholars have asserted that a board of directors with a diverse composition increases the board's independence. Here, board independence is critical to protecting the shareholders' interests and balancing the acts of the Chief Executive Officer (CEO), eventually enabling the board to effectively monitor and direct the firm's management. Theoretically, there are two main agency challenges, especially in publicly listed companies. The first challenge is managing actual and potential conflicts between managers and shareholders, while the second is managing actual and potential conflicts between majority and minority shareholders.

In agency theory, the principal-agent problem involves two parties, the principal and the agent (Jensen & Meckling, 1976; Fama, 1980; Eisenhardt, 1989). Within agency theory, the principal often wishes to employ the agent to work in the principal's interest. In the case of publicly listed companies, ownership and control are separated, where shareholders hold property rights while managers control the company (Jensen & Meckling, 1976). This is also known as a *Type I* agency conflict. However, it must be noted that, though more efficient monitoring of management may impact firm financial performance positively, agency theory provides no clear link between board diversity and firm financial performance (Marinova et al., 2016). From the point of view of optimal contracting, the information asymmetry between principal and agent, where the agent usually possesses more information about the firm can be substituted by increased monitoring of the agent. In this case a trade-off is made between agency costs and monitoring costs.

In addition to agency theory, resource dependency theory also explains the links among board composition, diversity and firm performance. Generally, a firm depends on external resources to perform and expand its market and operations, including suppliers and creditors. Resource dependence theory explains how external resources of the firm affect organizational behaviour and eventually its performance (Terjesen et al., 2008). As corporate boards serve as a bridge between a firm and external organizations (or resources), resource dependence theory helps explain how diversity in board composition determines the firm's financial performance (Hillman et al., 2002). Here, board diversity reflects both gender and ethnic diversity in

influencing the decision-making process. Specifically, Carter et al. (2010) claim that gender diversity plays a significant role in a firm's decision-making process.

Given the significant role of board members in the corporate sector, companies hire or retain board members, especially those with the required skills and ability, with optimal pay based on performance and incentives (Hermanson, Tompkins, Veliyath & Ye, 2011). Firms also attract and hire a CEO with the appropriate skills and competencies, even if that necessitates the firms paying a premium remuneration. Maintaining a diverse board (i.e., gender and ethnicity) requires a balancing act of the CEO and securing the shareholders' and external partners' interests.

Human capital theory complements resource dependence theory, especially on how the education, experiences and skills-sets (i.e., collectively referred to as 'human capital') of directors can benefit firms. Carter et al. (2010) assert that human capital is a key determinant that influences firms' financial performance. From the human capital theory perspective, Hillman et al. (2002) suggest that female directors offer unique perspectives, experiences and work styles and this eventually influences the way firms perform. Lucas-Perez et al. (2015) point out that the presence of female directors enriches board decision-making. Other scholars such as Terjesen et al. (2008) stress that gender diversity in board composition has significant impact on the firms' performance. However, the impact of gender diversity on board composition can be both positive and negative (Carter et al., 2010).

Social psychological theory explains how the group dynamics inside boardrooms influence firms' decision-making process and governance. Directors who are able to form a major coalition in a firm have the ability to exert a disproportionate amount of influence on group decisions (Mateos de Cabo et al., 2011). Therefore, according to social psychological theory, the minorities on a board may be side-lined, or, at minimum, be less influential in the decision-making process (Carter et al., 2010). Social psychological theory also suggests that board diversity can have a positive impact on group dynamics by encouraging different ways and perspectives of arriving at decisions that will eventually help firms meet their financial targets (Westphal & Milton, 2000). However, scholars such as Campbell and Minguez (2008) contend that board diversity, including gender diversity, affects decision-making processes negatively, particularly as it leads to time-consuming and less effective processes.

Empirical Studies on Gender Diversity in Corporate Governance

As public awareness of the importance of social inclusion and gender equality in both public and private sectors increases, board diversity has been the focus of much research. Current empirical research on board diversity can be divided into two broad categories (Milliken & Martins 1996; Pelled, 1996), namely, demographic and non-visible attributes. The demographic category refers to such observable characteristics as gender, race, and academic level, while non-visible attributes include knowledge, skills, profiles and individual capabilities.

Within the demographic category, gender diversity has been the subject of much research (Rosenzweig, 1998). Some researchers favour gender diversity, while others do not. Williams and O'Reilly (1998), for example, suggest that gender diversity has many facets and leads to moderate group decisions. Consistent with this view, prior research has shown that boardroom gender diversity can mitigate conflicts of interest between stakeholders and shareholders (Mangen & Magnan, 2012: 1).

Bart & McQueen (2013) assert that females engage in participatory decision making because they feel less constrained by the rules, regulations, and other modes of operating that impact their male counterparts' normative reasoning. Bart & McQueen found that female directors pay due attention to the interests of various stakeholders and make fair decisions when facing competing interests. These characteristics promote good corporate governance. Similarly, prior studies have indicated that female directors are more active in monitoring activities than male directors. Female directors have fewer attendance issues than men (Adams & Ferreira, 2009). Nielsen and Huse (2010) highlight that a higher proportion of women on boards is associated with better strategic control. This is because women are more conscientious and take their responsibilities more seriously than men. In other words, as female directors are more efficient and focused than men (Adams and Ferreira, 2009), they increase their boards' independence (Lucas-Perez et al., 2015).

Beyond top-level management such as boards of directors, existing research also highlights the increasingly active participation of females in the workforce and economic activity. Arguably, this development is associated with the growing calls for gender equality across all walks of life (Asian Development Bank, 2015).

Despite these advantages, other studies indicate the negative impact of gender diversity. Prior studies suggest that director diversity constrains strategic change in firms (Goodstein, Gautam & Boeker, 1994) and often exacerbates conflict through the creation of schisms among directors (Veltrop, Hermes, Postma & de Haan, 2015). Additionally, Giannetti and Zhao (2018) argue that diversity has direct cost and benefit implications, which lead to performance volatility. Diversity may lead to inefficiencies, especially in the decision-making process and conflict management in the boardroom.

The increase in firm sizes and complexity in operations (e.g., complex supply chains) lead to board of directors having more complex roles. From the perspective of corporate governance, the formation of different committees to handle different board functions improves efficiency and transparency. As the directors' functions become more specialized and complex, specific skills are necessary for directors to effectively fulfil their responsibilities. Newly appointed directors need time to understand, gain knowledge, skills and exposure to perform their duties effectively. Ellig (2014) notes that experience is an important element that helps directors gain exposure and deliver what is expected of them. As such, frequent changes of directors should be avoided to ensure that firms benefit from the newly appointed directors on their boards. When these directors perform effectively, their firms' financial performance improves. This is a relatively new direction of study outlined by Kolev et al. (2019).

Existing studies have attempted to relate women representation on boards with financial performance (see Bratton, 2005; Krook and O'Brien, 2012), although there is little explanation as to how the presence of women on boards actually increases financial performance. Kanter (1977a) emphasizes that the presence of more women on boards leads to less stereotypical behaviour and functional segregation. However, Kanter's study does not directly explain whether increased female representation on boards leads to positive financial performance.

As mentioned earlier, boards that are more diverse make less risky decisions and perform better. Existing studies of gender diversity and firm performance have generally been mixed (Post & Byron, 2015). For example, having more female directors introduces different values and interests and a different understanding of values (Adams & Ferreira, 2009; Post & Byron, 2015).

Nguyen and Faff (2007) and Singh, Vinnicombe, and Johnson (2001), for example, found that boards which are more gender diverse generate higher returns on assets, which trigger positive reactions on the stock market. Similarly, Bernile et al. (2018) found that diversity on a board results in less risk taking and better corporate performance. In contrast, prior research conducted by Carter et al. (2010) in the United States found that the ethnicity or gender of a firm's directors does not impact the firm's financial performance. Carter et al. (2010) reinforced Adams and Ferreira's study (2009), which suggest there is no reason to implement gender quotas. Darmadi's study (2011) found that female directors tend to decrease firm performance. As Darmadi (2011) found that companies with a high proportion of females on boards usually do not have increased returns but keep the stock market index intact, he concluded that women board directors might have a negative impact on their firms' financial performance.

Fan's study (2012) in Hong Kong found that boards which were more gender and nationality diverse are likely to perform better and are more independent. However, findings varied depending on the different proxy measurements of diversity on boards. Furthermore, companies on the Madrid stock exchange found that women directors with new ideas, views and skills increase their firms' financial performance (Reguera-Alvarado et al., 2015). Reguera-Alvarado et al. (2015) also argue that, as women on boards are socially visible, they attract more talented directors to their boards. This is supported by Reguera-Alvarado et al.'s findings (2015) that an important aspect was that, in accordance with a recent law, the firms had 40% females on their boards, thus making the proportion of females in the sample larger. This means that board gender diversity is strongly associated with improved corporate financial performance.

In Denmark, a gender quota has yet to be incorporated into the regulatory framework, including the code of corporate governance. A study conducted in Denmark found no significant relationship between board diversity and firm financial performance (Rose, 2007; Linden, 2014). Mateos de Cabo et al.'s study (2011) in Europe also found no clear relationship between gender diversity and financial performance, although female directors tend to sit on the boards of low-risk banks. This means that when a firm or bank assumes a significant level of risk, it is less likely to hire women since women are perceived as less skilled in making the risky decisions that are necessary for the bank's success (Mateos de Cabo et al., 2011).

Conclusion and Future Research

This article discusses the convergence of the issues of board composition, gender diversity and financial performance. Our review of the literature found mixed results on the impact of gender diversity on the financial performance of firms. While some empirical research suggests that increased participation of women directors on boards enhance decision-making processes, other research indicates that the presence of women directors constrains strategic change (or transformation), which eventually leads to performance volatility. Thus, the link between gender diversity and financial performance has not been clearly established. Further research is needed to provide clarity on the nexus between gender diversity and financial performance. We also found that existing research focuses primarily on large and publicly listed corporations. Very little research has been conducted on the presence of women directors on the boards of small and medium-sized enterprises. Thus, future research should examine the effect of gender diversity on the top and senior level management of small and medium-sized enterprises.

Though this article was written without a particular country-context, it provides useful insights and lessons for such developing countries as Malaysia. For the record, the Malaysian Code on Corporate Governance (MCCG), revised in 2007, 2012 and 2017, requires firms to strengthen their commitment to gender diversity, including securing at least 30% of women directors on their boards of directors. A comprehensive assessment should be conducted of Malaysian companies' commitment to gender diversity on their boards, with the view of aligning with global standards.

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CHAPTER 3

THE ROLE OF ENERGY CONSUMPTION AND GDP IN CO2 EMISSIONS: A TIME SERIES ANALYSIS OF MALAYSIA

QICHUN WU & ANDREW KAM JIA YI

Abstract

This is of a study of the relationships among CO2 emissions, energy consumption, renewable energy consumption and Gross Domestic Product in Malaysia. It is based on Malaysia's time series data from 1990 to 2014 and uses the multivariate VAR system, Toda-Yamamoto Granger causality and impulse response function to examine how these variables are linked. This study shows that there are significant and bi-directional relationships between GDP and energy consumption. Increase in energy consumption and GDP are positively correlated with CO2 emission, while renewable energy consumption is negatively correlated with CO2 emission. However, there is no correlation between renewable energy consumption and economic development.

