Journal Global Policy and Governance

•	
M. Kevser,	The Impact of Ownership Concentration on Bank
M. Doğan	Profitability: Is the Effect Linear or Non-Linear?
-	An Empirical Evidence For Turkey

G. Zaidman, Containership Charter Rates: 21
G. Dominese, Analysis of Unprecedented Growth After Covid-19

3

S. Yakubovskiy, T. Rodionova

Papers

H. Xu,	The Concepts and Practice of China's Participation in	39
H. Wang	Global Climate Governance in the Post-Paris Era	

N. Tuan Hung,
N. Xuan Cuong
Non-traditional Security Complex in the South China Sea: 51
Vietnam's Perspectives and Policy Implications

V. Huy Duong,	Rising Strategic Competition Between the United States	73
T. H. Yen Tran	and China in Mekong River Subregion	

B. Thi Thao, The United States' Multilateral Security Cooperation 101
L. Van Anh, in Southeast Asia in the First Two Decades of the Twenty-

N. Tuan Binh First Century and the Impacts on Vietnam

Pandemic Outbreak

A. Mazenda Food Policy, Governance and the South African Food 119 Security

K. Gashi The Relationship between SME's Organizational Culture 139

and Training and Development as a Human Resource Management Practice

The Impact of Ownership Concentration on Bank Profitability: Is the Effect Linear or Non-Linear? An Empirical Evidence For Turkey

Mustafa Kevser* • Mesut Doğan**

Abstract In this study, the linear/non-linear impact of ownership concentration (OC) on financial performance was investigated. In this context, the data of 8 deposit banks trading at BIST were analysed with a fixed-effects model over the period 2005-2020. The research study used the return on assets ratio (ROA) and return on equity ratio (ROE) as financial performance indicators. According to the research results, OC had negative linear impacts on both ROA and ROE. These impacts had higher significance in the four largest banks. Moreover, the interaction between OC and bank size is significant because bank size positively affects ROA. Furthermore, the ownership concentration of the banks subject to the study was determined.

Keywords: Corporate governance, ownership concentration, financial performance, banking sector, Borsa Istanbul.

Jel Classification: G21, G32

1. Introduction

Since ownership structure is one of the essential tools of corporate governance, the relationship between ownership structure and corporate performance in transition economies and market economies is one of the most studied subjects (Claessens and Djankov, 1999: 498). Major studies conducted on the subject reveal that a high level of ownership concentration exists from large organizations in the USA to both developed and developing countries (Demsetz, 1983; Shleifer and Vishny, 1986; Laporta et al., 1999). However, the impacts of ownership concentration on corporate performance are complex and uncertain (Earle et al., 2005; Huang, 2020). La Porta et al. (1998) attributed the main reason for this situation to the lack of adequate legal grounds for

Mustafa Kevser*(⋈), Mesut Doğan**

^{*} Bandırma Onyedi Eylül University, Finance, Bankig and Insurance Department, Balıkesir, Turkey E-mail: mustafakevser83@gmail.com, mkevser@bandirma.edu.tr

^{**} Afyon Kocatepe University, Business Administration, Afyonkarahisar, Turkey E-mail: mesutdogan07@gmail.com

protecting shareholders in both developed and developing countries. Berger et al. (2009) stated that developing countries could not achieve sustainable growth if they failed to maintain the necessary reforms in the banking system, and many studies reveal a positive relationship between economic growth and the existence of effective legal systems (King and Levine; 1993; Laporta et al., 1998; Beck et al., 2005).

This research study evaluates the banking sector, which partially accounts for the 2001 financial crisis, within the framework of ownership concentration, as one of the important corporate governance mechanism. Due to lack of transparency and concentrated ownership structures, Turkey is a developing country characterized by weak shareholder protection and various corporate governance issues (Selçuk, 2019). Nonetheless, following the 2001 financial crisis, Turkey has maintained its most essential reforms in the field of banking and implemented its effective corporate governance approach in the banking sector (Bektaş & Kaymak, 2009; Bakır & Öniş, 2010). The Turkish banking system is the leading catalyst of the economy and Turkey has many similar characteristics to developing countries. In this regard, the obtained results of the research study are important in providing new evidence not only for bank managers or policymakers but also for similar developing countries.

Previously conducted research studies firstly investigate the existence of a high level of ownership concentration in Turkey (Gürsoy and Aydoğan, 2002; Demirağ and Serter, 2003a; Mandacı and Gumus, 2010). Gürsoy and Aydoğan (2002) stated that a high level of ownership concentration enhanced market performance, but deteriorated accounting-based performance.

Bektaş and Kaymak (2009) concluded that ownership concentration was not an important factor for the Turkish banking sector, and explained this situation by the fact that the principal-principal conflict between the majority shareholders and minority shareholders in the Turkish banking sector was not fully settled. Similarly, Tükenmez et al. (2016) asserted that dominant shareholders acted without considering minority rights due to conflict of interests. Therefore, the rise in the ownership concentration for BIST banks negatively affected financial performance. Although the studies given above examine the relationship between ownership concentration and firm performance in the context of Turkey, they did not examine the effect of ownership concentration on firm performance in terms of linearity.

La Porta et al., (1999) stated that corporate governance structure was different in developing countries, while the differences in legal differences, corporate culture, and ownership structure indicated that the relationship between ownership concentration and firm performance might have led to different results in developing countries (Chow and Fung, 1998; Claessens and Djankov, 1999). In this context, the results obtained from the research studies on the relationship between ownership structure and firm performance in developed economies cannot be generalised in terms of developing countries (La Porta et al., 1998). These findings background in the context of Turkey

constitute the subject of the research studies investigating whether or not ownership concentration increases bank profitability.

Although there are many previously conducted studies investigating the impact of ownership structure on bank profitability (Tanriöven et al., 2006; Kevser, 2018), the number of studies directly investigating the linear/non-linear impact of ownership concentration on financial performance is quite limited. In this study, the linear/nonlinear impacts of ownership concentration on corporate performance are examined within Borsa Istanbul framework (BIST). According to Fama and Jensen (1983), once ownership concentration reaches a particular degree, managers will be able to entrench themselves and expropriate the wealth of minority shareholders. This hypothesis has sparked a heated debate among academics over the possibility of a nonlinear relationship between ownership concentration and business performance. In this context studies conducted in recent years have determined the non-linear effect of ownership concentration on corporate performance (Iwosaki and Mizobata, 2020). In terms of developing countries, it should be noted that there is a high potential nonlinearity between ownership concentration and firm performance (Hu and Izumida, 2008; Omran, 2009; Gul et al., 2010). In this respect, the data of 8 banks operating in BIST are analysed over the period 2005-2020. In the research study, firstly, the impact of ownership concentration on bank profitability is investigated over the period 2005-2020, and then the analysis results indicating whether the aforementioned impact is linear/non-linear are presented. Moreover, the fixed effects model is used as the method. The results obtained from the research study reveal a significant and negative linear relationship between ownership concentration and ROA. Furthermore, the results indicate that bank size has a positive impact on ROA. Another critical finding obtained from the research study is that the OC variable is statistically more significant for four big banks than other banks. The impact of the OC variable on profitability is insignificant for the non-Big4 bank group.

2. Theoretical Background of the Research

2.1 Corporate Governance and Ownership Structure

Debates on ownership structure and corporate performance date back to Berle and Means (1932) suggesting a positive relationship between ownership concentration (OC) and profitability. Since then, ownership structures of firms have been evaluated as a corporate governance mechanism. Corporate governance is an administrative structure that ensures that financial providers to companies get a good return on their investment (Shleifer and Vishny, 1997).

In 1976, Jensen and Meckling developed a theory and put forward a new era on the separation and control issue of firms. According to this new point of view conflict of interest occurs among shareholders and managers, and this causes agency costs for firms. In the context of agency theory, agency costs include monitoring costs, bonding costs and residual costs, which negatively affect firm profitability (Jensen and Meckling, 1976). As Claessens and Djankov (1999) stated, managers, prioritize their benefits rather than shareholders' value maximization. Extended literature suggests internal and external corporate governance tools to mitigate agency problems (Arouri et al., 2014). Afterward, as a corporate governance mechanism, the relationship between ownership structure and firm performance has become more arguable in the corporate governance and financial performance area. In prior researches, many types of ownership structure have been examined as a corporate governance determinant (Ozili and Uadiale, 2017). For instance, foreign ownership (Micco et al., 2004; Kosak and Cox, 2008; Kobiessi, 2010), institutional ownership (Elyasiani and Jin, 2010; Lin and Fu, 2017), state ownership (Yu, 2013; Liljeblom et al., 2019), managerial ownership (Morck et al., 1988; Hermalin and Weisbach, 1988; Holderness et al., 1999) ownership concentration (Antoniadis et al., 2010; Wen, 2010; Ozili and Uadiale, 2017; Iwasaki and Mizobata, 2020) have been widely investigated whether these ownership types have a significant impact on profitability.

The allocation of working capital among shareholders is referred to as ownership concentration. Working capital in this context can be in the hands of a few individuals or groups in large amounts, or it can be in the hands of minority shareholders in small amounts. The concentrated ownership structure is mentioned in the first case, whereas in the second case, the dispersed ownership structure is mentioned (Kevser, 2018). Since block shareholders often have power in systems with a high ownership concentration, they may exert direct management control through their representatives or managers with whom they have a personal relationship (Wang and Shailer, 2015). From the corporate governance perspective Shleifer and Vishny (1994, 1997) stated corporate governance is a straight forward ownership structure perspective, and ownership structure influences firm performance. In this context, corporate governance literature conceive two features ownership structure;

- 1. ownership concentration, which refers to the share of the largest owner; and
- 2. ownership mix, related to the major owner identity (Zouari and Taktak, 2014).

The primary motivation of this study is twofold. First, it aims to contribute to corporate governance literature in terms of ownership structure and financial performance. Secondly, the current research study aims to fill the gap in how ownership concentration affects bank performance. Is the effect linear or non-linear? Abundant literature investigates the effects of OC on financial performance and reaches mixed results. These results heavily show significant/insignificant, positive/negative impacts of OC on financial performance but a very limited study explores the linearity of these impacts. Hence in Turkey's context of an emerging market, the study examines if OC has a linear or non-linear effect on banks' financial performance.

2.2. Ownership Structure and Firm Performance, Theoretical Background

Many studies are exploring the impact of ownership structure on financial performance. Shleifer and Vishny (1994) indicate that ownership structure affects firm performance. However, the impact of ownership structure varies according to the type of ownership and country. Accordingly, findings are mixed, especially in developing countries (Zauari and Taktak, 2014). For instance, Arouri et al. (2014) showed a positive and significant association between family ownership, foreign ownership, institutional ownership, and bank performance, but findings did not support this association in terms of state ownership. On the other hand, Demsetz and Villalonga (2001) found no significant association between ownership structure and firm performance. In terms of agency theory, if managers do not have significant equity shares in the companies they run, the likelihood of them misappropriating profit in the short term to benefit themselves at the detriment of controlling and noncontrolling shareholders is higher. When this is the case, managers can misappropriate benefits for personal gain, which would harm the firm's reported profit; therefore, a negative relationship between dispersed ownership and profitability may be anticipated (Shleifer and Vishny, 1997; Ozili and Uadiale, 2017). Stulz (1999) explains this dilemma, which is a reflection of agency theory, in terms of firms with foreign ownership structures, claiming that firms with foreign ownership structures appear to monitor efficiently and have superior access to technological, managerial, and financial resources, and thus can contribute to a firm's performance improvement. In concentrated ownership structures in which a particular person or group holds the company shares, the problems of agency theory and the conflict of interest between shareholders and managers decrease. With the increase in the ownership concentration, the shareholders follow the management more (Jensen and Meckling, 1976, Thomsen and Pedersen, 2000).

On the other hand, ownership concentration can impose incentives and measures to prevent managers from abusing their responsibilities while also avoiding doing business (Shleifer and Vishny, 1986). Expropriation, on the other hand, is a significant issue caused by ownership concentration. Large shareholders have control over management decisions through their representatives in the case of ownership concentration, and they can cause minority shareholders to stop investing over time (Edwards and Weichenrieder, 2004; Santiago-Castro and Brown, 2007; Kim et al., 2007). The legal protection factor is at the root of the problem caused by the ownership concentration between majority and minority shareholders. According to Shleifer and Vishny (1997), the levels of legal protection vary by country, and ownership concentration is an effective corporate governance tool in cases where legal protection is inadequate. According to La Porta et al. (1998), legal protection and ownership concentration negatively correlate. As a result, as ownership concentration increases, legal protection decreases, and as ownership concentration decreases, legal protection increases (La Porta et al., 1998). In the literature, various rates of ownership

concentration have been used. Although La Porta et al. (1999) used a percentage of ownership concentration of 10% or more as a criterion, Claessens et al. (2000) used a share control of more than 5%, and Cronqvist and Nilsson (2003) used a voting right of at least 25%. According to Claessens and Djankov (1999), a concentration increase of 10 percent leads to a 2 percent higher short-term work production and a short-term profit increase of 3 percent. In another point of view, as a different type of ownership structure, foreign ownership is widely has been discussed, mostly in comparison with domestic ownership. It is suggested that foreign ownership performed better than domestically owned firms in developed countries via effective monitoring, managerial talent, strong investment power, thus contribute to increasing a firms performance (Claessend and Djankov, 1999; Choi and Hassan, 2005; Zouari et al., 2014; Arouri et al., 2014; Iwasaki and Mizobata, 2018).

Besides, La Porta et al., (2002) emphasise the importance of state ownership in developing countries economic and financial development. In most transition economies, privatisation policy influenced the transfer of assets from the state to private hands, increasing ownership concentration (Gabrisch and Hölscher, 2006, Bian and Deng, 2017). Most research shows that state ownership harms profitability, revealing that it operates with low profitability and high costs (Chen, 2001; Micco et al., 2006; Iannotta et al., 2007; Berger et al., 2008, Migliardo and Forgione, 2018). In this section, the effect of ownership types on firm performance is discussed. In the next section of literature review, the effect of ownership concentration on firm performance will be discussed and the conceptual framework will be presented as to whether this effect is linear or non-linear.

2.3. Ownership Concentration and Bank Performance

The complexity between ownership concentration and firm performance has been debated in numerous researches and reported mixed results (Shleifer and Vishny, 1986; Claessens and Djankov, 1999; Demsetz and Villalonga, 2001; Singh et al., 2003; Bian and Deng, 2017). As determinants of ownership structure, Demsetz and Lehn (1985) identify value-maximizing business size, profit possibilities from greater control levels, and systematic regulation.