Introduction

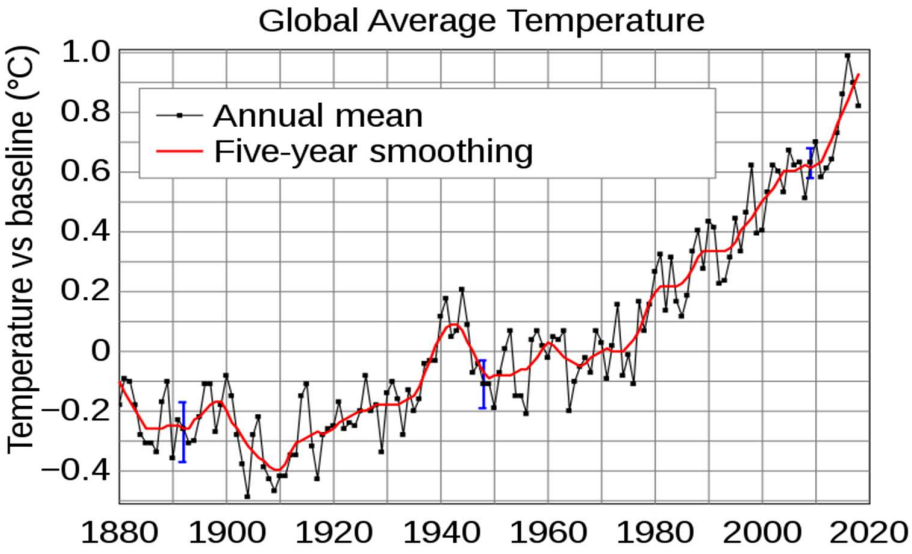
Global warming has caused severe environmental problems all over the world. Climate change has been linked to more frequent natural disasters (Van Aalst, 2006), more diseases (Datar et al., 2013), decreased labour productivity (Chavaillaz et al., 2019) and increased cumulative social cost of carbon emissions (Rasiah et al., 2017). The damage wrought by climate change occurs as sustainable development – the long-term continuous development of society, while preserving natural resources for future generations – grows in significance. To achieve sustainable development, three fundamental approaches – economics, environmental and social development – are used (Ciegis et al., 2009; Ghosh, 2008; Pierantoni, 2004). The economics approach includes the allocation of energy resources to ensure environmental sustainability and

improve social development. However, the use of energy resources increases carbon emissions, which pollute the air, harm the environment and lead to global warming.

Figure 1 shows the average global temperature over the past 50 years. A major reason for the increase in temperature is greenhouse gas (GHG) emissions. As Malaysia moved from an agricultural to an industrial economy, national energy usage accelerated 248% from 1990 to 2014. Thus, at the 2009 "United Nations Climate Change Conference (COP-15)" in Copenhagen, Malaysia voluntarily committed to "reduc[ing] greenhouse (GHG) emissions by 40% by 2020 (from 1990 levels)".

Efforts by Malaysia can be seen at the Palm Oil Trade Fair and Seminar in January 2021. Datuk Ravi Muthayah, Secretary-General of the Ministry of Plantation Industries and Commodities, committed to Malaysia reducing GHG emissions 45% from 2005 levels by 2030. The national oil corporation, Petroliam Nasional Bhd (Petronas), has pledged net zero GHG emissions by 2050. The use of renewable energy increased from 2% in 2008 to 10% in Malaysia, against the 20% target in 2050. The recent LSS4 (large scale solar programme) award by the Energy Commission increased the use of renewable energy by 3%. Considering the advantages of undertaking early efforts to avoid the extremely high remedial costs later, it is inevitable that Malaysia will embrace net-zero carbon emissions.

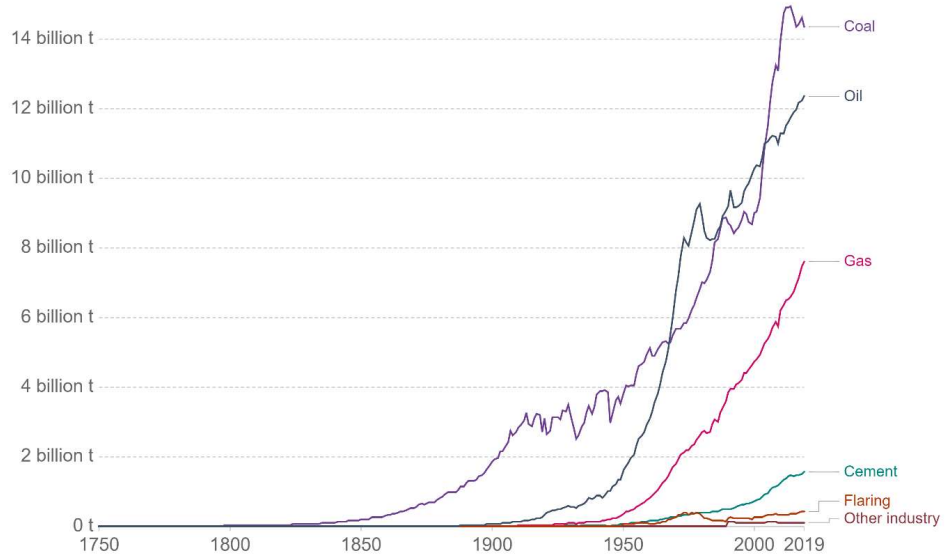
Figure 1: Average Annual Temperature of the Earth's Surface



Source: NASA (National Aeronautics and Space Administration)

According to the "Global Carbon Project (GCP)" and "the Carbon Dioxide Information Analysis Center (CDIAC)[1]", global CO2 emissions are primarily caused by the use of such fossil fuels as coal, oil, and gas (as shown in Figure 2a). Due to high energy consumption for economic development, CO2 emissions are expected to increase further, despite efforts by multiple countries to reduce carbon emissions. Figure 2b shows Malaysia's CO2 emissions in the 20th century. It is evident that after 1980, there was a sharp increase in CO2 emissions, especially from the use of oil, coal, and gas. Whether these emissions are attributable to Malaysia's economic growth is the key question this paper seeks to answer. The determinants of CO2 emissions, such as the level of energy consumption and renewable energy consumption, serve as intervening variables in the analysis.

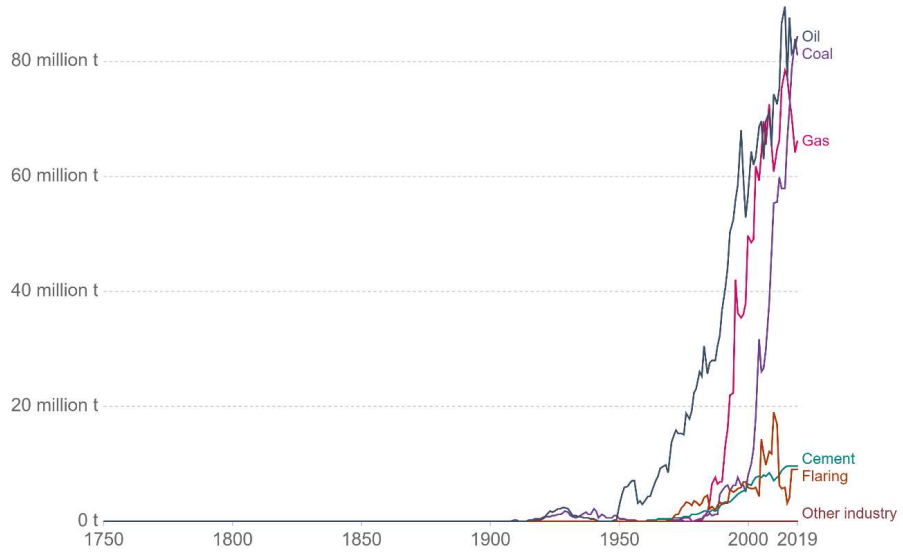
Figure 2a The Global CO2 emissions by fuel



Source: Global Carbon Project (GCP) and CDIAC

[1] "The Carbon Dioxide Information Analysis Center (CDIAC) was an organization within the United States Department of Energy that had the primary responsibility for providing the US government and research community with global warming data and analysis as it pertains to energy issues". **This is from Wikipedia and should be cited accordingly.**

Figure 2 b The CO2 emission (million tons) of Malaysia



Source: Global Carbon Project (GCP) and CDIAC

This analysis of the relationships among CO2 emissions, energy consumption, renewable energy consumption, and economic growth (as indicated by Gross Domestic Product, GDP) indicates that Malaysia's CO2 emissions are increasing significantly. In 2018, Malaysia's CO2 emissions were 250.3 million tons, up from 241.6 million tons in 2017 (BP Statistical Review of World Energy, 2019). While this study discussed earlier the relationships among CO2 emissions, energy consumption and economic growth, it will now briefly discuss the nexus among renewable energy and all these variables, as climate change presents both risks and opportunities. Due to increased awareness of the damage caused by carbon emissions, enterprises are becoming increasingly "carbon-sensitive".

Enterprises are expanding their businesses into such environmentally friendly sectors as renewable energy, green buildings, climate-smart agriculture, and urban financial products and services. Support from the government and the contributions of these enterprises play a critical role in a country's transition to a low carbon economy. Renewable energy here is key in reducing carbon emission. While most Asian countries lack the capacity to produce and use renewable energy, strong efforts have been made to develop this new technology in view of its economic and environmental benefits. Malaysia introduced the National Green Technology

Policy in 2009 to support the adoption of renewable energy technology. The Renewable Energy Act in 2011 further provided for the establishment and implementation of a Feed-in Tariff (FiT) scheme to catalyze the generation of electricity from renewable energy sources. In 2016, additional mechanisms were implemented to enhance renewable energy usage in Malaysia and ensure that the Renewable Energy Act targets and the Eleventh Malaysia Plan are achieved[2]. Looking ahead, the Malaysian government will promote the Low Carbon Cities Framework (LCCF) through Greentech Malaysia (Malaysian Edge Organization, 2019).

Literature review

This paper adopts the following working definitions. *CO2 emission* is defined as the release of carbon into the atmosphere and this CO2 is the main reason for climate change (Collins and Knutti, 2013; Dunn et al., 2020; Lindsey, 2009; Lüthi et al., 2008). Industrial development creates CO2 emissions through the burning of fossil fuels, which is a form of energy consumption. R*enewable energy,* which is collected from such renewable elements as the sun, wind, hydrogen, and geothermal, is cleaner than fossil fuels. *Gross domestic product (GDP)* is a monetary measure of the market value of all final goods and services produced in a certain period. There are many studies on the relationship between energy consumption and CO2 emissions. Al-Mulali et al. (2012) found that in most African countries, energy consumption is positively correlated with CO2 emissions. Still, in low-income countries, there is no relationship between energy consumption and CO2 emissions. Zaman et al. (2021) found that in China, renewable energy consumption helps reduce carbon emissions.

From a study of firms in China, Liu et al. (2020) concluded that a reduction in energy consumption reduces carbon emission. Wu et al. (2020) found that energy consumption significantly increases carbon emissions. In a comparison of energy consumption in the western and eastern regions of China, Wu et al. (2020) found that environmental regulations were key. In the poorer regions, where there were fewer regulations, more energy was consumed, thus increasing carbon emissions. They also found that when energy was consumed more efficiency, carbon emissions in the transportation industry were mitigated. Khan et al., (2020) found that the consumption of renewable energy was negatively correlated with carbon emission. Thus,

[2] MALAYSIA THIRD NATIONAL COMMUNICATION AND SECOND BIENNIAL UPDATE REPORT TO THE UNFCCC.

to investigate the relationships between energy consumption and carbon emissions, we hypothesize:

H1a: Total energy consumption is positively associated with carbon emissions.
H1b: Renewable energy consumption is negatively associated with carbon emissions.

The relationship between economics and carbon emissions will allow policymakers to balance development and environmental protection. There are numerous empirical studies on the relationship between economic growth and CO2 emissions. Salahuddin et al. (2016) investigation of the relationships between economic growth and CO2 emissions in OECD countries by panel data analysis concluded that economic growth does not significantly influence CO2 emissions. Tamazian et al. (2009), however, found that increased economic development reduces CO2 emissions. Jalil and Feridun (2011) found that economic development negatively influences CO2 emissions. But Zhang (2011) found reverse causality, where economic growth significantly increases CO2 emissions. Ozturk and Acaravci (2013) documented that, in Turkey, economic development does not influence the quantity of carbon emissions. In all these studies, the relationship between economic development and carbon emissions is not linear. There are also studies where the relationships between carbon emissions and economic development are not significant (Ehigiamusoe et al., 2020). Thus, to investigate the relationship between economic development and carbon emission, we hypothesize,

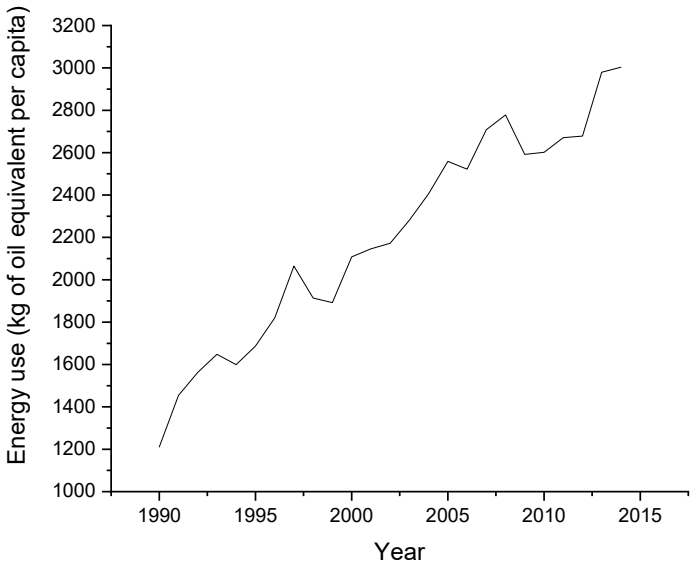
H2: Economic growth will be positively associated with quantity of carbon emissions.

The rapid increase in energy consumption required for economic growth contributes to environmental degradation (Asif et al., 2015). Salahuddin and Gow (2019) found that, in Qatar, there is bidirectional causality between economic growth and energy consumption. Zaman et al. (2021) documented that increasing renewable energy consumption will help reduce CO2 emissions in both the long and short term in China. Wasti and Zaidi (2020) associated economic growth with increased energy consumption, which significantly increases CO2 emissions. Liu et al. (2020) documented that, while energy conservation policies and reduced fossil fuel energy consumption will decrease economic development in the short run, the economy benefits in the long run. This result is the same for the African countries investigated by Le and Van (2020).

Thus, to investigate the relationships between energy consumption and economic development, we hypothesize:

H3: Total energy consumption will be positively associated with economic development.

An overview of CO2 emissions and energy consumption and GDP in Malaysia:1990-2014



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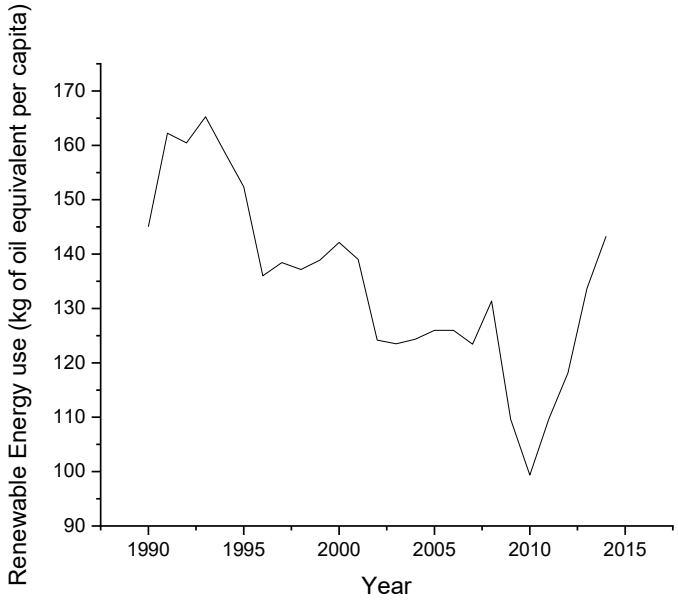

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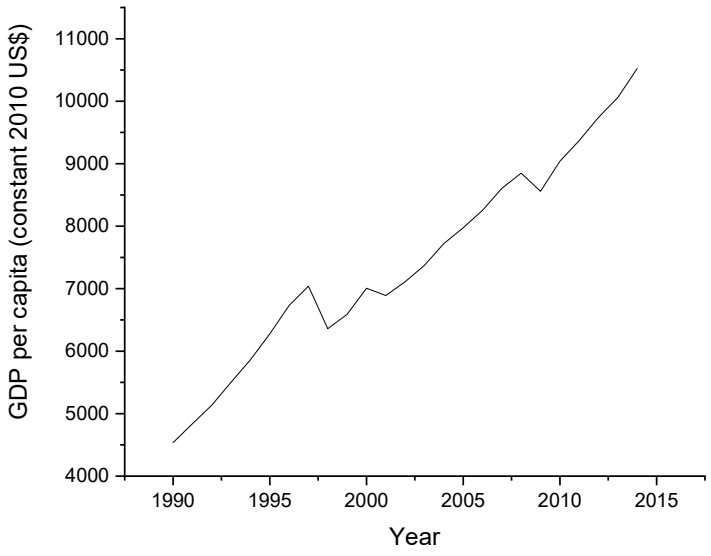

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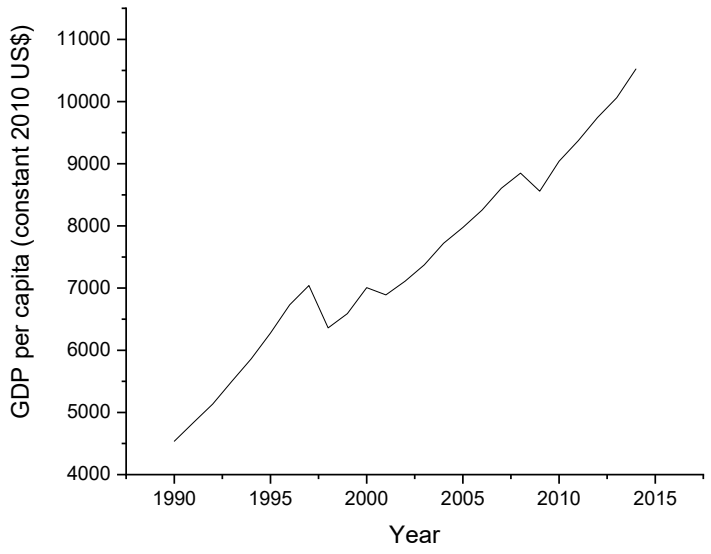


d.

Resource: The World Development Indicator

As energy consumption has been an essential part of Malaysia's economic development, it has contributed significantly to CO2 emissions (Sharvini et al., 2018). Begum et al. (2015)

demonstrate that both energy consumption and GDP growth significantly increase CO2 emissions in the long term. However, in Malaysia, economic growth may reduce CO2 emissions when there is significant use of low carbon technologies.

As Figures 3A and 3C show, as GDP grew, Malaysia's energy use increased from 1200 to 3000 kg of oil equivalent per capita from 1990 to 2014. Figure 3D shows that CO2 emissions (metric tons per capita) rose from 3 metric tons per capita in 1990 to 8 metric tons per capita in 2014. In 2009, the government announced its commitment to reduce CO2 emissions and increase the use of renewable energy. The consumption of renewable energy which had decreased from 1990 to 2010 increased sharply after 2010[3].

Data and methodology

This study uses Malaysia's time-series data (secondary data) from world development indicators (including carbon emissions, renewable energy consumption, total energy consumption, and GDP) from 1990 to 2014. This study used correlation, unit root test, Toda-Yamamoto approaches, and impulse response function. The correlation analysis reveals correlated relationships among carbon emission, energy consumption and GDP. The Toda-Yamamoto approach tests the causality relationship between these variables (Furuoka, 2015). A unit root test of the data was conducted to check the order of integration. The impulse response function is a dynamic system in its output when presented with a brief input signal, called an impulse. More generally, an impulse response refers to the reaction of any dynamic system in response to some external change (Lin et al., 2020; Sulaiman and Abdul-Rahim, 2017).

The data used in this study was obtained from world development indicators. Before analysis, the data were transformed into natural logs to make the data follow a normal distribution or near-normal distribution. The log transformation reduced skewness. This study assumes that CO2 emissions are impacted by GDP, energy consumption and renewable energy consumption:

$$CE_t = f(RC_t, EC_t, GDP_t) \quad (1)$$

Where CE is CO2 emissions (metric tons per capita) (Salahuddin et al., 2016), RC represents "renewable energy consumption (% of total final energy consumption)", EC is "energy

[3] "Department of Environment, COP 15: The Copenhagen Accord, in Quarterly DOE Update on Environment, Development and Sustainability, C.M. Chun, Editor 2010, Department of Environment (DOE), Ministry of Natural Resources and Environment: Putrajaya".

consumption (kg of oil equivalent per capita)" (Hussain et al., 2020), and GDP is "real gross domestic production per capita (constant 2010 US$)" (Furuoka, 2017).

The first step of empirical estimation of this study uses the "augmented Dickey-Fuller (ADF)" test (Dickey and Fuller, 1979), "the Phillips-Perron (PP)" test (Phillips, 1988), and "the Kwiatkowski, Phillips, Schmidt and Shin (KPSS)" test (Kwiatkowski et al., 1992). This step is aimed to test the stability of these variables.