Within this definition, Shleifer and Vishny (1986) argue that large shareholders have a strong incentive to supervise and discipline firm managers, which can help avoid the traditional "freeholder" problem associated with a company. In this context, Huang (2020) proposed that one crucial policy implication is that banks may establish a concentrated ownership structure in order to increase their profitability. According to Claessens and Djankov (1999), firms with higher ownership concentration is more profitable; Huang (2020) suggested that ownership concentration affects ROA and ROE positively; block ownership is positively associated with financial performance while having a limited effect on reducing costs (Singh et al. 2003), Zauri and Taktak (2014)

showed a significant and positive relationship between bank ownership concentration and ROA and ROE. However, some studies could not find a relationship between ownership concentration and firm performance. For instance, Demsetz and Villalonga (2001), one of the major studies on corporate governance and finance, suggested a little relation between OC and firm performance. Saidat et al. (2019) also indicated that ownership concentration has an insignificant correlation with financial performance. Iannotta et al. (2007) found that profitability is unaffected by high ownership concentration, but the quality of loans and advances is significantly improved. According to Laeven and Levine (2009), higher ownership concentration has a significant relationship with risk-taking tendency, affecting firm performance.

While it is stated that the concentrated ownership structure may have different effects on corporate performance, it is also necessary to mention the financial performance measures used in studies examining the relationship between ownership concentration and financial performance. A bank's performance cannot be assessed using a single metric because banks have a wide range of objectives to achieve (Rastogi et al., 2021) hence financial profitability can be measured using a variety of accounting-based and market-based indicators, such as return on assets (Bian and Deng, 2017; Ozili and Uadiale, 2017; Kevser, 2018; Saidat et al., 2019; Huang, 2020), return on equity (Kosak and Cok, 2008; Antoniadis et al., 2010; Bian and Deng, 2017), Tobin Q (McConnell and Servaes, 1990; Setia-Atmaja et al., 2009; Arouri et al., 2014).

In the literature given above, most studies exhibit the relations between ownership concentration and profitability, but very limited studies investigated whether this relation is linear or non-linear. Conflict and ambiguous results make more interesting Turkey's case as a developing country. Even studies conducted recently on the topic in both developed and developing economies show that the alignment hypothesis is more or less true. Even though previous empirical works have paid attention to both the potential nonlinearity of ownership concentration and firm performance as well as the endogeneity of the degree of ownership concentration and firm performance, the conclusions reached by these studies are vastly different (Omran, 2009; Gul et al., 2010; Iwosaki and Mizobata, 2020).

Despite empirical evidence that suggests a linear relationship between performance and ownership concentration (Demsetz and Lehn, 1985; Hill and Snell, 1988; Leech and Leahy, 1991; Morck et al., 2000), other contentious hypotheses imply that the link could be non-linear (Shleifer and Vishny, 1986; Kole, 1995; Iwosaki and Mizobata, 2020). For instance, Jiang et al., (2009), found a non-linear effect of ownership concentration on firm performance ROA, ROE and Tobin Q in New Zealand. For 2006-2009, Alimehmeti and Paletta (2012) discovered a positive and non-linear relationship between ownership concentration and firm value in Italian-listed firms. However in the setting of Chinese listed banks from 2007 to 2018, Huang (2020) discovered that the effect of ownership concentration on ROA and ROE is linear.

The results obtained from prior studies have strong relations with the following main hypotheses (Jiang et al, 2009; Zauri and Taktak, 2014; Iwosaki and Mizobata, 2020);

- convergence of interest hypothesis
- efficient-monitoring hypothesis
- entrenchment hypothesis

According to the convergence of interest hypothesis, concentrated ownership can increase performance by lowering monitoring costs and giving management more power (Jensen and Meckling, 1976; Shleifer and Vishny, 1986). The incentives and power to oversee management are in the hands of large owners. As a result, concentrated ownership reduces the principal-agent agency dilemma caused by the separation of ownership and control, implying a positive association between ownership concentration and firm performance (McConnell and Servaes, 1990; Zeitun and Tian, 2007).

According to the efficient-monitoring hypothesis, a concentrated ownership structure has more competence and can supervise management at a lesser cost than individual shareholders. Thus, ownership concentration increases company value, improves the long-term return-on-investment relationship, and limits earnings management (McConnell and Servaes, 1990; Clay, 2001; Rajgopal et al., 2002).

Instead, the entrenchment theory contends that the presence of significant controlling stockholders can result in expropriation. According to La Porta et al. (1999), a higher level of ownership concentration increases owners' motive and power to expropriate minority shareholder money because the ultimate owner has the power to extract private gains and expropriate minority interests.

The literature given above shows both linear and non-linear positive effects of ownership concentration. In this regard, we should note that the effects of ownership concentration may vary country by country. As La Porta et al. (1998) state, due to lack of legal protection, the ownership structure is concentrated in developing countries. Turkey is a developing country, and therefore the authors develop the following hypotheses in line with the theoretical background given above.

H₁: Ownership concentration has an impact on bank profitability.

H_{1a}: Ownership concentration has an impact on ROA

H_{1b}: Ownership concentration has an impact on ROE

H₂: Ownership concentration has a linear impact on bank profitability.

In the following sections, data and methods, findings and conclusions will be given, respectively.

3. Data and Methodology

This study aims to explicate the impact of ownership concentration on bank profitability. In the study, bank profitability is estimated by fixed effects model with heteroskedasticity- robust standard errors:

$$Profitability_{it} = \beta_0 + \beta_1 OC_{it} - I + \beta_i X_{it} - I + u_i + \lambda_t + \varepsilon_{it}. \tag{1}$$

Profitability refers to the profitability of the i^{th} bank in year t; OC denotes ownership concentration; X refers to a set of control variables. u_i and λ_t are unobserved bank and year fixed effects and the error term, respectively. Nevertheless, the impact of ownership concentration on bank performance may not be linear (Huang, 2020; Iwasaki and Mizobata, 2020). In this context, this study also analyses whether or not ownership concentration has a non-linear impact on bank profitability for Turkish banks. In order to analyse a nonlinear impact, the following equation is developed by squaring the ownership concentration (OC) variable:

$$Profitability = \beta_0 + \beta_1 OC_{ii} - I + \beta_n OC_{ii}^2 - I + \beta_1 X_{ii} - I + \lambda_1 + u_i + \varepsilon_{ii}. \tag{2}$$

Also, the impact of ownership concentration on the performance may differ by the size of the bank. In other words, large and small size banks may have different business models and ownership concentrations (Bian & Deng, 2017; Huang et al., 2019; Huang, 2020). To test this assumption, ownership concentration term interaction and bank size are included in the model:

$$Profitability = \beta_0 + \beta_1 OC_{it} - I + \beta_n OC_{it} - I \cdot Size_{it} - I + \beta_t X_{it} - I + \lambda_t + u_i + \varepsilon_{it}.$$
(3)

In the study, two variables are used as the indicator of bank profitability, namely; return on assets (ROA) and return on equity (ROE) (Lin & Zhang, 2009; Jiang et al., 2013; Boateng et al., 2015). In the study, as in the literature, ROA is used in the primary analyses and ROE is used for robustness check (Lin & Zhang, 2009; Huang, 2020). In terms of ownership concentration, the percentage measurement of the largest shareholder of each bank is obtained (Leaño & Pedraza, 2018; Huang, 2020). Control variables consist of the natural logarithm of total assets (Size), the total debt / total assets ratio (Debt), the annual growth of a bank's total assets (Growth), and the number of board members (Board).

The study uses data of 8 banks operating in the Turkish banking sector uninterruptedly over the period 2005 - 2020. According to the International Accounting Standards, standardization of the banks' financial statements accounts for determining 2005 as the beginning year of the dataset period. Moreover, following this period, the Turkish banking sector grew rapidly and became more attractive to foreign investors. In the study, participation, development, and state banks are not included in the analysis due to their distinctive structures, and a sample is generated for only deposit banks. As a result, the generalisability and homogeneity of the results for the period mentioned above and selected banks are provided. Financial data utilized in the study are obtained from the Banks Association of Turkey, whereas information regarding the ownership and board structure is obtained from the banks' annual reports. Table 1 presents the descriptive statistics of these variables.

Variable	# of Obs.	Mean	Std. Dev.	Min.	Max.
ROA	128	-6.37	4.90	1.5296	1.11845
ROE	128	-49.56	40.44	13.6271	8.97882
OC	128	.44	1.00	.7402	.18546
Size	128	20.95	27.19	24.7310	1.51862
Debt	128	.59	1.57	.9404	.11837
Growth	128	-27.77	105.61	19.3558	15.78745
Board	128	6.00	14.00	10.1641	2.04584

Table 1. Descriptive Statistics

4. Findings

Firstly, the relationship between ownership concentration and bank profitability is examined. The linear relationship between ownership concentration and bank profitability is tested with Equation 1, whereas the existence of a nonlinear relationship is tested with Equation 2. In Table 2, Columns I and III indicate the change in ownership concentration (OC) coefficient. Upon examining the results, it is understood that a negative and significant relationship exists at a 5% confidence level between ownership concentration and ROA. The coefficient of the OC variable ranges between -1.12 and -1.31. Upon developing the model by squaring the OC variable, the statistical significance of the OC variable remains (t = -4.83), whereas the OC variable is not statistically significant (see Column IV). These results indicate that ownership concentration has a negative and linear impact on the ROA of Turkish banks regardless of the model specifications.

If the relationship between ownership concentration and ROA is affected by the size of the bank will be tested in 2 ways. First of all, it is determined whether or not the impact of the interaction between OC and SIZE is significant (Equation 3). The results reveal that the coefficient of the interaction term (OC × Size) is 0.66, and it is significant at a 10% level (see Table 3, Column I). In other words, bank size has a positive impact on ROA. Secondly, the banks are divided into two groups such as the most significant four (Big4) and the remaining (Non-Big4) (Equation 1). The OC variable becomes more significant for the Big4 group. However, it loses its importance for the Non-Big4 group. These results indicate that the relationship between ownership concentration and ROA is quite evident for larger banks and the value of R-squared increases from 11.1% to 58.5%.

Table 2. The Impact of Ownership Concentration on ROA: Linear or Nonlinear?

		Linear		Nonlinear
	I	II	III	IV
0.0	-1.12**	-1.19**	-1.31**	-1.54**
OC	(-2.13)	(-2.96)	(-3.50)	(-4.83)
C:		0.13**	0.05	0.03
Size		(2.04)	(0.77)	(0.65)
D.1.4		-2.38***	-2.91***	-2.83***
Debt		(-2.84)	(-3.31)	(-3.21)
		0.00	0.00	0.00
Growth		(0.99)	(1.09)	(1.03)
n ı			0.11*	0.13*
Board			(1.83)	(1.74)
00-00				0.03
OCxOC				(0.74)
O	2.36***	1.13	2.52	2.43
$oldsymbol{eta}_0$	(5.87)	(0.66)	(1.36)	(1.23)
R-Square	0.035	0.111	0.135	0.136

Note: All models are estimated with fixed effects by bank and year, and robust standard errors are clustered at the bank level. T statistics are in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1% levels, respectively.

The results regarding the impact of ownership concentration on ROE as an alternative to performing robustness control are presented in Table 4. Similar to ROA, ownership concentration negatively affects ROE. As a result, it is determined that ownership concentration has a negative and linear relationship with ROE. Similar to ROA, the OC variable has become more significant for the Big4 group, whereas it is insignificant for the Non-Big4 group.

Table 4. Using ROE as an Alternative Measurement of Bank Profitability

	Linear	Non-Linear	Interaction	Big4	Non- Big4
OC	-7.15**	-7.15**	-8.68**	-19.05***	-1.99
O C	(-2.32)	(-2.32)	(-1.82)	(-2.60)	(-0.35)
C:	0.54	0.43	4.61	-4.57***	0.97
Size	(1.23)	(1.12)	$(2.37)^{**}$	(-4.10)	(1.13)
Debt	-15.11***	-12.42***	-18.35***	-65.42***	12.65
Dent	(-2.98)	(-2.32)	(-3.57)	(-9.99)	(1.95)**
Cwayyth	0.08**	0.07**	0.08**	0.16***	-0.01
Growth	(2.35)	(2.23)	(2.55)	(3.35)	(-0.42)
Doord	0.82	0.75	0.33	-0.01	0.37
Board	(2.40)**	(2.21)**	(0.87)	(-0.01)	(0.97)
00.00		0.01			
OCxOC		(0.08)			
00-6:			7.59**		
OCxSize			(2.72)		
ο.	9.55	2.21	14.69***	19.35***	-19.28
$oldsymbol{eta}_0$	(0.89)	(0.53)	(2.85)	(6.68)	(1.32)
R-Square	0.093	0.105	0.119	0.507	0.176

Note: All models are estimated with fixed effects by bank and year, and robust standard errors are clustered at the bank level. T statistics are in parentheses. *, **, and *** indicate significance at a 10%, 5%, and 1% levels, respectively.

5. Conclusion

This paper aims to provide a different view of the current literature investigating the relationship between corporate governance and bank performance. First of all, the research differs from previous research with its approach. While previous studies mainly investigated the positive or negative effects of ownership concentration on bank profitability, the current study examines the linearity of this effect and is novel for Turkey. In this context, the study answers whether bank profitability increases linearly as ownership concentration increases. Secondly, while investigating the linearity

effect in question, we divided the banks into two groups and compared the linearity effect between the four largest banks and the other group. This approach constitutes another original aspect of the research. Ownership concentration is an important instrument of corporate governance in various countries. Nonetheless, the obtained findings regarding the impact of ownership concentration on corporate performance differ by country and are theoretically and empirically complex (Wang and Shailer, 2015). This research study examines the impact of ownership concentration on profitability by analyzing the data of eight banks operating in the Turkish banking sector and BIST over the period 2005-2020. According to the fixed effects models with heteroskedasticity robust standard errors, the results obtained from the research study revealed that the ownership concentration has a negative and linear impact on both ROA and ROE; in addition, bank size has a positive association with ROA. For all three models, ownership concentration was found to decrease the profitability while bank size increases ROA. Moreover, another remarkable result of the research is that the effect of ownership concentration on bank profitability is more significant for the four largest banks. The obtained results comply with that of La Porta et al. (1999) and Claessens et al. (2000) but differs from Alimehmeti and Paletta (2012), Huang (2020), which showed that ownership concentration has a positive and linear impact on the case of Italy and China.

We found a robust evidence that ownership concentration has a negative and linear impact on bank profitability. A concentrated ownership structure exists where the legal protection is law and concentrated ownership is predominant in the Turkish banking system. In Turkey, the weakness of legal protection and concentrated ownership deactivate the professional managers, as Berle and Means (1932) indicated.

From this perspective results obtained from the study also support the entrenchment hypothesis. As La Porta et al. (1999) stated, owners are more motivated and powerful to expropriate money from minority shareholders when there is a higher concentration of ownership. Because the ultimate owner has the power to expropriate minority interests and earn private gains therefore, as ownership concentration increases, profitability does not increase at the same level.

Our findings also have various policy implications. Turkey is a developing country with a transition economy. Every day, remedial arrangements are made for banking and capital markets. In this context, the new regulations should be in a structure that will protect the rights of all banks' stakeholders. In addition, the ownership structure of banks characterised by diseconomies, or those with a risk profile that could jeopardise the financial system's stability, should be taken into account by bank authorities and regulators in their monitoring activities. Overall also it should be stated that bank managers must focus on sustainable profitability.

The research has some limitations. First of all, the inclusion of eight banks operating in the stock market is the main constraint. Banks operating in the stock market but

with different balance sheet structures were not included in the research. Secondly, the research covers the period of 2005-2020 and the results obtained belong to this period.