The bounds test is used to test co-integration (long-run relationship) among variables, with ΔCE as the dependent variable:

$$\Delta CE_t = \beta_0 + \sum_{i=1}^{p} \beta_{1i} \Delta CE_{t-i} + \sum_{i=1}^{p} \beta_{2i} \Delta RC_{t-i} + \sum_{i=1}^{p} \beta_{3i} \Delta EC_{t-i} + \sum_{i=1}^{p} \beta_{4i} \Delta GDP_{t-i} + \varphi_1 CE_{t-1} + \varphi_2 RC_{t-1} + \varphi_3 EC_{t-1} + \varphi_4 GDP_{t-1} + \varepsilon_{1t} \quad (2)$$

Where p is the number of lag order, $\beta_0, \beta_1, \beta_2, \beta_3, \beta_4$ are "the slope coefficients for the lagged differenced variables", $\varphi_1, \varphi_2, \varphi_3, \varphi_4$ are "the slope coefficient for the lagged levels" and ε_t is the error item. The null hypothesis for the co-integration test is expressed as:

$$H0: \varphi_1 = \varphi_2 = \varphi_3 + \varphi_4 = 0 \quad (3)$$

The last part of this study uses the "Toda-Yamamoto causality analysis" to examine the relationship among these variables (Toda and Yamamoto, 1995). After checking the unit root test, the different order of integrations performed among the time-series data. For different orders, this study used the "Toda-Yamamoto causality analysis" because the Granger causality test required all variables to have the same order of co-integration. The Toda Yamamoto approach and impulse response function (IRF) are based on the vector auto-regression (VAR). The VAR model is as follow:

$$\mathrm{CE}_t = \beta_{10} + \sum_{i=1}^{k+d} \beta_{11i} CE_{t-i} + \sum_{i=1}^{k+d} \beta_{12}\, RC_{t-i} + \sum_{i=1}^{k+d} \beta_{13}\, EC_{t-i} + \sum_{i=1}^{k+d} \beta_{14i} GDP_{t-i} + \varepsilon_{1t} \quad (4a)$$

$$\mathrm{RC}_t = \beta_{20} + \sum_{i=1}^{k+d} \beta_{21i} CE_{t-i} + \sum_{i=1}^{k+d} \beta_{22i} RC_{t-i} + \sum_{i=1}^{k+d} \beta_{23i} EC_{t-i} + \sum_{i=1}^{k+d} \beta_{24}\, GDP_{t-i} + \varepsilon_{1t} \quad (4b)$$

$$\mathrm{EC}_t = \beta_{30} + \sum_{i=1}^{k+d} \beta_{31}\, CE_{t-i} + \sum_{i=1}^{k+d} \beta_{32i} RC_{t-i} + \sum_{i=1}^{k+d} \beta_{33i} EC_{t-i} + \sum_{i=1}^{k+d} \beta_{34i} GDP_{t-i} + \varepsilon_{1t} \quad (4c)$$

$$\mathrm{GDP}_t = \beta_{40} + \sum_{i=1}^{k+d} \beta_{41i} CE_{t-i} + \sum_{i=1}^{k+d} \beta_{42}\, RC_{t-i} + \sum_{i=1}^{k+d} \beta_{43i} EC_{t-i} + \sum_{i=1}^{k+d} \beta_{44}\, GDP_{t-i} + \varepsilon_{1t} \quad (4d)$$

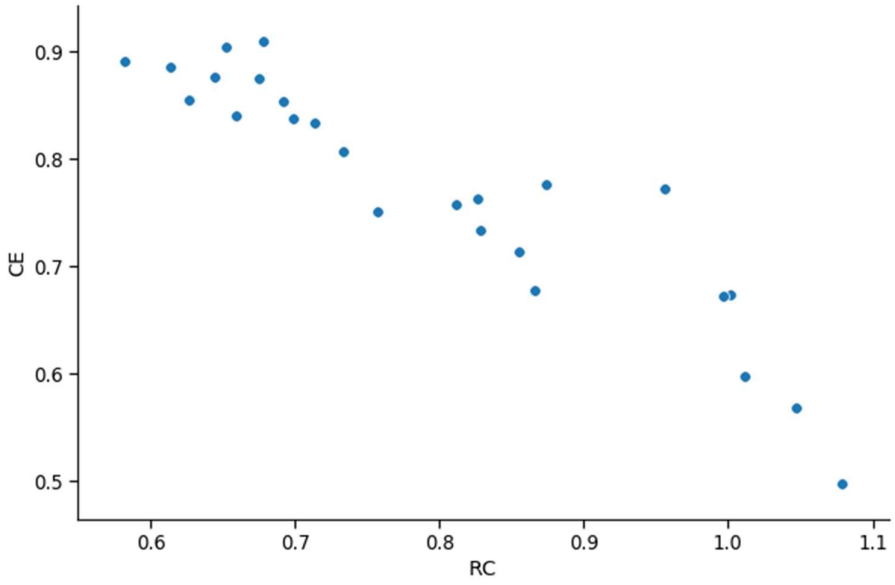
where k is the optimal lag order and d is the additional lag order, which is the maximum order of integration. In this test, the maximum order of integration is identified through the ADF test, while the lag length is determined by the "Akaike info criterion (AIC)".

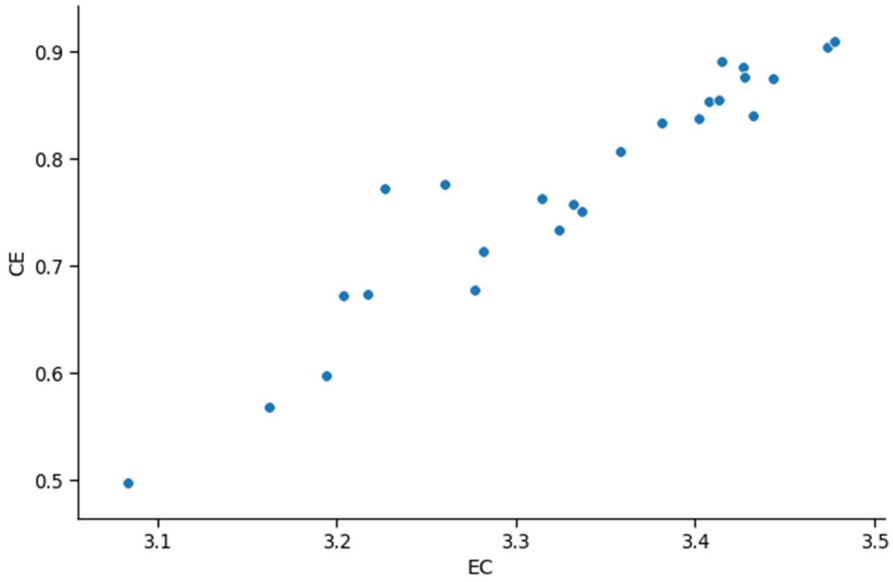
Empirical analysis and findings

5.1 Correlation

First, a correlation analysis was conducted on energy consumption, renewable energy consumption, economic development and carbon emissions. The correlation analysis revealed a strong negative correlation between renewable energy consumption and CO2 emissions (shown in figure 4). Both energy consumption and GDP in Malaysia positively correlated from 1990 to 2014. The results support our hypothesis that energy consumption is positively associated with growth in GDP and increase in carbon emissions.

Figure 4 The correlation result of these variables




CE
0.9
0.8
0.7
0.6
0.5
3.1
3.2
3.3
3.4
3.5
EC

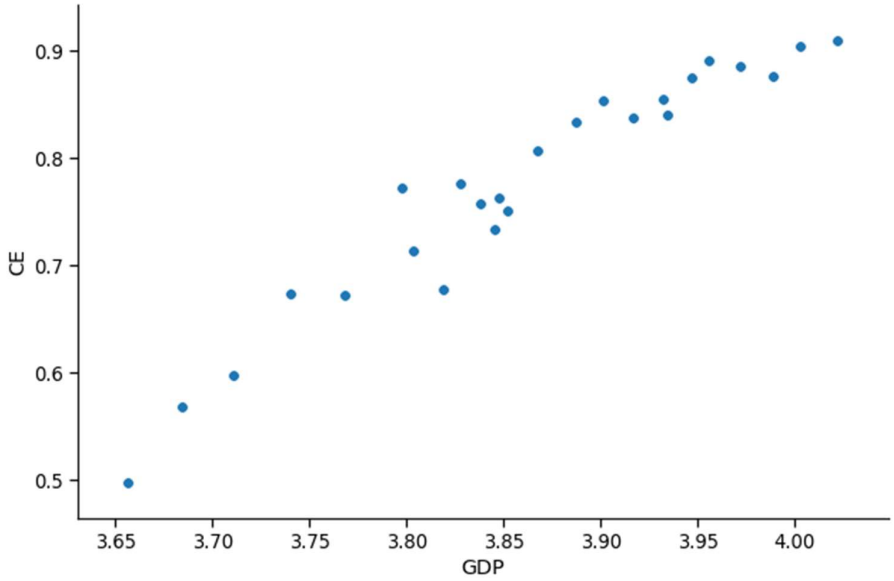

CE
0.9
0.8
0.7
0.6
0.5
3.65
3.70
3.75
3.80
3.85
3.90
3.95
4.00
GDP

Table 1 Unit root tests

			CE	RC	EC	GDP
ADF	Level	Constant	-2.667*	-2.1824	-2.4274	-1.5333
		Constant and trend	-5.0909***	-0.462	-3.985**	-2.8964
	1st difference	Constant	-4.8288***	-3.4479**	-4.8639***	-4.4452***
		Constant and trend	-4.9065***	-3.9711**	-5.0118***	-4.4212***
PP	Level	Constant	-2.667*	-2.1633	-3.1396**	-1.5871
		Constant and trend	-3.2385	-0.2175	-3.9896**	-2.8856
	1st difference	Constant	-4.8288***	-3.3461**	-8.7777***	-4.437***
		Constant and trend	-4.9065***	-3.9947**	-13.4323***	-4.4038***
KPSS	Level	Constant	0.6951**	0.6907**	0.7336**	0.7307**
		Constant and trend	0.0971	0.1832**	0.1849**	0.104
	1st difference	Constant	0.2524	0.4361*	0.3457	0.1885
		Constant and trend	0.0896	0.1318*	0.2291***	0.111

Notes: Figures in parentheses indicate the optimal lag order suggested by the AIC method.
*** Indicates significance at the 1% level.
** Indicates significance at the 5% level.
* Indicates significance at the 10% level

This study used three different kinds of unit root tests. The ADF test indicated that CE was integrated of order zero. RC, EC and GDP were integrated of order one. The finding from the PP test shows that EC was integrated of order zero, CE, RC and GDP were integrated with order one. The conclusion from the KPSS test showed that the CE and GDP were integrated of order zero, EC and RC were integrated in order one. The results from the unit root tests indicate that the four variables have different orders of integration. Thus, this study could not use normal Granger causality but used Toda-Yamamoto causality analysis instead.

5.2 The nexus among energy consumption, renewable energy consumption, GDP and CO2 emissions nexus in Malaysia

Table 2 Results of Toda-Yamamoto analysis

DV	CE	EC	RC	GDP
CE		1.63	2.57	2.38
EC	8.54*		4.07	6.14*
RC	2.59	1.45		0.29
GDP	10.45**	7.02*	0.46	
Conclusion	Bi-direction relationship: GDP⇔EC One-way relationship: EC⇒CE, GDP⇒CE			

Notes: ** Indicates significance at the 1% level. * Indicates significance at the 5% level.

The Toda-Yamamoto method found that the relationship between GDP and EC are bi-directional, that is, they affected each other. EC impacted CE and GDP impacted CE. However, there is no significant relationship between RC and GDP and carbon emissions. This result supports Hypothesis 1A, that is, energy consumption increases carbon emissions. This result is also consistent with other literature (*see* Al-Mulali et al., 2012; Zaman et al., 2021) but there is no evidence to support Hypothesis 1B that renewable energy consumption increases carbon emissions.

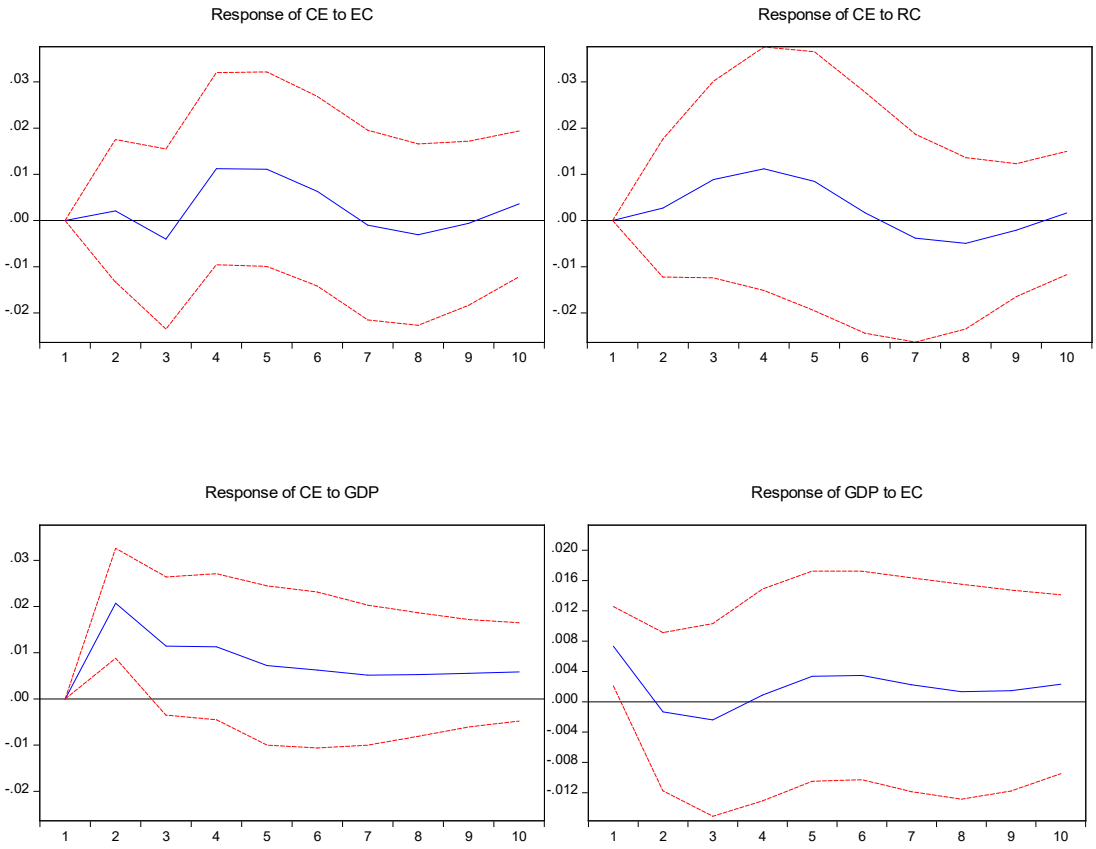
Hypothesis 2 is also confirmed and is supported by this finding, that is, increase in GDP positively increases carbon emissions. This result is consistent with (Zhang 2011) but differs from Salahuddin et al. (2016), Tamazian et al. (2009), Jalil and Feridun (2011) and Ozturk and Acaravci (2013).

This study also supported Hypothesis 3, that is, energy consumption increases with economic development. This result is also supported by Asif et al. (2015) and Salahuddin and Gow, (2019) and Wasti and Zaidi, (2020).

5.3 The impulse response function analysis

The impulse response function (IRF) used in this study tracks the impact of energy consumption, renewable energy consumption and increase in GDP on CO2 emissions in Malaysia. The first step estimated the VAR using the lag of two periods. . The second step used the VAR residual serial correlation LM method to conduct diagnostic tests. The result showed no serial correlation issues. The third step -- conducting the multivariate Normality test -- the Jarque-Bera result showed that the errors and VAR system are distributed normally. The IRF was conducted on the following variables: response of carbon emissions (CE) to energy consumption (EC), the reaction of carbon emissions (CE) to renewable energy consumption (RC), the response of carbon emission (CE) to economic development (GDP).

Figure 5: Results of Impulse Response Function (IRF)



The results of the IRF analysis is shown in Figure 5. The results of these impulse response functions were always within the 95% confidence interval. From the IRF graph, in the early stages, there was no such reaction from the CE. As CE was almost stable, declined and dropped below zero, this meant that there was little negative response of CE to EC. From periods 4 to 7, EC is the positive impact on the CE. A one SD shock (Energy Consumption) to EC initially has no noticeable effect on CE. From the 2nd and 3rd period, the response decline, the 4th period the response rises sharply and after seven periods turn to a negative response. The shocks to EC will have an asymmetric impact on CE in the short run and long run. This also means that we cannot conclude that there is a simple linear relationship between energy consumption and carbon emission. The influence of energy consumption on CO2 emissions per capita changed over time, from positive to negative, from periods 4 to 10. A possible reason is that, after 2010, renewable energy consumption increased and constituted a larger portion of total energy consumption (see Figure 3B).

The second graph in Figure 5 shows that CE to RC's response from periods 1 to period6 is positive and negative from periods 7 to 10. The CE response to a one standard deviation shock RC is that the CE increases in the early stages, then declines, becomes negative, and gradually increases. The shocks to RC will also have an asymmetric impact on CE in the short and long run. When combined with the results of the Toda-Yamamoto causality analysis, this means that the fluctuation of RC will result in a standstill (both positive and negative impacts on CE, hence no causal relationship). Before 2010, as awareness and use of renewable energy was low, its effect on carbon emissions was minimal. It was after 2009, when the Malaysian government committed to reducing carbon emission, that the situation changed and the use of renewable energy increasingly reduced carbon emissions.

The third graph is the response of CE to GDP. In the early stage, there was a sharp increase in CE. Between periods 2 and 3, there was a sharp decline in CE, which then remained stable till the end. The shocks to GDP have positive impacts on CE in both the short and long run. This is consistent with Zhang (2011). These results are similar to the second stage (Industrial Economics) of the Environmental Kuznets Curve (EKC) (Panayotou, 1993).

The fourth graph, the response of GDP to EC, shows that only period 4 was under zero. Before period 3 and after the periods after that are all a little above zero. This means that there are primarily positive relationships between energy consumption and GDP. This result is consistent with Asif et al. (2015), Salahuddin and Gow (2019) and Wasti and Zaidi (2020) in that energy consumption positively impacts economic development.

Conclusion and recommendation

This empirical study finds that CO2 emissions are positively correlated with increases in energy consumption and GDP. These results are understandable because, with increased economic growth, there is increased use of fuel energy and an increase in CO2 emissions. Thus, this study shows that there is a significant and bi-direction relationship between GDP and energy consumption. Energy consumption and GDP are positively correlated with CO2 emissions. Even though there is a negative correlation between energy consumption and renewable energy consumption, the latter has no significant contribution to CO2 emissions. Renewable energy consumption did not significantly impact Malaysia’s economic development as there are only

low levels of renewable energy consumption in Malaysia, compared with fossil fuel consumption. Hence, the impact on economic development by renewable energy consumption is minimal. However, this may change in future as under the green policy, Malaysia is committed to increase its use of renewable energy to 25% of total energy consumption. Thus, renewable energy will have increasing influence on economic development.

This study also investigated the relationships among GDP, energy consumption, renewable energy consumption and CO2 emissions. While energy consumption significantly enhances GDP growth in Malaysia, the Malaysian government should increase consumption of renewable energy to reduce carbon emissions, while developing the economy.

Renewable energy, therefore, plays a critical role in mitigating CO2 emission in the economic development process. While it is vital to use renewable energy instead of fuel energy, utilization of renewable energy in Malaysia is still low, only less than 10% of total energy used. This is a far cry from other ASEAN countries. According to 2014 data, Laos uses 60%, Myanmar 60%, Cambodia 64%, Indonesia 36%, Vietnam 34%, and the Philippines 27%.

In conclusion, the Malaysian government should encourage the use of green technology, such as solar panels at home, to promote the use of renewable energy. Apart from encouraging people to move towards using renewable energy in daily activities, the government should aggressively reduce the use of fossil fuels in transportation and support a more sustainable environment with using electric public vehicles. Meanwhile the government can promote the benefits and importance of renewable energy through social media. Doing so will increase the use of renewable energy, which will lead to growth of the Malaysian economy.

There is also a need to regulate industries, especially those which have significant impact on the environment such as the generation of electricity and construction, since both these industries have high consumption of fossil fuel consumption and thus have high carbon emissions. If such industries switch to renewable energy (such as solar, wind, hydrogen and geothermal), they will mitigate carbon emissions in Malaysia.

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CHAPTER 4

THE NEEDS OF AN ACCREDITED NON-DESTRUCTIVE TESTING TRAINING CENTRE FOR ASEAN COUNTRIES

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Abstract

Nondestructive Testing (NDT) is a method of inspecting, testing or evaluating material for any defects or discontinuities on the surface or interior of materials without damaging the structure or altering the materials. NDT plays a crucial role in everyday life and is necessary to assure safety and reliability. The accessibility of local NDT professionals will ensure the progress of the country's physical infrastructure. Only a trained and licensed NDT inspector is allowed to do the relevant inspection on the country's physical infrastructure. The NDT license can be obtained through a specific education and training from an accredited training centre. However not all ASEAN countries have an accredited NDT training centre to fulfil the demands of NDT inspection in the countries. There is a lack of certified professionals in the field of NDT. In Malaysia, currently there is only one university that has an accredited NDT training centre that offers to its students. Universities should offer an NDT skill certification to improve graduates' employability rate. ASEAN countries should provide technical training to meet the demands from the NDT market. Hence this research will examine the availability of an accredited NDT training centre in ASEAN countries. This research also examines the progress of Malaysia's accredited NDT training centres.

Introduction

Non-destructive testing (NDT) is an exceptional method of evaluating, inspecting and testing materials used in the oil and gas industry, aircraft industry, etc. Hence, NDT plays a crucial role in assuring the safety and reliability of physical infrastructure. Only a trained and licensed NDT inspector is allowed to do the pertinent inspections. To obtain a NDT license, a student must successfully complete specified education and training at an accredited NDT training centre. However, not all ASEAN member states have an accredited NDT training centre

because of the expense and complex training required. Despite the increasing importance of NDT, the availability and accessibility of the required training and experience to be a competent NDT inspector are still sparse in ASEAN member states.

This article will discuss the importance of NDT for various industries, the existence and availability of NDT training centres in ASEAN member states, the various certification schemes the ASEAN member states possess and, in particular, Malaysia's progress in establishing accredited NDT training centres.

Why do Industries need NDT?

NDT is a method of evaluating, inspecting, or testing materials for defects, discontinuities and flaws on the surface or interior of materials, without damaging the structure or altering the materials (Lockard, 2015; Gholizadeh, 2016). According to Adam and Drinkwater (1997), the objective of any form of NDT is to connect the joint strength with some physical, chemical or other parameter which can be measured without causing any destruction.

The main motive for using NDT inspection is to detect cracks or defects in pipes or welded structures that would ultimately cause an entire structure to fail, crumble or break. Thus, the NDT industry is extremely important, as errors can have disastrous consequences.
During the Second World War, visual NDT and radiographic testing were the primary ways to inspect materials. Since then, the technique has evolved until it has surpassed simple visual inspection and can now be used to inspect samples that are only 1cm thick. The principle behind each NDT method was and is always the same -- to test and evaluate materials, without causing damage or destruction.