Finally, this research covers banks traded on the stock exchange. The inclusion of all banks operating in the banking sector in future research is important in terms of testing the results of the research and testing the validity of the robustness of the research model.

References

- Antoniadis, I., Lazarides, T. & Sarrianides, N. (2010). Ownership and performance in the Greek banking sector. *International Conferance on Applied Economics*.
- Arouri, H., Hossain, M. & Muttakin, M.B. (2014). Effects of board and ownership structure on corporate performance: evidence from GCC countries. *Journal of Accounting in Emerging Economies*, 4(1), 117-130.
- Bakır, C. & Öniş, Z. (2010). The regulatory state and Turkish banking reforms in the age of post-Washington consensus. *Development and Change* DOI:10.1111/j.1467-7660.2009. 01634.x.
- Beck, T., Demirgue-Kunt, A. & Maksimovic, V. (2005). Financial and legal constraints to firm growth: Does firm size matter? *Journal of Finance*, 60, 137–177.
- Bektaş, E. & Kaymak, T. (2009). Governance mechanism and ownership in an emerging market: The case of Turkish banks. *Emerging Markets Finance & Trade*, 45(6), 20-32.
- Berger, A.N., Klapper, L.F., Peria, M.S.M. & Zaidi, R. (2008). Bank ownership type and banking relationships. *Journal of Financial Intermediation*, 17(1), 37-62.
- Berger, A. N., Hasan, I. & Zhou, M. (2009). Bank ownership and efficiency in China: What will happen in the world's largest nation. *Journal of Banking and Finance*, 33, 113-130.
- Berle, A. A. & Means, C. G. (1932). The modern corporation and private property. New York: Harcourt Brace and World Inc.
- Bian, W. & Deng, C. (2017). Ownership dispersion and bank performance: Evidence from China. *Finance Res. Lett*, 22, 49–52. doi: 10.1016/j.frl.2016. 12.030.
- Boateng, A., Huang, W. & Kufuor, N. K. (2015). Commercial bank ownership and performance in China. *Appl. Econ*, 47, 5320–5336. doi:10.1080/00036846.2015.1047089.
- Chen, R. (2001). Ownership structure as corporate governance mechanism: Evidence from Chinese listed companies. *Economics of Planning*, 34, 53-72.
- Choi, S., & Hasan, I. (2005). Ownership, governance and bank performance: Korean experience. *Financial Markets, Institutions & Instruments*, 14(4), 215-242.
- Chow, C. K. W. & Fung M. K. Y. (1998). Ownership structure, lending bias and liquidity constraints, evidence from Shanghai's manufacturing sector. *Journal of Comparative Economics*, 26, 301-316.
- Claessens, S. & Djankov, S. 1999. Ownership concentration and corporate performance in the Czech Republic. *Journal of Comparative Economics*, 27, 498–513.
- Claessens, S., Djankov, S. & Lang, L. (2000). The seperation of ownership and control in East Asian corporations. *Journal of Financial Economics*, 58(1), 81–112.
- Clay, D.G. (2001). Institutional ownership, CEO incentives, and firm value. Unpublished PhD

- dissertation, University of Chicago, Chicago, IL.
- Demirag, I. & Serter, M. (2003). Ownership patterns and control in Turkish listed companies. *Corporate Governance*, 11(1), 40-51.
- Demsetz, H. (1986). Corporate control, insider trading, and rates of return. *American Economic Review*, 76(2), 313-316.
- Demsetz, H. & Lehn, K. (1985). The structure of corporate ownership: Causes and Consequences. Journal of Political Economy, 93(6), 1155-1177. doi:10.1086/261354
- Demsetz, H. & Villalonga, B. (2001). Ownership structure and corporate performance. *Journal of Corporate Finance*, 7(3), 209-233.
- Earl, J. S., Kucsera, C. & Telegdy, A. (2005). Ownership concentration and corporate performance on the budapest stock exchange: Do too many cooks spoil the goulash? *Corporate Governance*, 13(2), 254-264.
- Edwards, J.S.S. & Weichenrieder, A.J. (2004). Ownership concentration and share valuation. *German Economic Review*, 5(2), 143-171.
- Elyasiani, E. & Jia, J. (2010). Distributon of institutional ownership and corporate firm performance. *Journal of Banking and Finance*, 34(3), 606-620.
- Fama, E. F. & Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26(2), 301-325.
- Gabrisch, H., & Hölscher, J. (2006). *The successes and failures of economic transition: The European Experience*, Palgrave Macmillan: Basingstoke.
- Gul, F. A., Kim, J.B. & Qiu, A.A. (2010). Ownership concentration, foreign shareholding, audit quality, and stock price synchronicity: Evidence from China. *Journal of Financial Economics*, 95(3), 425–442.
- Gürsoy, G. & Aydoğan, K. (2002). Equity ownership structure, risk taking and performance. *Emerging Markets Finance and Trade*, 38(6), 6-25.
- Hermalin, B. & Weisbach, M. (1988). The determinants of board composition. *RAND Journal of Economics*, 19, 589–606.
- Holderness, C., Kroszner, R. & Sheehan, D. (1999). Were the good old days that good? Evolution of managerial stock ownership and corporate governance since the great depression. *Journal of Finance*, 54, 435–469.
- Hill, C. W. & Snell, S. A. (1989). Effects of ownership structure and control on corporate productivity. *The Academy of Management Journal*, 32(1), 25-46.
- Hu, Y. & Izumida, S. (2008). Ownership concentration and corporate performance: A causal analysis with Japanese panel data. *Corporate Governance: An International Review*, 16(4), 342–358. doi:10.1111/j.1467-8683.2008.00690.x
- Huang, Q. (2020). Ownership concentration and bank profitability in China. *Economic Letters*, 196, 109525.
- Huang, Q., De Haan, J. & Scholtens, Bert. (2019). Analysing systemic risk in the Chinese banking system. *Pacific Economic Review*, 24, 348–372. doi:/10.1111/1468-0106.12212.
- Iannotta, G., Nocera, G. & Sironi, A. (2007). Ownership structure, risk and performance in the European banking industry. *Journal of Banking and Finance*, 31(7), 2127–2149.
- Iwasaki, I. & S. Mizobata. (2018). Post-privatization ownership and firm performance: A large meta-analysis of the transition literature. *Annals of Public and Cooperative Economics*,

- 89(2), 263–322. doi:10.1111/apce.2018.89.issue-2.
- Iwasaki, I. & Mizobata, S. (2020). Ownership concentration and firm performance in European Emerging Economies: A Meta-Analysis. *Emerging Markets Finance and Trade*, 56(1), 32-67. doi:10.1080/1540496X.2018.1530107.
- Jensen, M. C. & Meckling, W.H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Jiang, H., Habib, A. & Smallman, C. (2009). The effect of ownership concentration on CEO compensation-firm performance relationship in New Zeland. *Pacific Accounting Review*, 21(2), 104-131.
- Jiang, C., Yao, S. & Feng, G. (2013). Bank ownership, privatization and performance: Evidence from a transition country. *Journal of Banking and Finance*, 37, 3364–3372. doi:10.1016/j. jbankfin.2013.05.009.
- Kevser, M. (2018). The relationship between ownership structure of banks and financial performance: An emprical research for Turkey, Doctoral Thesis, Yalova University, Turkey.
- Kim, K.A., Kitsabunnarat-Chatjuthamard, P. & Nofsinger, J.R. (2007). Large shareholders, board independence, and minority shareholder rights: Evidence from Europe. *Journal of Corporate Finance*, 13, 859-880.
- King, R. G. & Levine, R. (1993). Finance and growth: Schumpeter might be right. *Quarterly Journal of Economics*, 108, 717–738.
- Kobeissi, N. & Sun, X. (2010). Ownership structure and bank performance: Evidence from the Middle East and North Africa Region. *Comparative Economic Studies*, 52(3), 287-323.
- Kole, S.R. (1995). Measuring managerial equity ownership: A comparison of sources of ownership data. *Journal of Corporate Finance*, 1(3-4), 413–435.
- Kosak, M. & Cok, M. (2008). Ownership structure and profitability of the banking sector: the evidence from the see region. *Journal of Economics and Business*, 26(1), 93-122.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A. & Vishny, R. (1998). Law and Finance. *Journal of Political Economy*, 106, 1113–1155.
- La Porta, R., Lopez-de-Silanes, F. & Shleifer, A. (1999). Corporate owneship around the World. *The Journal of Finance*, 54(2), 471–517.
- Laeven, L. & Levine, R. (2009). Bank governance, regulation and risk taking. *Journal of Financial Economics*, 93, 259–275.
- Leaño, M. & Pedraza, A. (2018). Ownership concentration and market liquidity: Evidence from a natural experiment. *Economics Letters*, 167, 56–59. doi:10.1016/j.econlet.2018.02.024.
- Leech, D. & Leahy, J. (1991). Ownership structure, control type classifications and the performance of large British companies. *The Economic Journal*, 101(409), 1418-1437.
- Liljeblom, E., Maury, B. & Hörhammer, A. (2019). Complex state ownership, competition, and firm performance–Russian evidence. *International Journal of Emerging Markets*, 15(2), 189-221.
- Lin, X. & Zhang, Y. (2009). Bank ownership reform and bank performance in China. *Journal of Banking and Finance*, 33, 20–29. doi:10.1016/j.jbankfin.2006.11.022.
- Lin, Y.R. & Fu, X.M. (2017). Does institutional ownership influence firm performance: Evidence from China. *International Review of Economics and Finance*, 49, 17-57.
- Mandacı, P. E. & Gumus, Kurt, G. (2010). Ownership concentration, managerial ownership and

- firm performance: Evidence from Turkey. SEE Journal, 57-66. doi:10.2478/v10033-010-0005-4.
- McConnell, J. & Servaes, H. (1990). Additional evidence on equity ownership and corporate value. *Journal of Financial Economics*, 27(2), 595-612.
- Micco A., Panizza, U. & Yañez-Pagans M. (2004). *Bank ownership and performance*. Inter-American Development Bank. Research Department. Working Paper.
- Micco, A. U., Panizza, U. & Yañez-Pagans, M. (2006). Bank ownership and performance. Does politics matter? *Journal of Banking and Finance*, 31, 219–241.
- Migliardo, C. & Forgione, A.F. (2018). Ownership structure and bank performance in eu-15 countries. *Corporate Governance*, 18(3), 509-530.
- Morck, R., Shleifer, A. & Vishny, R. (1988). Management ownership and market valuation: An empirical analysis. *Journal of Financial Economics*, 20, 293–315.
- Morck, R., Nakamura, M. & Shivdasani, A. (2000). Banks, ownership structure, and firm value in Japan. *The Journal of Business*, 73(4), 539-567.
- Omran, M. (2009). Post-privatization corporate governance and firm performance: The role of privatisation ownership concentration, identity and board composition. *Journal of Comparative Economics*, 37(4), 658–673. doi:10.1016/j.jce.2009.02.002.
- Ozili, P.K. & Uadiale, O. (2017). Ownership concentration and bank profitability. *Future Business Journal*, 3, 159-171.
- Rajgopal, S., Venkatachalam, M. & Jiambalvo, J. (2002). Institutional ownership and the extent to which stock prices reflect future earnings. *Contemporary Accounting Research*, 19(1), 117-136.
- Rastogi, S., Gupte, R. & Meenakshi, R. (2021). A holistic perspective on bank performance using regulation, profitability, and risk-taking with a view on ownership concentration. *Journal of Risk and Financial Management*, 14(111): doi:10.3390/jrfm14030111
- Santiago-Castro, M. & Brown, C.J. (2007). Ownership structure and minority rights: a Latin America view. *Journal of Economics and Business*, 59, 430-442.
- Selçuk, E. A. (2019). Corporate social responsibility and financial performance: The moderating role of ownership concentration in Turkey. *Sustainability*, 11. doi:10.3390/su11133643.
- Setia-Atmaja, L., Tanewski, G.A. & Skully, M. (2009). The role of dividends, debt and board structure in the governance of family controlled firms. *Journal of Business, Finance and Accounting*, 36(7/8), 863-898.
- Shleifer, A. & Vishny, R.W. (1986). Large shareholders and corporate control. *Journal of Political Economy*, 94, 461–488.
- Shleifer, A. & Vishny, R.W. (1994). Politicians and Firms, *The Quarterly Journal of Economics*, 109(4), 995-1025.
- Shleifer, A. & Vishny, R. (1997). A survey of corporate governance. *The Journal of Finance*, 52(2), 737-783.
- Singh, M. & Davidson, W.N. (2003). Agency Costs, Ownership Structure and Corporate Governance Mechanism, *Journal of Banking and Finance*, 27, 793-816.
- Stulz, R. (1999). Globalization of equity markets and the cost of capital. NBER working paper.
- Tanrıöven, C., Küçükkaplan, İ. & Başçı, E. S. (2006). <u>Kurumsal Yönetim Açısından Sahiplik ve Kontrol Yapısı ile Üst Düzey Yönetici Durumunun İMKB'de Faaliyet Gösteren Bankalarda</u>

- İncelenmesi. İktisat İşletme ve Finans, 21(241), 87-104.
- Thomsen, S & Pedersen, T. (2000). Ownership structure and economic performance in the largest European companies. *Strategic Management Journal*, 21(6), 689–705.
- Tükenmez, N. M., Gençyürek, A. G. & Kabakçı, C. Ç. (2015). Türk bankacılık sektöründe sahiplik yoğunlaşması ile finansal performans ilişkisinin incelenmesine yönelik ampirik bir calısma. *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 30(3), 625-644.
- Wang, K. & Shailer, G. (2015). Ownership concentration and firm performance in emerging markets: A meta–analysis. *Journal of Economic Surveys*, 29(2), 199–229.
- Wen, W. (2010). Ownership structure and banking performance: New evidence in China. Europen Doctoral Programme in Entrepreneurship and Small Business Management Research Work. (1-42).
- Yu, M. (2013). State ownership and firm performance: Empirical evidence from Chinese listed companies. *China Journal of Accounting Research*, 6(2), 75-87.
- Zeitun, R. & Tian, G.G. (2007). Does ownership affect a firm's performance and default risk in Jordan? *Corporate governance*, 7(1), 66-82.
- Zouari, S.B.S. & Takta, N.B. (2014). Ownership structure and financial performance in Islamic banks: Does bank ownership matter? *International Journal of Islamic and Middle Eastern Finance and Management*, 7(2), 146-160.

Conflicts of interest/Competing interests

There is no conflict of interest among the authors.