While there are many NDT techniques, the five most frequently used and taught are: ultrasonic testing (UT), radiographic testing (RT), eddy current testing (ET), magnetic particle testing (MT), and liquid penetrant testing (LT). Each NDT method charts a particular domain of testing. This means that each method is most effective only in a particular area of testing. Two or more methods of testing may complement each other but are not used for cross-checking each other's effectiveness or efficiency. The effectiveness of any NDT method depends on its adequacy and reliability for a particular test situation (Prasad & Nair, 2008). Factors such as

safety, operational costs, and efficiency with the material to be inspected are considered when choosing a NDT technique (Shrifan et al., 2019).

All NDT testing must be done by a licensed NDT professional. NDT testing is predominantly used in particular industries in developed countries, for example, the oil and gas industry in the United States. In fact, the most readily available accreditations are from the United States and the United Kingdom. While having adequate number of local NDT professionals ensures the safety of a country's physical infrastructure, there is a lack of NDT professionals in ASEAN member states, especially in Malaysia. (Hashim, 2017)

The World Trade Organisation under the Technical Barrier to Trade (TBT) agreement has pointed out the need to ensure that products comply with the standards and technical regulations and meet clients' demand. The TBT agreement aims to ensure the technical regulations, standards and conformity assessment procedures are non-discriminatory and do not create unnecessary obstacles to trade. Hence, industries such as aerospace, energy, nuclear, oil and gas and transport need NDT to ensure their materials are safe and code compliant. Since only certified NDT professional can perform the inspection, accredited NDT training centres can help facilitate the training. Upon successful completion of the training, a certified professional license is granted to a trainee.

NDT Training and Certification in ASEAN Member States

Not all ASEAN member states have an accredited NDT training centre because of the expensive equipment and complex training required to graduate professional workers capable of undertaking complex inspections. Malaysia, Indonesia, and Singapore have NDT training centres but countries such as Cambodia and Laos do not. To obtain a NDT license, a Cambodian or Laotian student would have to travel to a country with a NDT training centre, making the process inconvenient and costly. The lack of local NDT-licensed professionals is also why migrant workers are in demand. Table 1 shows the ASEAN member states and their accredited NDT training centres.

Table 1: ASEAN member states and their accredited NDT training centres

Member States	Location	Centre name
Malaysia	Selangor	1. Standard and Industrial Research Institute in Malaysia (SIRIM) 2. Malaysian Nuclear Agency (MNA) 3. ITC Company limited 4. MINDT Training & Certification Sdn Bhd 5. TWI technology Sdn Bhd
	Terengganu	RUANE-TATI Sdn Bhd
	Malacca	Technical University of Malacca
Indonesia	Bataam	TWI Technology
	Bekasi	TWI Technology
	Banten	TWI Technology
	Bandung	TWI Technology
	Jakarta	TWI Technology PT. AusNDT Indonesia
Singapore	Singapore	TWI Technology CSWIP Training centre A-Star Training & Consultancy Pte. Ltd.
Thailand	Chonburi	TWI Technology
	Rayong	1. NDT Training Centre Co. Ltd. 2. A-Star Training & Consultancy
Philippines	Manila	1. TWI Technology 2. Philippine Nuclear Research Institute
Vietnam	Vung Tau city	TWI Technology
	Le Chan District	SUNE Co Ltd
Myanmar	Yangon	Myanmar Inspection & Technology (MIT)
Brunei	Bandar Seri Begawan	NB Inspection Sdn Bhd
	Seria	1. TWI Technology 2. Joffren Omar Training Centre

Although Malaysia has seven NDT training centres, there are insufficient certified professionals to meet the demand for competent NDT workers (Hashim, 2017; Kamarudin, 2013). To remedy this, one of Malaysia's initiatives is establishing accredited NDT training centres in its universities so that students can take NDT training immediately upon graduation. As the students would have not only their degrees but also certification of their hard skills, it is easier for them to find employment. Even though there are numerous testing labs in Malaysian universities, only one university, the Technical University of Malaysia Malacca (UTeM), has an accredited NDT training centre. After being in operation for more than 5 years, graduates from the UTeM's NDT training centre have successfully ventured into the NDT field. As the high demand for competent NDT professionals is well known, other universities such as Universiti Teknologi MARA (UiTM) are embarking on the process to provide NDT training for their students.

In the NDT field, standardized testing is required to ensure that testing is at par with international standards. For the ASEAN member states to meet the objectives of a single market and production base, conforming to standards is key for the establishment of national and regional infrastructures. (Ramesh et. al., 2019). Hence, standardized NDT testing is crucial for ASEAN member states.

The ASEAN member states have adopted and provided a variety of training schemes to meet their needs for qualified and certified NDT personnel (Babu & Barnett, 2011). Table 2 shows the various NDT certification schemes that are currently operating in ASEAN member states.

Table 2: The various Non-Destructive Testing Certification Schemes currently operating in ASEAN member states

No.	Certification Scheme
1.	ASNT (American Society for Nondestructive Testing) – SNT-TC-1A Scheme
2.	ASNT (American Society for Nondestructive Testing) – ISO 9712
3.	BINDT (The British Institute of Nondestructive Testing) – PCN Scheme based on EN473 & ISO 9712, accredited to ISO 17024
4.	TWI (The Welding Institute, UK) – CSWIP scheme based on EN473 & ISO 9712, accredited to ISO 17024
5.	AINDT (Australian Institute of Nondestructive Testing) – Certification body based on EN473 & ISO 9712, accredited to ISO 17024
6.	NDTSS (Nondestructive Testing Society Singapore) – SGNDT scheme based in ISO 9712 & EN473
7.	Other – State run/central government departments controlling the nuclear board of the countries such as the Philippines Society of NDT in the Philippines and the Malaysian government's Department of Skills Development.

These certification schemes were chosen primarily on the bases of industrial needs & applications. Although the SNT-TC-1A certification is extremely popular, the PCN (BINDT) and CSWIP (TWI) schemes have gained popularity over the last decade (Babu & Barnett, 2011). The schemes that are available in each ASEAN member state are set forth in Table 3.

Table 3: ASEAN member states and the certification schemes that are available

No.	Member States	Locally Available Schemes	Standard
1.	Indonesia	1, 4, 7	SNT-TC-1A, ISO9712
2.	Malaysia	1, 2, 3, 4, 5, 7	ISO 9712/EN473, SNT-T-C-1A
3.	Philippines	1, 4, 7	SNT-TC-1A, ISO9712
4.	Singapore	1, 2, 3, 4, 7	ISO 9712/EN473, SNT-TC-1A
5.	Thailand	1, 4, 7	SNT-TC-1A, ISO9712
6.	Vietnam	1, 4, 7	SNT-TC-1A, ISO9712

The ASNT SNT-TC-1A scheme used to be very popular and was the cheapest certification available. However, as PCN and CSWIP, with certification schemes based on ISO 9712/ISO 17024, are now available, there is less demand for SNT-TC-1A.

Australia's certification scheme, which conform to ISO 9712/ISO 17024, provides a sound model for other countries to follow. Sri Lanka, which has a small industrial sector, has shown substantial resourcefulness in not only establishing a national certification board (NCB) but also in developing a quality management system that meets ISO 17024. The Philippines is another country that has made great advances in the establishment of a national certification scheme and the Philippines Society of NDT has been appointed by the government to become the National Certification Body. Indonesia is also quickly conforming its certification scheme to ISO 9712/ISO 17024 and its NCB was established in 2009. Its neighbour, Singapore, has a certification system that covers SNT-TC-1A, PCN and ISO9712 through various authorized qualifying bodies.

The oil and gas industry and other industries in Malaysia require well-trained and qualified NDT personnel. Malaysia has excellent facilities for the training of NDT technicians and, through the Malaysian government's Department of Skills Development (DSD), it is implementing a national program for certification of NDT personnel. Arrangements are already in place to implement a QMS that meets ISO 17024 and this has been operational since 2009.

The progress of Malaysia's accredited NDT training center

The four certification schemes in Malaysia are DSD, PCN, CSWIP and ASNT. The Department of Skills Development (DSD) has accredited these six companies: Standard and Industrial Research Institute in Malaysia (SIRIM), Malaysian Nuclear Agency (MNA), ITC Company

limited, RUANE-TATI Sdn Bhd, Asia NDE Sdn Bhd and Technical University of Malaysia Malacca (UTeM). Both the Personnel Certification in NDT (PCN) and Certification Scheme for Welding Inspection Personnel (CSWIP) are U.K. accreditations. The four companies accredited by PCN are: MINDT Training & Certification Sdn. Bhd., TWI Technology Sdn. Bhd., Ruane-Tati Sdn. Bhd. and Trident Global Training & Consultancy (BINDT, 2019). CSWIP has accredited TWI Technology. Finally, the American Society for Non-Destructive Testing has accredited RJ Testing & Inspection Sdn. Bhd.

These training centres continuously enrol students to train to become licensed NDT inspectors. However, in 2020, all classes were suspended because of the COVID-19 pandemic. There were plans to resume these classes and training in 2021 but, because of the overwhelming number of COVID-19 cases and ongoing lockdown, the classes have not resumed. This development has had a huge impact on the market as no new students could be enrolled and trained.

Conclusion

Careers in NDT have tremendous potential in today's economy. New NDT methods have been introduced, while old ones are being improved. The NDT field is constantly advancing and there is an increasing need for specialists in the field. Thus, ASEAN countries need to train more licensed inspectors. Having local NDT inspectors is crucial in improving a country's physical infrastructure as it cuts down on the cost of hiring migrant workers.

Having standardised NDT inspections conducted by certified personnel ensures that products comply with the World Trade Organisation's standards and technical regulations under the Technical Barrier to Trade (TBT) agreement. Thus, NDT testing standards must be up to par with international standards to be accepted and recognised internationally.

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CHAPTER 5

PROMOTING INCLUSIVE ISLAM: THE ROLES OF CIVIL SOCIETY IN SHAPING ISLAMIC DISCOURSES IN MALAYSIA AND INDONESIA

AHMAD MUSTAQIM ZOLKAFALI, MOHD AL ADIB SAMURI
& RUSSLI KAMARUDIN

Introduction

ASEAN is a unique organization that combines countries in Southeast Asia. Malaysia and Indonesia are among the countries that are the pillars of ASEAN countries. Malaysia is a democratic-Muslim majority country and Indonesia is the largest Muslim country in the world. The Muslim community in these two countries was spared the conflict in the Middle East Arab countries. However, the inclusive promotion of Islam is needed in both countries because hard and extreme ideologies still exist in those countries. Thus, the role of a moderate Islamic civil movement is needed in bringing progressive Islamic discourse.

In Malaysia, Prime Minister Abdullah Ahmad Badawi introduced the concept of *Islam Hadhari* during his administration, while Prime Minister Najib Razak promoted the idea of Islam *Wasatiyah* when he was in power. Although Prime Minister Mahathir Mohamad did not promote an Islamic policy, the Minister of Religion, Mujahid Yusuf Rawa, proposed the concept of *Rahmatan Lil 'Alamin* (Mercy to all Creations), which originated from an Islamic civil movement, Pertubuhan IKRAM Malaysia. This paper discusses how *Rahmatan Lil 'Alamin* became the Islamic policy of the Pakatan Harapan government.

Indonesia has been at the forefront of introducing moderate Islam through the concept of *Islam Nusantara* or Islam of the Archipelago, which is associated with the *Nahdlatul Ulama* (NU) movement, originally established in 1926 in Surabaya, Indonesia.