Containership Charter Rates: Analysis of Unprecedented Growth After Covid-19 Pandemic Outbreak

Grigoriy Zaidman* • Giorgio Dominese** • Sergey Yakubovskiy*** • Tetiana Rodionova****

Abstract The covid-19 pandemic outbreak disrupted the entire world economy with no exception. The shipping industry was hit hard short-term, after which the dry shipping sector demonstrated a surprisingly rapid return to the pre-covid level and subsequently exceeded the same. The containership segment experienced the most unprecedented surge. The current paper examines the containership market by analyzing charter rate as a main variable of interest for all shipping industry stakeholders and investigates the nature of the 10-time increase of rates on the charter market, concentrating on the containerships of certain capacity (2750 TEU). To conduct this analysis, the vector autoregression model, namely the Granger test, is constructed. The impact of various independent macroeconomic variables, namely vessel prices, industrial production of several countries, several goods prices, the market capitalization of the leading container shipping companies, container throughput of the leading global ports, on containership charter rate is assessed. It was proven that the swift increase of containership charter rate could not have a basic demand-related justification, as the volume of containerized trade was more or less stable within the period of consideration (2020-2021) and neither Singapore nor Hong Kong nor Los Angeles port container throughput indicators appeared to have an effect on containership charter rate. It was ascertained that geographical factor determined the way macroeconomic indicators influenced charter rate - the more dependent region or country on seaborne trade and maritime transportation of goods, the more significant the relation with charter rate. Europe appears to be the least dependent.

Grigoriy Zaidman*, Giorgio Dominese**, Sergey Yakubovskiy***(⋈), Tetiana Rodionova****

E-mail: t.rodionova@onu.edu.ua.

^{*}Competitor at the Department of World Economy and International Economic Relations, Odessa I. I. Mechnikov National University, Odessa, Ukraine.

E-mail: zaidman.grigoriy@gmail.com

^{**} Professor, Chair of Transition Studies Research Network, Venice, Italy.

E-mail: g.dominese@transitionstudiesnetwork.org

^{***} Doctor of Economics, Professor, Chair of the Department of World Economy and International Economic Relations, Odessa I. I. Mechnikov National University, Odessa, Ukraine.

E-mail: syakubovskiy@onu.edu.ua (corresponding author).

^{****} Ph.D. (Economics), Associate Professor of the Department of World Economy and International Economic Relations, Odessa I. I. Mechnikov National University, Odessa, Ukraine.

US industrial production affects the charter rate, although it is not affected in return. In turn, Asian indicators (Asian port throughputs and industrial development of Asian countries) are affected by charter rate, while Chinese industrial production is the solo Asian indicator influencing charter rate. The remaining factors impacting charter rate are Maersk market capitalization and steel price.

Keywords: shipping, charter rate, containership, chartering market, vessel price.

JEL Classification: C80, F14, L99, O14, R41, R49.

1. Introduction

The shipping industry plays a vital role in the global supply chain and occupies a considerable segment of the world economy. This role was especially noticeable during the outbreak of coronavirus pandemic when the demand on maritime transportation as a main global supplier of goods, including the essential ones, was obviously impacted by the disruption, although experienced lesser shock in comparison to other spheres, but the drop was still considerable short-term as covid-19 was generating uncertainty over strategic decisions.

The article provides an overview of the current shipping trends by looking at four closely related shipping markets, each trading in a different commodity, with the changes and impacts caused by the Covid-19 pandemic. The classification of the shipping markets is as per M. Stopford (2009): the freight market trades in sea transport; the sale and purchase market trades secondhand ships; the newbuilding market trades new ships; and the demolition market deals in ships for scrapping. After the overview, the containership segment of the freight/charter market is being examined, as soon as this shipping sector experienced the unprecedented surge upon the first Covid-19 limitations were lifted.

Trend wise and sector wise, the main shipping markets have reacted to unprecedented pandemic similarly, however, subsequent progress has varied across cargoes and the speed of development is different. Seaborne trade volumes of dry bulk rapidly firmed, container shipping trade has seen a remarkably quick bounce-back from covid-driven initial slowdown. Apart from bulk commodities and containers, LNG was demonstrating stable positive dynamics. Interestingly, real economic growth did not accompany the surge in activity on shipping markets.

Containerized trade is a crucial segment of the shipping industry. Containerships carry various types of commodities in containers which are miscellaneous consumer products, home, and building products, furniture, industrial machines and parts, textile, clothing, miscellaneous industrial products, autos and auto parts, consumer electronics, iron/steel, toys, sports equipment, wood pulp, lumber, peas, beans, lentils, wastepaper, hay/alfalfa, fresh and frozen meat, soya beans, malt, newsprint, scrap metal, etc. The

range of these commodities only underpins how important the containerized trade is for both households and manufacturing.

The widely used measure of the volume of containerized trade, as well as the capacity of the containership, is TEU – twenty-equivalent unit. This measurement comes from the volume of a 20-foot-long intermodal container, which is a metal box of a standard size with a main benefit being its uniformity, i.e., it can be simply transferred between various types of transportation, such as ships, trains and trucks. However, the usage of this measure has both advantages and drawbacks. As M. Stopford (2009) notes, by 2005, the tonnage of containerized cargo had reached 1 billion tons and the average tonnage per container lift in 2005 was only 2.7 tons per TEU, which reveals the underlying weakness of the container lift statistics as a measure of transport capacity. Container lifts include all container movements through ports, including double lifts when a container is transshipped from a deep-sea service to a feeder ship and containers returned empty on unbalanced trades. A 20 ft container can carry up to 24 tons, and 10 tons would be a more normal average.

Moreover, although containers are physically homogenous, their contents are not. The weight of the containers varies, depending on the contents. In 2005 Vancouver's average outbound container carried 11.9 tons of cargo, whilst the average inbound container carried 7 tons, reflecting the different characteristics of the inbound and outbound trades. The contents also vary in value. Electronic goods such as TV sets are worth over USD 30000 per ton, motorcycles USD 22000 per ton, basic clothing such as jeans USD 16000 per ton, and designer clothing perhaps USD 60000 per ton. At the other end of the scale, many of the export commodities are worth less than USD 1000 per ton, for example scrap metal USD 300 per ton and steel products USD 600 per ton. These differences are important because they affect transport pricing.

Summarizing the discussion about the most precise approach towards estimation of containerized trade, there is no ideal measurement unit for it – all have some shortcomings not allowing the researchers to assess the value of the traded commodities to its fullest. As soon as there is no relation between the mass and the price of commodities, meaning both indicators can be misleading one way or the other, the current paper sticks to the TEU as a measurement of trade volumes since the industry commonly accepts it. Another distinguishing feature of the container shipping segment is that the major market players not always own the vessel tonnage they operate. By 2005 about 50% of the containership capacity operated by the 20 largest containership companies was being time-chartered from independent owners. There are so-called non-operating owners (NOO) who provide vessels to companies providing regular transportation services under long-time charter.

Between 1975 and 2007, the containerized cargo grew much faster than other parts of the shipping business, as per M. Stopford (2009). In 2019, 811.2 million TEUs were processed in container ports globally. Nearly 65 per cent

of world port-container cargo handling was in the Asian region – the share of China surpassed 50 per cent. Europe ranked second in terms of container port-handling volumes, behind Asia, whose share was more than four times greater. Other regions in descending order are North America (7.7 per cent), Latin America and the Caribbean (6.5 per cent), Africa (4 per cent) and Oceania (1.6 per cent). As far as Asia is the main region for containerized trade, the current paper takes into consideration the port container throughput indicator for Singapore and Hong Kong which were the second and the eighth in the list of the leading global container ports in TEU in 2019. Los Angeles, ranked 16 on the same list, is also considered as the busiest container port of North America (UNCTAD, 2020).

2. Literature review

The current study dwells exactly on the vessels of 2750 TEU capacity as the most suitable size representative to investigate the entire container shipping market. UNCTAD (2020) researchers echo this approach: when examining the consequences of pandemic-induced disruption, the specialists forecast that potential trade regionalization (especially in container shipping) would lead to increased fragmentation of trade flows which in turn would make the use of larger vessels more challenging.

The pandemic revealed the vulnerability of the larger vessels from the economic efficiency standpoint, which could have never arisen itself under the normal circumstances in the world economy unless hit by the extreme external event. Owing to diminishing trade volumes as factory output in manufacturing regions slowed down and consumers reduced discretionary spending on non-essential items in Europe and North America, carriers cut capacity by introducing such solutions as blank sailing, idling capacity and re-routing via the Cape of Good Hope to pare down costs while taking advantage of lower fuel prices.

Blank sailing and service cancellations announced by the carriers without the usual notice periods affect service reliability and the ability of shippers to plan their supply chains. Deploying larger vessels means that any missed port calls caused by blank sailing has a greater impact on available capacity. In June 2020, many ports reported that blank sailing had resulted in mega-sized vessels calling less often but when they did, the large volumes created peaks and operational challenges. These operational hurdles affected ports (ship-to-shore operations and yard activity), as well as landside distribution.

Since container vessels move on a scheduled rotation, the cancellation of a sailing from the first port in the rotation cascades down to all the other ports served by that carrier in that rotation. Shippers also contributed to the disruption by cancelling bookings without prior notice to carriers, thereby making any planning to optimize vessel capacity difficult. At the port level, less traffic sometimes can result in the cancellation of working shifts without proper notice to carriers conducting inland transportation. The operational challenges become more painful by growing detention

and demurrage charges for exceeding free storage time and the late return of equipment to marine terminals (UNCTAD, 2020).

Importantly, liner companies are less flexible than other dry sector players. In addition to the usual trade cycles which affect all shipping businesses, there are two reasons why capacity management can be an issue. Seasonality occurs on many liner routes, meaning cargo volume varies depending on the period of the year. Cargo disbalances take place when there is more trade in one direction than the other, forcing vessels to proceed partly loaded on the leg with the smaller trade flow. Both problems are also intrinsic to the dry bulk market, but market forces quickly resolve them; for instance, ship owning companies negotiate rates and switch from trade to trade. Liner companies lack this flexibility. With so many customers, it is not practical to negotiate a rate for every cargo. This combination of fixed prices and inflexible capacity leaves liner companies with a pricing problem that has dominated the industry since it started (M. Stopford, 2009).

Maritime transportation has been widely explored in the existing literature. The most prominent studies are authored by N. Michail, K. Melas, D. Batzilis, T. Pelagidis, I. Karaounalis, G. Panagiotopoulos, B. Ko, S. Arslanalp, M. Marini, P. Tumbarello, D. Cerdeiro, A. Komaromi.

An attempt to find the relationship between the number of containers transported and real GDP growth was taken by N. Michail et al. (2021). The significant positive effect was revealed – a 1% increase in transported TEUs led to an approximate 1.7% increase in GDP. It can be explained via the fact that TEUs have a positive effect on trade flows between countries and trade flows have long been shown to have a strong positive impact on real GDP growth. A worthy note is that the scholars included exchange rate into the model, so that it accounted for any potential movements in GDP that have already been incorporated by the markets and were thus unrelated to the growth in trade.

Two more articles by N. Michail and K. Melas are worth to be referred to. Both articles supplement each other, forming a single comprehensive attempt to quantify the connection between economic growth and seaborne trade on the macroeconomic level, and the consequent impact on freight rates of various market sectors. Firstly, N. Michail (2020) in order to assess how the world economic growth affects the global demand for seaborne trade, split the world economy into three groups of countries by income (high, middle and low) and the shipping trade market into three main sectors (dry cargo, crude oil and petroleum products). The results of the research display that developments in the world economic growth impact all three cargo categories, although to a different extent: processed petroleum products, related to clean tanker transport, register the most robust effect from an increase in world GDP in comparison to crude oil and dry cargo. The price of oil appeared to have a small negative effect on the amount of goods transported, supporting the view of demand inelasticity with regards to price. The positive reaction of seaborne trade demand on GDP shock has

to be mainly attributed to the high- and middle-income countries. As to low-income countries, which are known as net exporters of oil and petroleum products, economic growth appeared to negatively affect seaborne trade, as higher income is likely to be associated with more domestic consumption and less exports.

Secondly, N. Michail and K. Melas (2020) investigated the relationship between seaborne trade and several freight indices and found out a strong impact the quantity of seaborne commodity trade had on the BDI and the BDII, but not on the BCII, most likely due to the fact that clean tankers can simultaneously operate both in the clean and dirty sectors. Additionally, it was observed that a shock in the price of Brent oil had the expected positive response from the Baltic Dry Index, while its relationship with the Baltic Clean Tanker Index and the Baltic Dirty Tanker Index was negative because tanker vessels can operate as floating storage units when oil prices decline. N. Michail and K. Melas confirmed that the world GDP determined the freight rates through the quantity of seaborne trade, while the former determined the freight rates directly.

While B. Ko (2010, 2011, 2013) analyzed the general dry bulk freight market with one of the important conclusions being that market players considered the backwardation shock in low uncertainty as more important than in high uncertainty; T. Pelagidis, I. Karaounalis, G. Panagiotopoulos (2019, 2021) investigated precisely capesize sector as a key barometer of commodities shipping trade, namely the connection between the trading of forwarding freight agreements (FFAs) and the volatility of capesize freight market of 4 time charter average (4TC).

IMF researchers D. Cerdeiro and A. Komaromi (2020) constructed a measure called 'lockdown exposure' in order to examine the spillover effects of pandemic supply-side disruptions and found out that as opposed to overall activity in the domestic economy, the supply and transportation of goods was indeed influenced by government lockdowns. Supply disruptions due to lockdowns reduced global seaborne imports in February-March 2020 by 10%, with China's lockdowns contributing about 4%. However, these spillover effects were short-lived – present during the first 2-3 months of the pandemic. After then, demand effects likely dominated the evolution of global trade.

A few other studies by IMF specialists aimed to connect AIS data with trade activity and convert these massive data into practical use for economics. S. Arslanalp, M. Marini and P. Tumbarello (2019) took Malta as a benchmark and used AIS-based port calls data to develop two indicators — 'cargo number' and 'cargo load' — to trace maritime and trade activity. 'Cargo number' stood for the number of ships visiting ports, and 'cargo load' stood for changes in vessels' draughts, representing the fact that either loading or discharging operations happened at port. Thereafter researchers tested produced data by comparing with official reports and the results (0.75 and 0.65 correlation coefficients, respectively) could act as proof of sustainability of the employed method to predict trade volumes by means of AIS data and to nowcast them (assess in real-time). The latter appears to be a topical problem raised by the industry. Nowcasting trade flows is key

for all market participants as far as official trade data is always published with delays. This matter was further addressed by D. Cerdeiro, A. Komaromi, Y. Liu, M. Saeed (2020) in "World Seaborne Trade in Real Time: A Proof of Concept for Building AIS-based Nowcasts from Scratch." Having introduced the GTI (Global Trade Intelligence) index counted purely on AIS-based data and having compared it with official global and country divided trade data, the scholars came to the conclusion that based on the high final correlations, such a methodology achieved a good fit with official statistics. As soon as this paper relies solely on AIS messages and publicly available information, its self-dependence underlies the speed of trade estimates being produced with a 5-10-day lag in comparison to 11-15 weeks it takes officials to publish the same data.

3. Hypothesis, methodology and data

As a hypothesis of the study, we assume that the following indicators affect charter rates: containership 2750 TEU 10-year-old secondhand price; containership 2750 TEU newbuilding price; US industrial production; European industrial production; OECD industrial production; S. Korean industrial production; Chinese industrial production; Taiwanese industrial production; crude oil Brent price; grain USG price; steel ship plate price; market capitalization of the world-leading containership companies; the world-leading ports container throughput.