Historically, the NU movement traced its origins to the *Wahhabi* movement that controlled *Makkah*. Initially, NU received strong support from the Javanese/ Madurese. However, the *Wahhabi* sect *(mazhab)* in Saudi Arabia was considered not suitable to spread in Indonesia. The quest for an approach that is friendly and close to Indonesian culture continued. According to Assef Bayat (2007), the *Maqasid Syariah* framework introduced in 2007 showed strong promise for linking Islam and democracy. However, with the onset of the COVID-19 pandemic in 2019, the protection of life, an element of *Maqasid Syariah,* became the main focus for civil society and Islamic Movement.

Rahmatan Lil Alamin as an Islamic Administration policy in Malaysia

Pertubuhan IKRAM Malaysia (IKRAM) is a non-governmental Islamic organization that focuses on dawah *(preaching), tarbiah* (step of development) and general welfare of the public consistent with the teachings and way of life of Islam. Since 2014, IKRAM has been promoting the concept of 'Malaysia towards a Merciful Nation' to curb extremism and radicalism in Islam. In a narrow context, differences of opinion as to the meaning and practice of Islam among religious judges and Islamic sects have led to a culture of *takfir*, that is, disbelief among Muslims. In a broader context, *Rahmah,* is a new discourse against extremist approaches, for example, the threat of ISIS, that come from interpreting the text of the Quran without understanding the context.

The political context in Malaysia must also be considered. In 2015, the coalition of opposition parties – Democratic Action Party (DAP), Parti Islam Se-Malaysia or Malaysian Islamic Party (PAS) and Parti Kalah Rakyat or People's Justice Party (PKR) – was dissolved. Conservative elements within PAS moved closer to its ex-rival, the United Malays National Organisation (UMNO). The situation prompted progressive PAS leadership to leave the party to establish the Parti Amanah Negara (AMANAH) in 2018. AMANAH then consolidated with DAP and PKR to form a new coalition, Pakatan Harapan, with Parti Pribumi Bersatu, which joined later. Pakatan

Harapan succeeded in the 14th General Elections and formed a new government of Malaysia. The Minister of Religious Affairs, Mujahid Rawa, from AMANAH then introduced the concept of *Rahmatan Lil Alamin* to counter conservative PAS ideology.

Inclusive Islamic Discourse

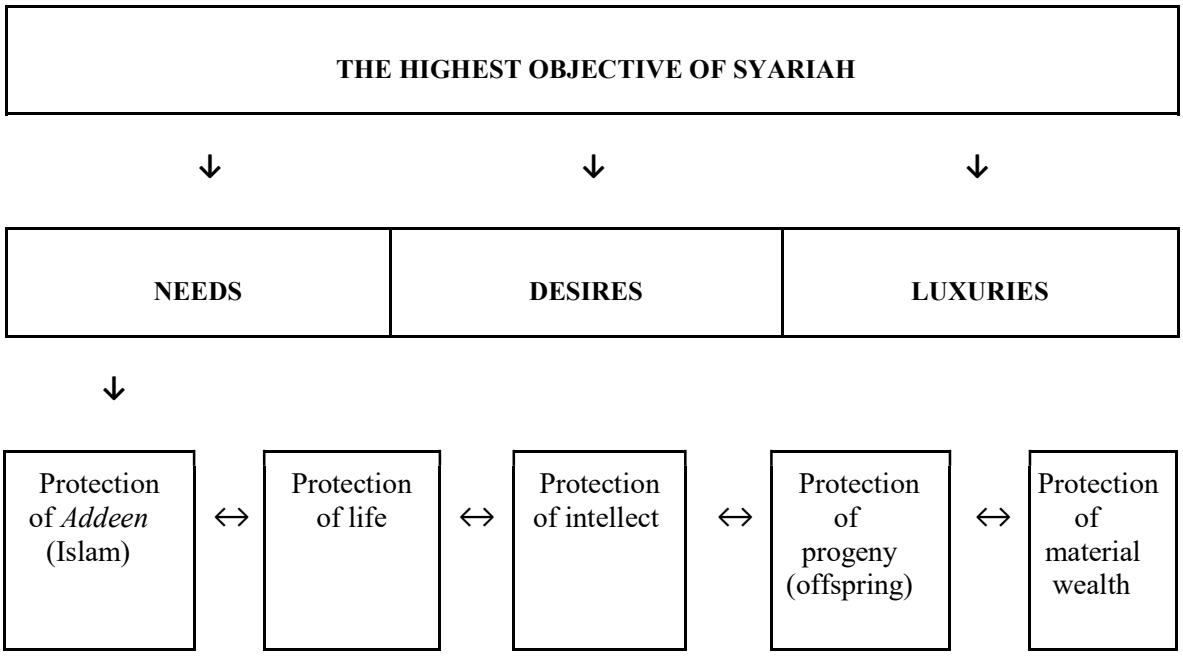
Inclusive democracy involves the incorporation and representation of disadvantaged social groups in a democracy (Wolbrecht, 2005). From this perspective, AMANAH, is a more inclusive than PAS because it practices Inclusive Islam. According to Mohamed Ali (2020), five important features of Inclusive Islam are:

i. Being open to the truth that come from outside Islam and does not contradict the teachings of the Qur'an and hadith.
ii. Recognizing truth and goodness in other religions. Muslims believe that Islam is the true religion but respect other religions at the same time.
iii. By being inclusive, Muslims are noble in character as they choose and follow their path without cursing or belittling others.
iv. Cultivating in Muslims three praiseworthy qualities, namely *Tasamuh* (tolerance), *'Adl* (justice) and respect for local cultural norms, as long as the norms do not contradict the basic teachings of Islam.
v. Appreciating diversity as a platform to know each other respectfully and openly, as well as to learn new and useful knowledge.

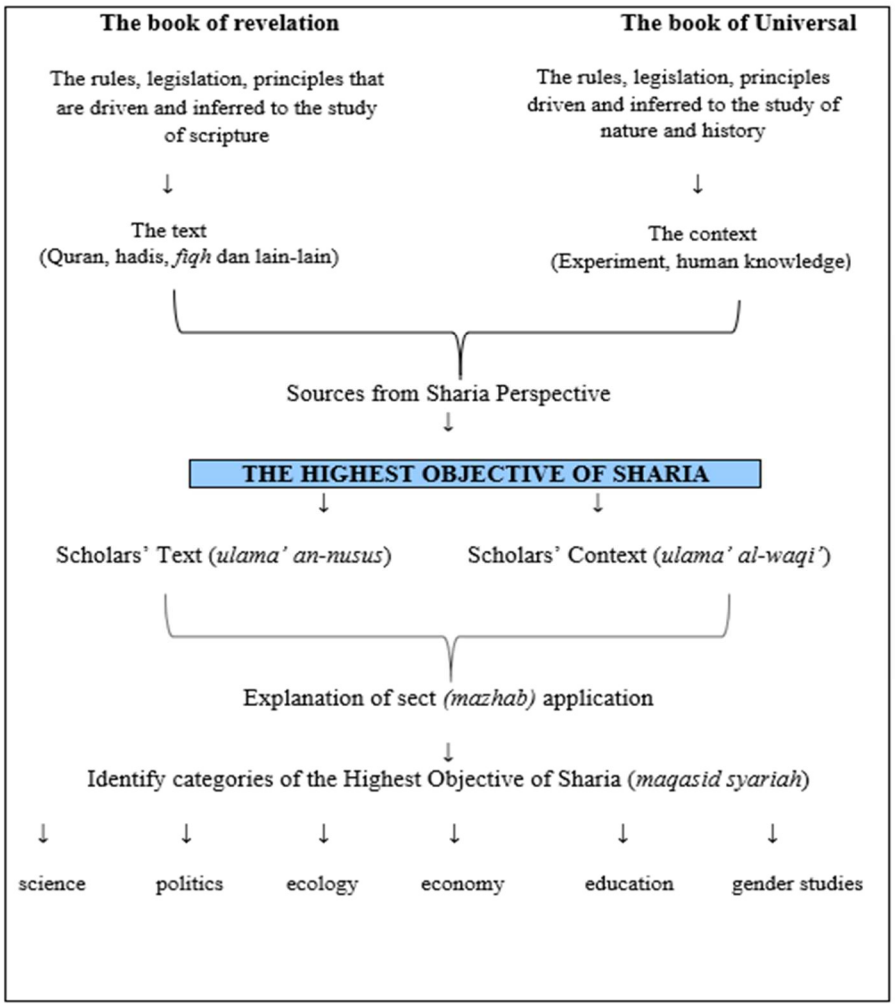
The Reference of Rahmatan Lil Alamin

The concept of *Rahmatan Lil Alamin* is traceable to the *Maqasid Syariah,* as outlined by Imam al-Ghazali, that is, the highest purpose of *Syariah* is to preserve religion, life, intellect, lineage and property.

Diagram 1: *Maqasid Syariah* Dimension



Sources: Jasser Auda (2010:27) *Maqasid Syariah Al-Ghazal* Ramadan (2009:129) from the book of *Radical Reform: Islamic Ethics and Liberation*



The Elements of a Rahmah Nation, as set forth by IKRAM

1. Competent and accountable leadership;
2. An administrative system based on effective checks and balances;
3. Good governance;
4. Fair and just Laws;
5. A knowledgeable, civil and caring society;
6. Strong institution of family;
7. Harmonious relations with different ethnicities and religions;
8. A stable and thriving economy;
9. Equitable distribution of wealth;
10. Sustainable development;

11. Safeguarding citizens' welfare, health and security; and
12. Spearheading global peace and humanitarian efforts

The Ten books of Rahmah:

The 10 Buku Rahmah are:

1. Rahmah -- an Introduction;
2. Rahmah in Governance;
3. Rahmah in Environmental Management;
4. Concepts and Applications of Rahmah in Financial *Muamalat;*
5. Rahmah in the Management of People with Disabilities;
6. Rahmah in Syariah Law and Judiciary;
7. Rahmah in Mosque Management;
8. Rahmah in Life in a Pluralistic Society;
9. Rahmah in Socioeconomics; and
10. Rahmah in Family Institutions.

The Concepts & Application of Islam Nusantara in Indonesia

Islam Nusantara is a methodology of *da'wah* to understand and apply the universality *(syumuliyah)* of Islamic teachings in accordance with the principles of Islam. This model has undergone a process of contact with good traditions *('urf shahih)* in the archipelago, in this case, Indonesia, or if the tradition is not acceptable *('urf fasid),* it has undergone assimilation, minimization, or rejection so that it is not contrary to Islamic law (Anam & Faris: 2015:22). Azra (2015: 172) considers *Islam Nusantara* as a model of thought, understanding, and practice of Islamic teachings through the culture and traditions that has developed in the Southeast Asian region. As for the Islamic component, "The Islamic Orthodoxy of the archipelago *(nusantara)* is *kalam* (theology) from Asy'ariah, fiqh Syafi'i, dan tasawuf al Ghazali.

The Strength of the Islam Nusantara Concept

According to Khalil (2008: viii), the strength of *Islam Nusantara* is how it harmonizes Islam and local traditions, without classifying which elements are Islamic and which are local traditions.

Having merged, Islam and local traditions become a unit that absorbs elements from both Islam and local traditions. This phenomenon of cultural acculturation is strengthening to the local community because it is consistent with *syariah,* which is be conserved.