The vector autoregression (VAR) framework is chosen to test this hypothesis since it provides a systemic way to capture the rich dynamics in multiple time series. This method has been successfully tested in the following previous studies – Dominese et al. (2020, 2021), Lomachynska et al. (2020).

Specifically, to provide evidence on the dynamic interactions between containership charter rates and other macroeconomic indicators, the following VAR systems are estimated to test Granger non-causality:

$$CCCR_{t} = \alpha_{1} + \sum_{i=1}^{p} \beta_{1i}OMI_{t-i} + \sum_{i=1}^{p} \gamma_{1i}CCCR_{t-i} + \varepsilon_{1t}$$

$$OMI_{t} = \alpha_{2} + \sum_{i=1}^{p} \beta_{2i}CCCR_{t-i} + \sum_{i=1}^{p} \gamma_{2i}OMI_{t-i} + \varepsilon_{2t}$$

$$(1)$$

where CCCR, OMI and ε denote respectively: components of containership charter rates –containership 2750 TEU 10-year-old secondhand price; containership 2750 TEU newbuilding price; US industrial production; European industrial production; OECD Industrial production; S. Korean industrial production; Chinese industrial production; Taiwanese industrial production; crude oil Brent price; grain USG price; steel ship plate price; capitalization of the world-leading containership companies (Maersk, Hapag-Lloyd, OOCL); Singapore, Honk Kong, Los Angeles ports container throughput; and the error term. α is a constant term, β and γ denote the coefficients to be estimated, p is the lag order selected. The null hypothesis of Granger non-causality from CCFR to OMI and from OMI

to CCFR are $\beta_{1i}=0$ and $\gamma_{2i}=0$, respectively. The rejection of the null hypothesis of the Granger non-causality from OMI to CCFR implies that the past macroeconomics indicators can help predict the containership charter rates and vice versa.

The model is estimated as follows. First, an unrestricted VAR is estimated. Then Granger causality testing is performed. The optimal number of lag length was chosen by looking at AIC and SIC criteria. The stability of VAR was checked: all AR roots are inside the unit circle and the Autocorrelation LM test states that no serial correlation in the residuals was detected.

Monthly data is used, taken from the: Clarksons Research (2020, 2021), Hong Kong Maritime and Port Board (2021), Largest Companies by Market Cap (2021), Maritime and Port Authority of Singapore (2021), The Port of Los Angeles (2021).

4. Results and discussion

Over the first 5 months of the pandemic, the freight rates have dropped by 73% for the dry bulk segment, by 36% for the dirty tankers segment and by 30% for the clean tanker segment (N. Michail, K. Melas, D. Batzilis, 2020) confirming the initial shock on the dry segment was more significant which is mainly because using tankers as storage capacity is a common practice for the periods of oil market distress. In 2020 during the first two months of the Covid pandemic, floating storage volumes increased by 37%.

However, the dry bulk and containership rates have experienced a quick recovery. By April 2021, capesize spot earnings reached a height 96% above the average level seen since 2009, with the whole dry sector demonstrating the similar trend. Overall, bulker earnings have increased to their highest levels for over a decade. In the tanker segment, 2021 average rates levels are still significantly (3-10 times depending on the vessel type) below average 2020 (Clarksons Research, 2021).

On the sale and purchase market, by April 2021, the price of a 10yo capesize has increased by 40% (USD 7.75m) to USD 27.25m and a price of a 10yo supramax has increased by 35% (USD 3.75m) to USD 14.5m since October 20. At the same time tanker markets have not managed to recover from the stress yet. Once the storage-driven market spike subsided, tanker pricing fell. Compared to March 20, the price of 10yo VLCC was down 12% (USD 6m) at USD 46m (Clarksons Research, 2021). Tanker sector (crude oil and oil products trade) has behaved in a different to dry sector way, facing tough times and experiencing negative or low growth regime delaying a return to pre-covid level – global oil demand is still below same.

On the newbuilding market, by April 2021, the new units order book has grown and represented 12% of the existing fleet, up from about 9% at the beginning of 2021. The containership sector accounted for 39% of all investment in newbuildings made so far in 2021. Boxship newbuilding prices have increased by more than 20% since the pandemic outbreak. The first quarter of 2021 saw the highest level of containership contracting since the first quarter of 2007 (A. Corbett, I. Ang, 2021). Regarding the demolition market, the

scrap pricing has firmed – around 12% increase in 2021 (Clarksons Research, 2021).

By and large, the sale and purchase shipping market saw the lowest number of sales (254, totaling 17m dwt) for 8 years in Q2 of 2020. With more positive sentiments in the world economy later in 2020, S&P market picked up firmly – Q3 (429 vessels, 23m DWT) and Q4 (572 vessels, 49m DWT). The recovery of the activity was so strong that sales in Q4 reached a new high and drove the annual total in 2020 to a record of 102m DWT, up 29% from 2019. Activity has shown no sign of slowing so far in 2021, with 590 ships (40m DWT) sold in Q1. At the current run, over 7% of fleet DWT would change hands in 2021, the highest level since 2007 (Clarksons Research, 2021).

The entire dry sector was similarly impacted by the pandemic, although the pace of recovery was different. Since autumn 2020, the containership sector has seen spectacular sharp changes of secondhand asset prices. For example, the price of a 10yo 6,600 TEU unit has increased by 138% (USD 29m) to USD 50m over the same period, whilst the price of a 10yo 4,500 TEU unit has risen by 268% (USD 25.5m) to USD 35m (Clarksons Research, 2021). The stable and fast-paced growth of secondhand asset prices in the containership segment reached the turning point in July 2021 when the price of the 10yo containership of 2750 TEU capacity surpassed the price of newbuild containership of the same capacity – USD 38m vs. USD 36.5m! Moreover, the gap between these prices continued to enlarge, having reached a USD 7m difference in August (Clarksons Research, 2021).

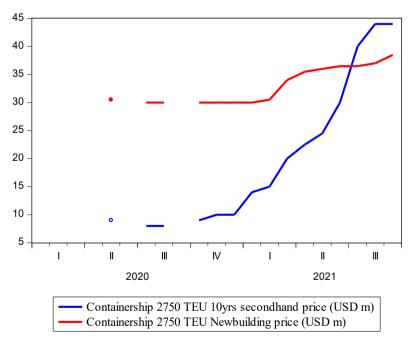


Figure 1. Monthly dynamics of the prices for secondhand (10-year-old) and newbuilding containerships of 2750 TEU capacity in 2020-2021 (in USD million).

Source: compiled by the authors based on (Clarksons Research, 2021).

The rationale behind this paradox is quite straightforward. The fleet supply cannot increase overnight with the delivery of each new unit taking years, and the majority of orders in 2021 so far has been for 2023 and beyond. The absence of opportunities to quickly get the newbuilding from the shippyard leaves secondhand purchase as the only option for the shipowners willing to absorb new capacity. The determinants of the vessel prices are scrutinized later in this paper.

The results of the Granger test that evaluate the hypothesis of the relationship between containership charter rates components and macroeconomic indicators are shown in table 1 and 2.

Table 1. Impact of macroeconomic indicators on containership charter rates components

Indi-					Lagged v	ariables				
cators	US IP	СН ІР	SK IP	TW IP	SP	BP	м мс	SP CT	HK CT	LA CT
CC rate	5.52 (0.02) ^b L=1 ↑	742 (0.00) ^a L=3 ↑	2.82 (0.09)° L = 1	NS	9.97 (0.00) ^a L=3 ↑	NS	24.69 (0.00) ^a L=2	8.38 (0.08) ^c L=4	NS	8.63 (0.07)° L=4 ↑
CS SP	NS	NS	5.86 (0.05)° L = 2 ↑	NS	77.29 (0.00) ^a L=2	11.8 (0.00) ^a L=3 ↑	19.07 (0.00) ^a L=2 ↑	NS	NS	NS
CS NP	NS	44.58 (0.00) ^a L=2 ↓	NS	10.6 (0.00) ^a L=2 ↑	NS	73.9 (0.00) ^a L=3 ↑	NS	47.1 (0.00) ^a L=2 ↑	32.5 (0.00) ^a L=2 ↑	NS

Table 2. Impact of containership charter rates components on macroeconomic indicators

Indicators -		Lagged variables	
	CC rate	CS SP	CS NP
		NS	93.98
IIC ID	NS		$(0.00)^{a}$
US IP			L=2
			↑
	57.17		
CILID	$(0.00)^{a}$	NS	NS
CH IP	L=3	NS	NS
	↑		

	110	110	1,0
LA CT	NS	NS	NS
	L=5 ↑		
HK CT	$(0.00)^{a}$	NS	NS
	17.57		-
	- .		
SP CT	(0.00) L=4	NS	NS
	$(0.00)^a$		
	30.4		
			L=1
M MC	NS	NS	$(0.02)^{b}$
			6.53
BP	NS	NS	NS
DD	NG		
		L=2 ↑	L=2 ↑
SP	NS	(0.07) ^c L=2	(0.00) ⁴ L=2
		$(0.07)^{c}$	$(0.00)^{a}$
	<u> </u>	<u>↑</u> 5.41	13.67
	L=5	L=2	
TW IP	(0.04) ^b	$(0.00)^{a}$	NS
	11.27	15.5	
	11.27	15.5	
SK IP	L=1	L=2	L=3
	$(0.02)^{b}$	$(0.02)^{b}$	$(0.00)^{a}$
	5.13	8.93	88.88

Note: CC rate – 2750 TEU containership charter rate; CS SP - containership 2750 TEU 10-year-old secondhand price; CS NP - containership 2750 TEU new building price; US IP - US Industrial production (% change year-on-year); CH IP - Chinese Industrial production (% change year-on-year); SK IP - S. Korean Industrial production (% change year-on-year); TW IP - Taiwanese Industrial production (% change year-on-year); SP - Steel (ship plate) Japan price (\$/t); BP - Crude oil Brent price (\$/bbl); M MC - MAERSK market capitalization (\$ B); SP CT - Singapore container throughput (in TEU); HK CT - Hong Kong container throughput (in TEU); LA CT − Los Angeles container throughput (in TEU); a, b, c represent the 1, 5, and 10 % significance levels, respectively. In parentheses, p values are given; ↑ - direct causality; ↓ - reverse causality. Source: authors` calculations, data from Clarksons Research (2020, 2021), Hong Kong Maritime and Port Board (2021), Largest Companies by Market Cap (2021), Maritime and Port Authority of Singapore (2021), The Port of Los Angeles (2021).

The shipping industry operates several ship employment types, which are known as chartering agreements. The vessel can be chartered (e.g., employed, hired, rented) under time charter for a certain time period, under voyage charter for a specific voyage from point A to point B, under trip charter, which is a mix of the first two types, as well as under some other rarely used chartering agreements like bareboat charter. While the containership market is in the focus of the current paper and containerships are most commonly chartered under time charter agreements, we examine 2750 TEU capacity containership, chartered for 6-12 months, daily rate as an outcome variable.

Containership 2750 TEU 6-12 mo TC rate (\$/day)

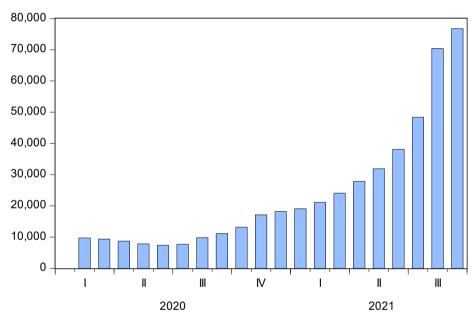


Figure 2. Monthly dynamics of the 2750 TEU containership daily charter rate (for 6-12 months) in 2020-2021 (in USD).

Source: compiled by the authors based on (Clarksons Research, 2021).

It is evident from Figure 2 that the containership charter rate growth is very swift and reaching all-time highs; at the same time, the similar growth of containerized shipping trade volumes isn't observed within the same period, see Figure 3. The shipping is a demand-derived system, although the unprecedented growth of containership charter rates can't be explained simply by demand growth – this is not the case. Thus, several shipping, financial and industrial indicators were put through analysis against containership charter rate growth.

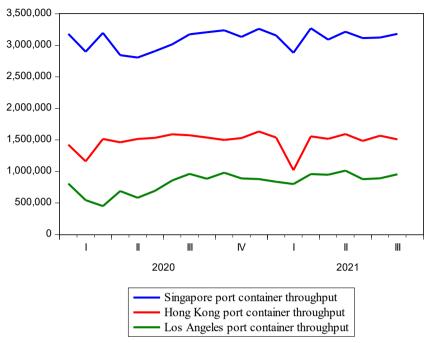


Figure 3. Monthly dynamics of container throughput of Singapore, Hong Kong and Los Angeles ports in 2020-2021 (in TEU).

Source: compiled by the authors based on (Hong Kong Maritime and Port Board (2021), Maritime and Port Authority of Singapore (2021), The Port of Los Angeles (2021)).

The results suggest that 2750 TEU containership charter rate is determined by both newbuilding and 10-year-old secondhand prices of vessels of said capacity; US and Chinese industrial production growth; steel ship plate price; Maersk market capitalization. Interestingly, some of these indicators are in turn affected by containership charter rate: secondhand vessel price and Chinese industrial production. The following macroeconomic indicators appeared to have no or insignificant influence on the containership charter rate: European, OECD, South Korean and Taiwanese industrial production; crude oil Brent and grain price; market capitalization of Hapag-Lloyd and OOCL; Singapore, Hong Kong and Los Angeles container throughput.

Expectedly, the charter rate is affected by secondhand and newbuilding vessel prices. Since the dynamics of vessel prices should be quite similar to the one of charter rate: the positive growth regime is an evidence of the positive market sentiment and increasing demand, when both rates and vessel prices increase, the latter – due to supply 'hunger' and the tough competition between shipping companies to gain more contracts for transportation. As described above, the only way for a shipping company to obtain the new tonnage to increase its own supply is to complete a deal on sale and

purchase market, as soon as newbuilding market is not that elastic and cannot satisfy the growing demand in the short-term. This is a probable reason for the mutual effects observed between charter rate and secondhand vessel price, while the connection with newbuilding price is one-way.

A mutual connection is observed between the charter rate and Chinese industrial production. The role of Asia in the world containerized trade cannot be overestimated with the majority of trade happening in the region, China being the unattainable leader (4 out of 5 and 7 out of 10 world-leading container ports are Chinese). The industrial growth of China as the leading economy obviously increases the need for exportimport operations, e.g., transportation of goods. The decline in industrial production makes the need for sea transport lower and with the same global ships supply level causes the decline of charter rates. Taiwanese and South Korean industrial production albeit has no influence on charter rate, is being in turn influenced by it.

On the contrary, US industrial production directly impacts charter rate dynamics while there is no reverse effect. The explanation lies in the difference between the US and Asian economic models, the first being more powerful and resistant and the latter being still permanently growing at a high pace, thus more dependent on maritime transportation — external supply of goods, materials, and products (imports) on the one hand and exports of ready-for-consumption products on the other hand. Industrial parts, auto parts, electronics, clothes, etc., are massively produced in Asia and are precisely the goods transported overseas in containers.

As a short but important note, European and OECD industrial production do not demonstrate influence on containership charter rate. This is predominantly based on the nature of the EU economy, which responds to the external shocks more slowly, being relatively self-contained in its trade and which have remained outside the busiest trade routes of the current world economy for a long period. With the EU GDP exceeding US GDP, Europe is represented by only three ports in the global leading container ports list. Furthermore, three of them do not occupy the top positions of this list – Rotterdam (10th), Antwerp (13th), Hamburg (17th).

As to throughput of ports included into the VAR model, it is ascertained that the considered charter rate is affected neither by Singaporean (the second leading world container port) nor Hong Kong (8th) nor Los Angeles (16th) port handling indicators. At the same time, the charter rate has an effect on Singaporean and Hong Kong throughputs, with no similar connection with number of containers handled in Los Angeles port. Putting this observation into the macroeconomic framework, similarly to analysis of the industrial production indicators, we appear in front of the different behavior of US and Asian economic models when interacting with seaborne trade. Likewise, in US industrial production, Los Angeles container port throughput is not affected by charter rate, while Asian ports, Singapore and Hong Kong, are. So, the identity of reaction of Asian industrial production (excluding China) and Asian port throughput is worth mentioning.

Grain price expectedly appeared to have no effect and not being affected by containership charter rates since this cargo is mainly transported by dry bulk vessels. In turn, steel price affects containership charter rates with no reverse reaction. Steel can be transported by container vessels, so the demand for steel leads to a rate surge. No connection was observed between oil price and charter rate. As already mentioned, container vessels are mainly subject to time charter agreements. One of the conditions of this agreement is the fixed distribution of born costs. The charterer pays the commercial costs (not ship owner), where bunker costs are a considerable part of them. This can serve to possibly explain the non-existing relation between oil price (affecting bunker price, for sure) and the charter rate payable by charterer to ship owner. However, this needs to be further investigated. One of the fields for next research is the examination of the relation between oil price and freight rates of those vessels chartered under voyage charter agreement which presupposes different distribution of costs, commercial part of which (including bunkering) is being born by ship owner. The assumption is that oil price influence on voyage charter rates can be observed.

As to market capitalization of the leading containership market players, Hapag-Lloyd and Orient Overseas Container Line do not demonstrate any connection with charter rate, although market capitalization of Maersk does demonstrate the influence on charter rate. As an irrefutable leader and 'trend-setter' of the containership market, Maersk plays a more significant role in comparison to other companies operating container vessels, even the ones from the top-10 list according to market capitalization and the capacity of managed fleet. Driving the market to a certain extent, Maersk affects charter rates.

Looking one more time at the earlier addressed issue of vessel asset prices dynamics both newbuilding and secondhand by employing the Granger test, we can ascertain that different factors determine secondhand and newbuilding prices. While the price of secondhand containership is affected by charter rate, newbuilding vessel price, steel price, oil price, and Maersk market capitalization; newbuilding price is influenced by Chinese and Taiwanese industrial production, oil price, Singaporean and Honk Kong port throughput. The list of determinants confirms the different and isolated dynamics secondhand and newbuilding prices follow. The determinants do not coincide, hence the fact that the secondhand vessel price exceeds newbuilding is more than justified from the maritime economics perspective and is no more than a 'fallacy' - by default, the secondhand asset is expected to be cheaper than the new one, although under certain circumstances the shipping market rules modify the logical expectations. Charter rate affects secondhand vessel price, although has no impact on newbuilding price. Charter rate is everchanging and unclear middle-term when newbuilding vessel can be constructed and delivered. Interestingly, newbuilding vessel price is negatively affected by Chinese industrial production. China retains the position of the leading shipbuilding region and, at the same, the leading steel producer. The possible

explanation of such a relation can lie in the following. It is well known that Chinese shipyards perform shipbuilding activities for a cheaper price than Korean and Japanese. As soon as industrial production is growing, which can be associated with an increase of steel production, this means the increase of steel availability which can be used for shipbuilding. Otherwise, if the steel availability is going down, increasing its price, the newbuilding orders can migrate to alternative places.

5. Conclusion

The main shipping markets have reacted to the Covid-19 pandemic similarly; however, the containership market experienced the most remarkable recovery from the slowdown. The demand for containership tonnage increased quickly and significantly. Moreover, in the middle of 2021, it led to the situation when the price of the 10-year-old containership of 2750 TEU capacity surpassed the price of new containership of the same capacity. The rationale behind this paradox is quite straightforward. The fleet supply cannot increase overnight, with the delivery of each new unit taking years, and the majority of orders in 2021 so far has been for 2023 and beyond. The absence of opportunities to quickly get the newbuilding from the shippard leaves secondhand purchase as the only option for the shipowners willing to absorb new capacity. By employing the vector autoregression model, it was also ascertained that the list of factors determining newbuilding and secondhand vessel price differed. This confirms the isolated paths secondhand and newbuilding prices follow, enabling this paradox, driven by shipping market forces, to occur.

The analysis results show that the charter rate of a containership of 2750 TEU capacity is determined by both newbuilding and 10-year-old secondhand prices of vessels of said capacity; US and Chinese industrial production growth; steel ship plate price; Maersk market capitalization. Notably, neither Singapore, Hong Kong, or Los Angeles port container throughput indicators affect containership charter rate, which confirms the current unprecedented charter market growth does not have a demand-related nature.

If a geographical principle regroups the full list of considered determinants, the finding is the following. The identical relation between several Asian indicators (Asian port throughputs and industrial development of Asian countries) is observed; the behavior of American indicators is to a certain extent quite similar as well. Asian ports (Singapore and Hong Kong) are affected by charter rates similarly to how South Korean, Chinese and Taiwanese industrial production level are. At the same time, only Chinese industrial indicator influences the charter rate.

The explanation lies in the difference between US and Asian economic models: US one is more powerful and resistant to external factors; thus, neither US industrial production nor Los Angeles port throughput are affected by charter rate; and Asian ones are still permanently growing at a high pace, thus more dependent on maritime transportation and more deeply involved into global supply chains, shipping being a

workhorse of it. Europe is involved even less than the USA, so European industrial production demonstrates a mutually insignificant relation to containership charter rate. The more dependent region or country on seaborne trade and maritime transportation of goods, the more significant the relation with charter rate. Among the market capitalization of the leading container shipping companies, only Maersk is statistically significant when analyzing the charter rate.

Given the unprecedented nature of shipping rates growth, not only containership but also all dry shipping market segments, apart from demand-side analysis, the bigger picture needs to be assessed and a multi-factor model needs to be created for broader understanding and evaluation the reasons standing behind the changes.

References

- Arslanalp S., Marini M., Tumbarello P. (2019) Big Data on Vessel Traffic: Nowcasting Trade Flows in Real Time. *IMF Working Paper* 19/275.
- Cerdeiro D., Komaromi A. (2020) Supply Spillovers During the Pandemic: Evidence from High-Frequency Shipping Data. *IMF Working Paper* 20/284.
- Cerdeiro D., Komaromi A., Liu Y., Saeed M. (2020) World Seaborne Trade in Real Time: A Proof of Concept for Building AIS-based Nowcasts from Scratch. *IMF Working Paper* 20/57.
- Clarksons Research (2020, 2021). *Shipping Intelligence Weekly (reports)*. Issues No. 1,421-1,493.
- Clarksons Research (2021) *Shipping Intelligence Weekly*. A Secondhand Rush: S&P Activity Jumps to New Highs. Issue No. 1,469.
- Clarksons Research (2021) *Shipping Intelligence Weekly*. Secondhand Swings in The Spotlight. Issue No. 1,468.
- Corbett A., Ang I. (2021) Yards on Alert as Box Newbuilding Boom Spreads to Smaller Sectors. *TradeWinds.* Vol. 32, No 17.
- Dominese G., Yakubovskiy S., Tsevukh J., Rodionova T. (2020) Impact of International Migration Flows on the European Union and Ukraine. *Journal Transition Studies Review*. No. 27(2), pp. 83-98. DOI: https://doi.org/10.14665/1614-4007-27-2-007.
- Dominese G., Rodionova T., Tsviakh A. (2020). Comparative Analysis of the Return on Foreign Investments of the United States, Germany and Japan. *Journal Global Policy and Governance*. Vol. 9(2), pp. 17-27. Doi: https://doi.org/10.14666/2194-7759-9-2-002
- Dominese, G., Yakubovskiy, S., Rodionova, T., Derenko, V. (2021). Determinants of the government bond yields of Italy, Spain, Portugal and Greece. *Journal Global Policy and Governance*. Vol. 10(1), pp. 23–34. Doi: https://doi.org/10.14666/2194-7759-10-1-002
- Hong Kong Maritime and Port Board (2021). Container Throughput of Hong Kong Port https://www.hkmpb.gov.hk/document/HKP KTCT-stat.pdf. Accessed October 2021.
- Ko B. (2013) Analysis of Term Structure in Dry Bulk Freight Market. *The Asian Journal of Shipping and Logistics*. Vol. 29 (1). https://doi.org/10.1016/j.ajsl.2013.05.001
- Ko B. (2010) A Mixed-Regime Model for Dry Bulk Freight Market. The Asian Journal of

- Shipping and Logistics. Vol. 26 (2).
- Ko B. (2011) Dynamics of Dry Bulk Freight Market: Through the Lens of a Common Stochastic Trend Model. *The Asian Journal of Shipping and Logistics*. Vol. 27 (3). https://doi.org/10.1016/S2092-5212(11)80018-0
- Largest Companies by Market Cap (2021) https://companiesmarketcap.com/. Accessed October 2021.
- Lomachynska I., Babenko V., Yemets O. (2020) Impact of the Foreign Direct Investment Inflow on the Export Growth of the Visegrad Group Countries. *Studies of Applied Economics*, Vol 38, No 4. Doi: http://dx.doi.org/10.25115/eea.v38i4.4007
- Maritime and Port Authority of Singapore (2021). Port statistics. https://www.mpa.gov.sg/web/ portal/home/maritime-singapore/port-statistics. Accessed October 2021.
- Michail N. (2020) World Economic Growth and Seaborne Trade Volume: Quantifying the Relationship. *Transportation Research Interdisciplinary Perspectives*. Vol. 4. https://doi.org/10.1016/j.trip.2020.100108
- Michail N., Melas K. (2020) Quantifying the Relationship Between Seaborne Trade and Shipping Freight Rates: A Bayesian Vector Autoregressive Approach. *Maritime Transport Research*. Vol. https://doi.org/10.1016/j.martra.2020.100001
- Michail N., Melas K. (2020) Shipping Markets in Turmoil: An Analysis of the Covid-19 Outbreak and Its Implications. *Transportation Research Interdisciplinary Perspectives*. September. Vol. 7. https://doi.org/10.1016/j.trip.2020.100178
- Michail N., Melas K., Batzilis D. (2021) Container Shipping Trade and Real GDP Growth: A Panel Vector Autoregressive Approach. *Economics Bulletin*. Vol. 41 (2). https://doi.org/10.2139/ssrn.3724480
- Pelagidis T., Karaoulanis I. (2021) Capesize Markets Behavior: Explaining Volatility and Expectations. *The Asian Journal of Shipping and Logistics*. Vol. 37 (1). https://doi.org/10.1016/j.ajsl.2020.08.001
- Pelagidis T., Panagiotopoulos G. (2019) Forward Freight Agreements and Market Transparency in the Capesize Sector. *The Asian Journal of Shipping and Logistics*. Vol. 35 (3). https://doi.org/10.1016/j.ajsl.2019.09.004
- UNCTAD (2020) Review of Maritime Transport.
- Stopford M. (2009) Maritime Economics.
- The Port of Los Angeles (2021). About Container Statistics. https://www.portoflosangeles.org/business/statistics/container-statistics. Accessed October 2021.

The Concepts and Practice of China's Participation in Global Climate Governance in the Post-Paris Era

Haohui Xu* • Hongyu Wang**

Abstract The Paris Agreement is by far the most universal and binding climate agreement. Since its signing and entering into force, the Paris Agreement has attracted great attention from the international community. Global climate governance in the Post-Paris era is faced with the dilemmas of lack of leadership, fragmentation of institutions and deficit of greenhouse gas emissions reduction. With the continuous increase of China's comprehensive national strength and international influence, China's ability and willingness to participate in global climate governance are also increasing. This paper will first analyze the practical dilemmas faced by global climate governance in the Post-Paris, then explain China's global climate governance concepts in this context, and finally analyze China's climate governance practice under the guidance of these concepts.

Keywords: global climate governance, the Post-Paris era, governance dilemma, China.

Introduction

Since the 1990s, the international community has been faced with many global challenges. As one of the most frequently mentioned topics, climate change has appeared often in various international conferences. Global climate governance has become an essential part of global governance. The United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol, and the Paris Agreement laid a global climate treaty and the institutional framework, but the particularity of the issue of climate change and the realistic pursuit of national interests constitute the complexity of global climate governance. Global climate governance involves the interest game and coordination and cooperation among various international actors. In December 2015, the 21st Conference of the Parties to the UNFCCC (COP21) was held in Paris, France, and the Paris Agreement was reached. This is the first global climate agreement that is both universal and legally binding, laying a legal and institutional foundation for global

Haohui Xu*, Hongyu Wang**(⊠)

^{*} University of International Business and Economics, Beijing, PRC e-mail:mofei20210421@163.com

^{**}University of International Business and Economics, Beijing, PRC e-mail: hongyuruc@gmail.com

climate governance in the Post-Paris era. Since then, the international community has held the Marrakech, Bonn, Katowice, and Madrid climate change conferences focusing on implementing the Paris Agreement (Li, 2016). However, due to the differences in temperature control targets, greenhouse gas emissions reduction schedule, carbon trading mechanism, financial assistance and technical support from developed countries, it is challenging to achieve substantive breakthroughs in the process of global climate governance in the Post-Paris era.

As an important participant and builder of the global climate governance system, China's concepts and practice in global climate governance, as well as the construction of the international system, will be not only a practical issue related to its own national interests but also a theoretical issue related to global governance and international relations.

1. The Dilemmas of Global Climate Governance in the Post-Paris Era

1.1 The Lack of leadership

For an international agreement, whether it can exert the expected binding force and achieve the normal implementation behavior of the parties often depends on the strength of leadership it covers. The swing attitude of the United States on global climate governance (mainly the negative attitude of the Trump administration on global climate governance) and the decline of the EU's leadership have exacerbated the lack of leadership in global climate governance.

1.1.1 The swing attitude of the United States on global climate governance

The United States is a major energy producer and consumer and the world's second-largest carbon emitter. How its domestic climate policies will evolve and how effective they will be will significantly impact global climate governance (Liu, 2019). In January 2017, Republican Donald Trump was sworn in as the 45th president of the United States. Trump adheres to the "America First" governing philosophy, doubts the scientific basis of climate change and the necessity of global climate governance, and believes that the United States will affect its own economic development if it makes too many commitments to greenhouse gas emissions reduction. In June 2017, Trump announced his withdrawal from the Paris Agreement and formally started the withdrawal process in November 2019, which undermining leadership of the global climate governance regime in the Post-Paris era (Friedman, 2019). Moreover, due to the special status and powerful influence of the United States in the international community, its withdrawal will undoubtedly have a magnifying effect in the international community, which will cause a more serious impact.