In the context of *Islam Nusantara*, the strongest acculturation occurred between Islam and Javanese tradition because both are equally strong. Javanese culture, since the establishment of the Kingdoms of Demak, Panjang to Mataram, has maintained the Hindu-Buddhist and Animism-Dynamism traditions (Khalil, 2008: 149). These traditions have enriched and adapted to Islamic values. For example, there are Islamic nuances in the royal palaces of *Panjang* and *Mataram* but local customs and traditions have been sustained. (Hariwijaya, 2006: 206).

Yusuf Fuad, & Haris (2014:1) justify the mutual adjustment that comes when Islam encounters local traditions. The peaceful presence of Islam affects cultural acculturation between local culture and Islam. *Nahdlatul Ulama* promotes Islam in the lens of Indonesian culture. Thus, Islam as understood and practised by the Javanese is different from the Islam understood and practised by the Sundanese. Likewise, the Islam that is understood and practiced by the Indonesian people is different from the Islam understood and practiced by people in the Middle East. Meanwhile, tradition is neither static nor stagnant (Ramadan, 2010: 146).

Indonesia's Promotion of the Concept of Islam Nusantara

The specialty of the concept of *Islam Nusantara*, it is the encounter of Islam with local traditions that become the mutual adjustment. The peaceful presence of Islam affects cultural acculturation between local culture and Islam (Yusuf and Haris, 2014: 1).

According to Machasin (2011: 187), the three characteristics of *Nahdlatul Ulama's* understanding of Islamic attitudes when dealing with local culture or traditions are:

i. Accepting and developing a culture that follows Islamic principles and helps glorifies human life;
ii. Rejecting traditions and cultural elements that are contrary to Islamic principles; and
iii. Leave it as a way of dressing.

The first characteristic is based on the consideration that local culture is useful and supports the improvement and welfare of the community. The second attribute is applicable when local culture is seen as endangering the community, while the third characteristic applies when the local culture neither harms nor benefits Islam.

Thus, the development of most of Islamic culture in Indonesia resulted from a dialogue between universal Islamic values and the culture of the archipelago (Madjid, 1996: 92).

According to Wijaya (2011:179), the Peaceful Islam dialogues with the local cultures of the archipelago differ significantly from Arab culture and Islamic teachings. The nuances of peaceful dialogue are also carried out by Islam with local animism-dynamism and external Hindu-Buddhist beliefs. The peaceful dialogue happened, among other reasons, because of the Sufistic approach in spreading religion Islam

The *Sufistic* approach is effective because it dilutes the relationships and interactions among religious adherents, so that adherents of Animism, Dynamism, Hinduism and Buddhism can get closer to the teachings of Islam. In the end, most of the adherents of other religions convert to Islam. The result of this interactive religious dialogue is the distinctive Islam Nusantara (Mujamil Qomar:207-208).

A common understanding is Islam is the religion for the Arab people. In reality, it is a mistake when *Makkah* (in Saudi Arabia) customs are forcibly introduced into practice in Indonesia or other non-Arabic countries. The nature of *Makkah* is different from the nature of Indonesia and other areas of the archipelago. As explained by Mujamil (2009), the people of *Makkah* differ in many ways from the people of Indonesia. What is good for the people of *Makkah* is not necessarily good for the people of Indonesia and vice versa.

Another unique feature of *Islam Nusantara* is that, although Indonesia is one of the largest Muslim nations in the world, it is much less Arabized than other countries with large Muslim populations (Madjid, 1996: 94). In terms of clothes, for example, Indonesians prefer to wear sarongs and

songkok rather than robes and turbans. In terms of names for teacher, Indonesians use *Kiai, Ajengan, Tuan Guru,* or *Buya* instead of the commonly used *Syeikh* or *'Ulama* in Saudi Arabia.The Islam Nusantara concept from Indonesia may promote to foreign (Muslim) countries because of the certain privileges as mentioned by Umar (2014:271-276).

	The Characteristics of Indonesia as a Muslim-Majority Country
1.	Indonesia has the largest Muslim population in the world. The number of Indonesian Muslims is larger than the number of Muslims in Arab countries.
2.	Indonesia is free from the regional conflicts of the Middle East.
.3.	Indonesia adheres to a democratic system as the first Islamic country to conduct elections for its president.
4.	The *Mazhab* School of Thought that has developed in Indonesia is homogeneous *(Sunni).*
5.	Indonesia has made more progress in achieving gender equality than other Islamic countries.
6.	The *Pancasila,* the five foundational principles of Indonesia, has successfully united an extremely diverse country.
7.	Islamic mass organizations such as *NU* and *Muhammadiyah* have improved living conditions for Indonesians.
8.	The *Indonesian Ulema Council* (MUI), has also been important in maintaining harmony among Muslims, harmony with Indonesians who believe in other religions, and harmony with the government.
9.	The fact that Indonesian is the language used to convey Islamic values and teachings has also been very decisive.
10.	A variety of cultures influences the teaching of Islam in Indonesia. The *pesantren* education system, which has Javanese, Hindu and Buddhist roots, play an important role in the teaching of Islam in Indonesian society.

Rahmatan Lil Alamin, the Inclusivity and the Challenge?

Although *Rahmatan Lil Alamin* is against extremism in the practice of Islam, it has been interpreted as being against Islam. *Rahmatan Lil 'Alamin* has been interpreted as a blessing to kafirs (non-Muslims) and does not benefit the Muslims. The presentation of the idea of *Rahmatan Lil 'Alamin* was also brought by scholars' such as Sa'id Ramadan al-Buti through his book entitled *al-Jihad fi al-Islam*, and Shaykh Abdullah bin Bayyah in his series of a lecture. When the *Rahmatan Lil 'Alamin* concept was being implemented, a controversial issue arose when Mujahid Rawa engaged with the LGBT group. The purpose of the *Jelajah Rahmah* outreach program was to help the LGBT community, as well as the homeless and the socially disadvantaged (Bernama: 2009). In fact, as an Islamic NGO, IKRAM advises that all quarters listen, guide, and help individuals who are inclined towards and/or have been involved with LGBT practices but realize their immorality and wish to change themselves. This would be an exercise of *rahmah* (mercy) for such persons (Mohammad Hafizuddin: 2018). This episode further strengthened the negative image of *Rahmatan Lil 'Alamin*. Conflicts occurred within the Muslim community, especially from PAS supporters and right-wing NGOs' such as ISMA which criticize *Rahmatan Lil 'Alamin* for being pro-liberal, pro-DAP and failing to defend Muslim rights.

Pakatan Harapan was also criticised for how *Rahmatan Lil 'Alamin* policies ignore *Shia* Muslims in Malaysia. Sharifah Munirah Alatas (2019) has criticized the hypocrisy in the religious worldviews of the UAE and the Malaysian administrations. Michelle Bachelet stated that if *Pakatan Harapan* is committed to not excluding any individual, it must ensure that everyone's religious freedom is fully respected, including those from religious and minority sects. Simultaneously, the United Nations High Commissioner for Human Rights (UNHCR), has briefed the concept of *Rahmatan Lil Alamin* brought by the *Pakatan Harapan* (PH) government but stressed that every individual has religious freedom, including those from different sects *(FMT Reporter. 2019).*

Before this issue developed, then Minister of Education Maszlee Malik proposed introducing khat or Islamic calligraphy in schools. Chinese educational organizations, Dong Zong and Jiao Zong (Dong Jiao Zong), opposed the proposal. Lawmakers and other vernacular education groups also criticized the move to introduce Islamic calligraphy in schools. Instead of conflict with the right-wing and conservative NGO's from Malay and Chinese group, The inclusivity of *Rahmatan Lil*

'Alamin was questioned through the lesbian, gay, bisexual and transgender (LGBT) issue by right wing and conservative Malay and Chinese NGOs. During the meeting with transgender activist Nisha Ayub, Mujahid Rawa did not touch on rights of same-gender relationships but on the discrimination faced by the LGBT community. (The meeting had been arranged following a public controversy regarding the removal of Nisha and LGBT activist Pang Khee Teik's portraits from a photo exhibition at the George Town Festival.) This episode damaged how the public viewed *Rahmatan Lil 'Alamin's* inclusivity. First, right-wing and some Islamic NGO's regarded *Rahmatan Lil 'Alamin's* inclusivity policy as being against Islam because it was friendly to the LGBT community. Second, the LGBT community urged the Pakatan Harapan government to accord more rights to the community. Based on *Rahmatan Lil 'Alamin* policy, however, the Pakatan Harapan government was only able to be inclusive in terms of engagement with the LGBT community but not LGBT practice specifically.

Islam Nusantara, Nahdlatul Ulama and the Challenges

Nahdlatul Ulama still maintains its positive relationship with the Indonesian government, while the *Rahmatan Lil' Alamin* concept is the position of a NGO with no government support as the Malaysian government has changed. *Nahdlatul Ulama's* campaign to promote its "moderate", culturally embedded Islam Nusantara concept has won government endorsement and attracted international attention. In short, NU's status as the pre-eminent Islamic organization in Indonesia has never seemed more secure (Greg: 2018).

As *Nahdlatul Ulama's* influence increases, it encounters the increasingly blurred boundary between the state and civil society as the government seeks to co-opt civic organisations such as NU to service its goals, while civil society seeks to capture state resources. (Greg: 2018). Indonesian leaders are highly educated urban elites, while the majority of NU supporters are from villages and small towns (Woodward: 2020). Moreover, some sectors of NU are becoming conservative and supportive of Islamist activism. According to Greg (2018), political fluctuations may also disadvantage NU. Although President Jokowi appears well placed to be re-elected, it is possible that a rival candidate who is less favourable to NU may win. Should this happen, NU's proximity to Jokowi would limit its ability to manoeuvre with the new government.

According to Saskia Schaefer (2021), the concept of *Islam Nusantara* in debates about Islam in Southeast Asia, particularly in Indonesia with three arguments. First, while the concept *Islam Nusantara* is closely tied to a particular group of thinkers within the NU (Islamic scholars from South East Asian do not involve as a whole). Second, *Islam Nusantara* has also become a normative call for renewed pride in and support for diversity of practice and belief. It is a call issued in a deeply competitive landscape in which a variety of actors' link religion to politics in new and intense ways, but at the same time *Islam Nusantara* continues to contain some remnants of the foundational vision of the *Nahdlatul Ulama*. The third argument is the concept needs to reach beyond Java-centric notions of Islam.

Conclusion

Civil society plays a significant role in shaping Islamic discourses in both Malaysia and Indonesia. A commitment to and understanding of *Maqasid Syariah* and the democratic system will improve Malaysia and Indonesia's standing as majority Muslim countries in the Muslim world. On the flip side, civil society (Islamic Movement) must take engage with the recent challenges. The understanding and implementation of *Maqasid Syariah* in the Muslim world also must face reality. For example, Islamic movements and NGOs such as *Rahmatan Lil 'Alamin* and *Islam Nusantara* should step up and meet the challenge of the COVID-19 pandemic. Islamic movements and NGOs should work closely with government to promote the following of SOPs so that people may live through the pandemic.

Rahmatan Lil 'Alamin should be highlighted as a measured approach to these matters. The Islamic movement must also come forward to provide information to confront the anti-vaccine group. Likewise, NU, as an authoritative and influential group, should use the *Kiai* to educate the community to face the challenges of the COVID-19 pandemic. After all, the protection of life is one of the five attributes of the highest of syariah *(maqasid syariah).*

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