In January 2021, Democrat Joe Biden became president of the United States. At the beginning of his presidency, Biden signed a document announcing his return to the Paris Agreement and issued an executive order or memorandum on protecting the climate

environment, rebuilding scientific institutions, and addressing the climate crisis (Wang, Yu, & Zhang, 2021). These measures show that the Biden administration intends to make the United States play a more active role in global climate governance, but it is too early to assert that the United States will succeed in reshaping its global climate governance leadership. The reasons are evident: the first is the Trump administration's climate policy legacy. The de-climate policies of Trump's presidency have damaged the coherence of US domestic climate governance and the credibility of international climate leadership, and these impacts are hard to eliminate in a short time. Second, there is the polarization of domestic politics. In recent years, the opposition between different interest groups in the United States has become more and more severe, and political polarization has become an unavoidable problem in American society (Niu, 2021). Political polarization has led to ideological and value splits and inefficiency and uncertainty in public policy outcomes, limiting the actual outcomes of the Biden administration's climate policies. Finally, the great power competition between China and the United States and the impact of COVID-19 will also limit the influence of the United States in global climate governance to a certain extent. As Charles A. Kupchan (2021) puts it, "U.S. President Joe Biden has ambitious goals at home and abroad ... However, Biden obviously can't achieve all of his goals ... Given the country's economic and political disarray, the new administration must focus on American development at home, which will inevitably come at the expense of American interests abroad."

1.1.2. The EU's leadership in global climate governance has gradually declined

The EU has long played a leading role in the global climate governance process. After the United States withdrew from the Kyoto Protocol in 2001, the EU tookactive and forceful measures to facilitate climate negotiations and successfully persuaded Russia to sign the agreement in 2005, which resolved the impasse in global climate governance, and thus the EU's leadership reached its peak. However, at the Copenhagen Climate Change Conference in 2009, the EU was isolated due to its radical stance. The United States and the BASIC countries (Brazil, South Africa, India and China) seized the opportunity and finally dominated the conclusion of the Copenhagen Accord. The leadership of the EU in global climate governance began to show a trend of decline. In 2015, China, the United States and the EU all played an essential role in the Paris Agreement negotiations. The EU's influence has recovered to some extent, but it is no longer as influential as before. In addition, the Brexit process since 2016 has intensified the centrifugal tendency among EU members, reduced the EU's influence in the international community, and further weakened the EU's leadership in the global climate governance process in the Post-Paris era (Kang, 2019).

1.2 The fragmentation of institutions

Fragmentation refers to the trend and state that multiple governance centers appear in parallel in global climate governance. It emphasizes the "patchwork" characteristics

of the overall institutional environment and argues that there is no single international governance mechanism in a fragmented international community. The global climate governance system is complex and covering multiple specific policy areas. These policy areas are not controlled by the traditional single international system but are pieced together by many international systems with different characteristics and scopes, leading to the fragmentation of the global climate governance system (Nina & Åsa, 2018).

The global climate governance system is mainly reflected in two aspects: the fragmentation of climate governance mechanisms with UNFCCC as the core and the diversification of climate governance mechanisms outside the UNFCCC framework. Fragmentation takes different forms in different global issues. It weakens the overall nature of the system. It makes it difficult for various actors in global climate governance to conduct unified and coordinated actions, thus affecting the follow-up implementation of the Paris Agreement and reducing the efficiency of all parties in implementing the agreement.

1.3 The deficit of greenhouse gas emissions reduction

The deficit of greenhouse gas emissions reduction is the difference between the greenhouse gas emissions reduction targets stipulated in a series of agreements under the framework of UNFCCC and the actual greenhouse gas emissions reduction of each party. There are three main reasons for it:

- the rate of climate change continues to update previous studies, leading to the increasing greenhouse gas emissions reduction targets required by global climate governance;
- 2. the targets stipulated in the agreement itself are too high, or the allocation of specific greenhouse gas emissions reduction targets is unreasonable;
- 3. the parties' willingness and ability to implement the contract fail to meet the previous expectations.

Data released by the World Meteorological Organization (2021) shows that every consecutive decade since the 1980s has been warmer than the previous one since 1850, and 2011-2020 the warmest decade on record, with 2016, 2019 and 2020 the top three, 1.2 (± 0.1)°C above pre-industrial levels.10 This is a diversion from the goal set out in the Paris Agreement. Taking into account the potential discount in the performance of the parties and the need to adequately respond to the reality of global climate change, the agreement sets higher requirements for national greenhouse gas emissions tasks. As the rate of climate change continues to climb, the global climate governance targets have been raised accordingly, and the provisions of the agreement need to be modified accordingly.

In addition, the willingness and ability to implement the convention vary from country to country. In terms of the ability to implement the convention, developed countries have a solid ability to implement the convention. In contrast, developing countries have limited their ability to implement the convention due to the impacts of economic development, social concepts, capital and technology, etc. In terms of the

willingness to implement the convention, except for some European countries and the Alliance of Small Island States (AOSIS), the willingness of all countries is not strong, but most of them still indicate that they will make greenhouse gas emissions actions within the framework of the convention. The strong ability of developed countries to implement the convention makes their willingness to implement the treaty become the main variable. The strength of their willingness will affect themselves and have an impact on the ability to develop countries to implement the convention.

2. The concepts of China's participation in global climate governance in the Post-Paris era

2.1 The fundamental concepts

2.1.1. The concept of sustainable development

Sustainable development generally refers to a mode of development that meets the needs of the present without compromising the needs of future generations while protecting the environment (Niu, 2012). The basic principles of sustainable development include:

- 1. The principle of equity, that is, the horizontal equity among contemporaries, the vertical equity among generations and the equity in the distribution and utilization of resources among different groups;
- 2. The principle of sustainability, that is, the pursuit of economic and social development needs to match the carrying capacity of resources and environment;
- 3. The principle of commonality.

Sustainable development is a development concept that all countries should follow in the world. The issues discussed by it are those related to all humankind, and the goals to be achieved are the common goals of humanity. The concept of sustainable development combines environmental issues with development issues and becomes a concept unity covering economic sustainability, ecological sustainability, and social sustainability.

In the field of global climate governance, climate change is not a simple ecological and environmental issue, and global climate governance is also different from other ecological and environmental issues in the international community. In the process of participating in global climate governance, China needs to give full consideration to its actual stage of economic and social development. It should advocate not only green development and gradually fulfill its greenhouse gas emissions reduction commitment but also ensure social and economic stability and progress and avoid going to extremes. In the discussion of global climate governance, there is an "ecological supremacy" view, which requires countries to limit or even give up their economic development rights to achieve climate governance goals. This obviously ignores the content of economic and social sustainability, distorts the nature of global climate governance, and runs counter to China's idea of global climate governance.

2.1.2. The concept of a community with a shared future for mankind

A community of shared future for humankind is a concept of value. As President Xi Jinping (2017) pointed out, "A community of shared future for mankind means that the future and destiny of every nation and country are closely linked. We should stand together through thick and thin, share weal and woe, and work hard to build the planet where we were born and grew up into a harmonious family." Building a community with a shared future for mankind is not only China's pursuit of value, but also a practical need for countries to jointly address various global challenges facing mankind.

As a typical global problem, climate change has gradually penetrated into many fields of the international community. On the one hand, due to the complexity of the climate problem and its impact, it is not easy to solve it through individual countries, but can only rely on international cooperation. On the other hand, countries differ considerably in terms of the economic base, scientific and technological level, social ideology, and greenhouse gas emissions. Different countries have different demands and propositions on the issue of climate change, which makes the cooperation between them often full of interest game and political compromise, so it is difficult to reach a truly effective international agreement. In this context, the concept of global governance, common interests and sustainable development advocated by the concept of a community with a shared future for humanity are of great guiding significance for China to participate in and play a leading role in global climate governance in the Post-Paris era.

The concept of a community with a shared future for mankind affirms the necessity of global climate governance, believes that climate and environmental issues should be considered while developing the economy and that green, low-carbon and sustainable development should be pursued. It means that, on the basis of a series of international climate agreements, countries should earnestly honor their emission reduction commitments, cooperate to address climate change and work together to achieve positive results in global climate governance in the Post-Paris era.

2.2. The normative concepts

In December 2015, at the opening ceremony of the Paris Climate Change Conference, President Xi Jinping delivered a speech entitled Work Together to Build a Win-Win, Equitable and Balanced Governance Mechanism on Climate Change. He proposed that the global climate governance mechanism should pursue the governance concepts and institutional features of win-win cooperation, fairness, and justice, which is also the conceptual connotation of China's participation in global climate governance.

2.2.1. Win-win cooperation

Win-win cooperation means that in the process of building a global climate governance mechanism, countries should transcend the traditional mindset of utilitarianism and zerosum game, actively undertake the responsibility of greenhouse gas emissions reduction, actively share the concept of greenhouse gas emissions reduction, and achieve mutual benefit and win-win results. In the process of participating in global climate governance, China has always adhered to the concept of win-win cooperation, actively participated in global climate negotiations, worked hard to uphold the multilateral governance system under the framework of the UNFCCC, and earnestly fulfilled its commitments under the Paris Agreement. President Xi Jinping (2015) has pointed out that "on the issue of climate change, China calls for all parties to work together to meet challenges, discuss ways to cope with climate change and safeguard the common interests of mankind."

The concept of win-win cooperation consists of two aspects. Cooperation focuses on the relationship between different actors participating in global climate governance, while win-win cooperation is the logical result of this situation being stabilized. Cooperation is relative to confrontation. The basis of cooperation is that all parties have common interests on the issue and clearly understand such interests. Besides, the long-term game on the same issue makes all parties acquiesce that the benefits of cooperation are more significant than confrontation or their own actions. Since the 1990s, global climate governance has undergone nearly 30 years of development. Facts have proved that cooperation rather than other ways should be the best strategy for China to participate in global climate governance.

However, cooperation does not necessarily lead to win-win results, and international cooperation under hegemony may damage partners' interests. The reasons why win-win is the logical outcome of cooperation of global climate governance in the Post-Paris era include multilateralism mode of cooperation, the particularity of the issue, the long-term repeated game. First of all, global climate governance cooperation is not a hegemonic mode of cooperation but a typical multilateral mode of cooperation, which involves enough actors to make vulnerable countries join together to compete with powerful countries. Secondly, due to the particularity of the topics, it is often more critical than traditional international political and economic cooperation to emphasize value concepts such as fairness and justice. Finally, in the long-term game, countries recognize the importance of cooperation and thus prefer stable long-term cooperation on this issue.

2.2.2. Fairness and justice

Fairness and justice have a special meaning in global climate governance. Its core lies in upholding the principle of Common But Differentiated Responsibilities (CBDR) between developed and developing countries. To put it simply, this means that developed and developing countries, due to their different historical responsibilities, stages of development and coping capacities, should also assume different obligations in tackling climate change and cannot simply assign the responsibility of each other for greenhouse gas emissions reduction. In the process of global climate governance in the Post-Paris era, China has always adhered to the principle of CBDR, taken the initiative to shoulder its due responsibilities, and made efforts to fulfill its greenhouse gas emissions reduction

commitments. President Xi Jinping has stated on many important occasions that it is China's consistent position to adhere to the principle of CBDR and encourage more countries to participate in international cooperation on tackling climate change.

Win-win cooperation, fairness and justice are not only the value goals that should be reflected in the global climate governance mechanism but also the basic approaches to improve the global climate governance mechanism. They are complementary to each other. Win-win cooperation is the value goal of the global climate governance mechanism. It calls for all parties to seek common interests and a basis for cooperation through active exchanges and cooperation and accommodate demands and concerns with each other. Fairness and justice is a basic requirement for win-win cooperation. It calls for all parties to share common responsibilities and distinguish specific obligations equally and effectively through substantive participation to advance global climate governance jointly (Bo, 2019).

3. The practice of China's participation in global climate governance in the Post-Paris era

3.1. Actively fulfilling greenhouse gas emissions reduction commitment and incorporating tackling climate change into the national long-term development plans

At the Paris Climate Change Conference held in December 2015, China promised to peak carbon dioxide emissions around 2030 and strive to achieve it as soon as possible. By 2030, carbon dioxide emissions per unit of GDP will be reduced by 60% to 65% compared with 2005. In March 2016, China issued the 13th Five-Year Plan for Economic and Social Development, which listed green transformation of production methods and lifestyles, lowcarbon levels, and effective control of total carbon emissions as part of its economic and social development goals. It proposed to actively respond to global climate change, control carbon emissions, implement emissions reduction commitment, and contribute to the solution of global climate change. According to data released by the Ministry of Ecology and Environment of the People's Republic of China (2021), by the end of 2019, China's carbon emissions intensity was 18.2% lower than 2015 and 48.1% lower than 2005, and non-fossil energy accounted for 15.3% of energy consumption, fulfilling the 2020 target China promised to the international community ahead of schedule. In September 2020, President Xi Jinping announced at the 75th United Nations General Assembly that China will increase its nationally determined contributions (NDCs), adopt more effective policies and measures, and strive to reach the peak of carbon dioxide emissions by 2030 strive to achieve carbon neutrality by 2060. It was further announced at the Climate Ambition Summit three months later that by 2030, China's carbon dioxide emissions per unit of GDP will drop by more than 65% from 2005, and that non-fossil energy will account for about 25% of primary energy consumption. The storage volume will increase by 6 billion cubic meters over 2005, and the total installed capacity of wind power and solar power will reach 1.2 billion kilowatts or more. In March 2021, China issued its fourteenth five-year plan for national economic and social development, which included the extensive formation of green production and lifestyles, a steady decline in carbon emissions after peaking, and a fundamental long-term improvement in the ecological environment goals for 2035. At the same time, it was announced that it would reduce energy consumption and carbon dioxide emissions per unit of GDP by 13.5% and 18%, respectively, and increase the forest coverage rate to 24.1% in the next five years.

Actively fulfilling the greenhouse gas emissions reduction commitment in the Paris Agreement and incorporating tackling climate change into the national long-term development plan is a model of China's participation in global climate governance practices in the Post-Paris era. A series of measures taken by China in optimizing the industrial structure and energy structure, controlling greenhouse gas emissions, increasing carbon sinks, and more, have made essential contributions to combating climate change, demonstrating its own responsibility as a major country, and serving as a model for other countries.

3.2. Participating in the multilateral process of global climate governance and strengthening exchanges and cooperation between countries

Since the Paris Agreement came into force, China has continued to play a responsible role in global climate governance, strengthened dialogue and exchanged with other countries on climate change, deepened international cooperation on climate governance, promoted consensus among all parties, and upheld the multilateral framework for global climate governance. On the one hand, China actively participated in the follow-up process within the framework of the UNFCCC and encouraged the international community to implement better the Paris Agreement, such as the Marrakech Climate Change Conference, Bonn Climate Change Conference, Katowice Climate Change Conference, Madrid Climate Change Conference and the postponed Glasgow Climate Change Conference in 2021. On the other hand, China has also participated in the climate governance process in other multilateral platforms outside the UNFCCC framework, such as the Petersberg Climate Dialogue, the Ministerial Meeting on Climate Action (MoCA), the Meeting of the Parties to the Montreal Protocol, the Climate Ambition Summit, and the Leaders' Climate Summit. In addition, China has incorporated climate governance issues into high-level exchanges and strengthen exchanges and cooperation with the United States, Germany, France, Russia, and other major countries, such as the China-France-Germany Leaders Climate Video Summit and the China-US Joint Statement on Climate Crisis.

3.3. Providing public goods for global climate governance—take The Belt and Road Initiative as an example

Global climate governance is non-competitive and non-exclusive and is one of the typical public goods in the international community. Even if a country does not participate in climate governance, it can still enjoy the benefits brought by climate governance rather than being excluded from the benefits of climate governance by other countries, and the benefits of one country will not reduce the benefits of other countries. The leadership of the United States and the European Union in global climate governance in the Post-Paris era has been weakened, which objectively promotes the relative improvement of China's leadership in this field, thus putting forward higher requirements for China's ability to provide public goods for global climate governance. To sum up, China provides two main types of public goods in global climate governance. One is to share the concepts of China's participation in global climate governance, and the other is to provide platforms for building international consensus and promoting climate governance cooperation and gradually improving the practice of the global climate governance system.

The Belt and Road Initiative covers both aspects and is a typical representative of China providing public goods for global climate governance. First, the Belt and Road Initiative reflects the concepts of China's participation in global climate governance. Its principles of wide consultation, joint contribution, and shared benefits align with China's concepts of win-win cooperation, fairness, and justice in global climate governance. The Green Belt and Road Initiative with ecological civilization as its core aims to promote green development and strengthen ecological protection in countries along the Belt and Road, which coincides with the concept of a community with a shared future for humankind and sustainable development (Ministry of Ecology and Environment of the People's Republic of China, 2017). Secondly, the Belt and Road Initiative is also of great significance for countries along the Belt and Road to participate in the practice of global climate governance. There are many developing countries with relatively low levels of economic development and technological innovation capabilities. In the process of participating in global climate governance, these countries usually face troubles such as shortage of funds, backward technology, the Belt and Road Initiative to deepen China's cooperation with countries in global climate governance, providing an important platform to solve the problems. Through the Belt and Road Initiative, China provides financial, technical, and personnel assistance to developing countries along the Belt and Road, thus helping them fulfill their greenhouse gas emissions reduction commitments.

Conclusion

This article analyzes the predicaments of global climate governance in the Post-Paris era and argues that the current global climate governance system is not perfect but is facing the challenges of lack of leadership, fragmentation of institutions, and deficit of greenhouse gas emissions reduction. Due to the swinging attitude of the United States in global climate governance and the relative decline of the EU's climate leadership, China's structural strength in the global climate governance system has increased. With the continuous enhancement of China's comprehensive national

power and international influence and the gradual popularization of domestic green development concepts, China's willingness and practical ability to participate in global climate governance has improved continuously. This paper argues that the concept of sustainable development and the concept of a community with a shared future for humankind are the fundamental concepts of China's participation in global climate governance in the Post-Paris era, and win-win cooperation & fairness and justice are the normative concepts of China's participation in global climate governance in the Post-Paris era. Under the guidance of these concepts, China has carried out a series of fruitful practices, such as actively fulfilling its greenhouse gas emissions reduction commitments, incorporating tackling climate change into national long-term development plans, participating in the multilateral process of global climate governance, strengthening exchanges and cooperation between countries, and providing public goods for global climate governance.

It is the common interest of all countries in the world to actively tackle climate change, promote the implementation of the Paris Agreement, and constantly improve the global climate governance system. Although the current reality of global climate governance and its operational mechanism is not perfect, global climate governance is in line with the historical trend and represents the international community's will. It is also a meaningful way to safeguard national interests and enhance one's international influence. In this context, China should use its special position in the Post-Paris era global climate governance system, build a global climate governance concept with Chinese characteristics, actively participate in global climate governance practice, and then promote global climate governance's continuous development.

Acknowledgments

This paper is funded by China National Social Science Fund (17BGJ011), Regional Research Fund of Ministry of Education (2020-N21), UIBE Central Research Fund (PX-6020514/X19003/120-741910) and UIBE Young Excellent Research Fund (18YQ17)

References

- Bo Yan. (2019). China's Concept on Global Climate Governance: Essence, Basis and Practice. *Contemporary World*, (12), 50-56. doi:10.19422/j.cnki.ddsj.2019.12.009.
- Friedman, L. (2019, October 23). *Trump Administration to Begin Official Withdrawal From Paris Climate Accord*. The New York Times. https://www.nytimes.com/2019/10/23/climate/trump-paris-climate-accord.html
- Kupchan, C. A. (2021, March 2). *Colossus Constrained: Renewal at Home Requires Restraint Abroad.* Foreign Affairs. https://www.foreignaffairs.com/articles/united-states/2021-03-02/colossus-constrained

- Kang Xiao. (2019). Global Climate Governance and Evolution of EU Leadership. *Contemporary World*, (12), 57-63. doi:10.19422/j.cnki.ddsj.2019.12.010.
- Li Huiming. (2016). The Paris Agreement and Transition of the Global Climate Governance System. *Global Review*, 8(02), 1-20+151-152. doi:10.13851/j.cnki.gjzw.201602001.
- Liu Yuanling. (2019). An Analysis of U.S. Domestic Policy on Climate Change since Trump Took Office. *Contemporary World*, (12), 64-70. doi:10.19422/j.cnki.ddsj.2019.12.011.
- Ministry of Ecology and Environment of the People's Republic of China. (2021, July 13). *China's Policies and Actions for Addressing Climate Change (2020)*. https://www.mee.gov.cn/ywgz/ydqhbh/syqhbh/202107/t20210713_846491.shtml
- Ministry of Ecology and Environment of the People's Republic of China. (2017, April 26). Guiding Opinions on Promoting Green Construction of One Belt One Road. https://www.mee.gov.cn/gkml/hbb/bwj/201705/t20170505 413602.htm
- Nina, H., Åsa, P. (2018). Global climate adaptation governance: Why is it not legally binding? *European journal of international relations*, 24(3), 540-566. https://doi.org/10.1177/1354066117725157
- Niu Wenyuan. (2012). Theory and Practice of China's Sustainable Development. *Bulletin of Chinese Academy of Sciences*, (03), 280-289. doi:CNKI:SUN:KYYX.0.2012-03-005.
- Niu Xiafei. (2021). The Multiculturalism and the Political Polarization in the United States. *Forum of World Economics & Politics*, (01), 29-55. doi:CNKI:SUN:SJJT.0.2021-01-003.
- UNFCCC. (2015, December 12). *The Paris Agreement*. https://unfccc.int/process-and-meetings/the-paris-agreement
- World Meteorological Organization. (2021, April 20). *The State of the Global Climate 2020*. https://public.wmo.int/en/our-mandate/climate/wmo-statement-state-of-global-climate
- Wang wanfa, Yu Hongyuan, & Zhang Xiaoran. (2021). The Biden Administration's Global ClimatePolicy and China's Response. *Global Review*, 13(02), 27-44+153-154. doi:10.13851/j.cnki.gjzw.202102002.
- Xi Jinping. (2017, December 1). Working Together to Build a Better World. Xinhua Net. http://www.xinhuanet.com//2017-12/01/c 1122045658.htm
- Xi Jinping. (2015, November 30). Work Together to Build a Win-Win, Equitable and Balanced Governance Mechanism on Climate Change. Xinhua Net. http://www.xinhuanet.com//world/2015-12/01/c 1117309642.htm
- Xi Jinping. (2020, September 22). Statement At the General Debate of the 75th Session of TheUnited Nations General Assembly. Xinhua Net. http://www.xinhuanet.com/politics/leaders/2020-09/22/c 1126527652.htm
- Xi Jinping. (2020, December 12). Building on Past Achievements and Launching a New Journey for Global Climate Actions. Xinhua Net. http://www.xinhuanet.com/politics/leaders/2020-12/12/c_1126853600.htm
- Xinhua News Agency. (2016, March 17). The 13th Five-Year Plan for Economic and Social Development of the People's Republic of China. Xinhua Net. http://www.xinhuanet.com//politics/2016lh/2016-03/17/c 1118366322.htm
- Xinhua News Agency. (2021, March 13). The 14th Five-Year Plan for Economic and Social Development and the Long-Range Objectives Through the Year 2035 of the People's Republic of China. Xinhua Net. http://www.xinhuanet.com/2021-03/13/c_1127205564.htm

Non-traditional Security Complex in the South China Sea: Vietnam's Perspectives and Policy Implications

Nghiem Tuan Hung* • Nguyen Xuan Cuong**

Abstract The South China Sea (SCS) is one of the busiest maritime areas in the world. In the SCS, there are several outstanding non-traditional security issues. After reviewing perspectives of Vietnam on non-traditional security issues, the article focuses on newly emerging issues, such as maritime security, freedom of navigation, marine environment, and resources exploitation in the SCS. The article argues that China's main factor making the situation more complicated is its territorial and resource ambitions. However, when it comes to the SCS issue, it is about differences, disputes, and complicated developments and about cooperation. Although the benefits are diverse, efforts to build confidence and promote cooperation between countries should be recognized. Among the disputing parties, Vietnam always seeks to resolve the issues as soon as possible with the most actively proposed idea called the cooperation model for mutual development.

Keywords: South China Sea, Vietnam, China, non-traditional security

1. Introduction

The South China Sea (SCS) is either one of the busiest maritime areas in the world or "an important nexus for regional and global economic activity" (Panda, 2017). Oil and commercial goods from the Middle East and Southeast Asia to Japan, South Korea, and China are transported through SCS, where there are many important straits such as the Strait of Malacca, Sunda and Lombok, and Makassar. On the military side, SCS is also an essential route for the movement of US military forces from the Western Pacific to the Indian Ocean and the Gulf. In addition, freedom of navigation, which is considered another important principle of international relations, is the principle of conduct in the world's seas. This principle is sometimes briefly referred to as freedom of navigation within the seas.

Vietnam is located on the west coast of the SCS. For Vietnam, the SCS plays a vital

E-mail: hungnt.iwep@vass.gov.vn, tuanhung3110@gmail.com

E-mail: xuancuong@vnics.org.vn

Nghiem Tuan Hung*, Nguyen Xuan Cuong**(⊠)

^{*} Institute of World Economics and Politics, Vietnam Academy of Social Sciences, Vietnam

^{**} Institute for Chinese Studies, Vietnam Academy of Social Sciences, Vietnam

role in the process of national construction and defense in history, present and future. The SCS has created a favorable strategic position for Vietnam. The SCS provides a vital source of aquatic resources, which contribute to making the fisheries sector one of the country's key economic sectors. The SCS is a source of seafood and a gateway for Vietnam to develop tourism, attract international visitors, and is a place for exchange and integration between many cultures. Oil and gas are the two largest resources found under the Vietnamese continental shelf. Up to now, many sedimentary basins have been identified and exploited with significant oil and gas reserves. Given the importance of the SCS to Vietnam's socio-economic development and security, any move in the SCS is carefully considered by Vietnam.

While traditional security issues have appeared and existed for a long time in the SCS, non-traditional security issues in the SCS have also become increasingly harsh. There are two groups of non-traditional security issues in the SCS. The first one contains issues that originated from the relationships between social communities, including state actors and non-state actors. The second one cover issues deriving from the interactions between social communities and the natural world. The paper analyzes the complexity of non-traditional security in the SCS, thereby drawing some policy implications for Vietnam in the coming time.

2. Non-traditional security in Vietnam's formal documents and academic perspectives

2.1 Non-traditional security in Vietnam's strategic documents

According to Vietnam's legal perspective, non-traditional security is an integral part of national security and defense; thus, ensuring national security is a strategic task in any time period. Non-traditional security threats have challenged Vietnam's national independence, sustainable development, socio-political stability, national independence, sovereignty, and national security.

The Ministry of Defence of Vietnam (2004, p. 2) affirms:

"Unresolved issues related to border, territorial, maritime and land disputes as well as other non-traditional security issues, such as drug trafficking, weapons trafficking, piracy, transnational organized crime, terrorism, illegal immigration and migration, ecological degradation, etc., are also Vietnam's security concerns."

The Ministry of Defence of Vietnam (2009) emphasized that non-traditional security issues such as the illegal trade and transportation of weapons, drugs, piracy, organized crime, terrorism, illegal immigration and migration, environmental degradation, climate change, epidemics, etc. were also frequent security concerns of Vietnam. In addition to the potential regional security risks of tension and conflict, the Ministry of Defence (2009) stated that many natural disasters heavily impacted southeast Asia; although terrorism and piracy had been curbed, there were still

potential threats to regional security; thus, those threats were common concern of Southeast Asian nations and many other countries; besides, climate change, natural disasters, epidemics, transnational crime were increasingly affecting the security of nations in the region. In 2019 Vietnam National Defence, the Ministry of National Defence (2019, pp. 11) once again reaffirmed the list of non-traditional security issues "as seen in cyberspace, terrorism, energy, food, climate change, natural disasters, epidemics, drug trafficking, people smuggling, illegal migration, transnational crime, and maritime piracy."

In the 11th National Congress of the Communist Party of Vietnam, the Party (2011, pp. 182-183) considered that non-traditional security threats and high-tech crime continued to increase; global issues such as financial security, energy security, food security, climate change, natural disasters, and epidemics would continue developing. The Party also listed a number of non-traditional security issues, namely religious conflict, ethnical issue, separatism, local wars, political riots, interference, subversion, terrorism, high-tech crime in the fields of finance and monetary, electronic telecommunications, biology, environment, and so on. According to the Party, those issues would continuously intensify in the coming years. At the 12th National Congress, the Communist Party of Vietnam (2016, pp. 33-34) asserted its consistent perception and perspective on national security strategies in general, including traditional and non-traditional security. The Party illustrated that Vietnam must strengthen national defence and security to firmly defend the fatherland and keep the environment of peace and stability for the country's development. Otherwise, Vietnam must be well-prepared to respond to traditional and non-traditional security threats. Lately, the Communist Party of Vietnam (2021) illustrated that:

"Non-traditional security issues are increasingly diverse, complex, and impactful; Increased natural disasters, epidemics and climate change, and the use of transboundary water resources, especially the Mekong River's water source, poses many unprecedented challenges for sustainable development."

2.2 Non-traditional security in the studies of the Vietnamese research community

Besides the formal perception of the ruling party and Ministry of National Defence, the Vietnamese research community also introduced many notions of non-traditional security. Le Van Cuong (2008) argues that there were 17 non-traditional security issues, including extreme nationalism, terrorism, financial security, energy security, science, and technology security, ecological environment security, drug trafficking, infectious disease, organized crime, transnational crime, money laundering, cyber attacks, illegal immigrants, population explosion, depletion of water resources, piracy, and the underground economy. Another author named Luan Thuy Duong (2010) divided the non-traditional security that Vietnam needs to address into seven forms, namely environmental security, energy security, economic security, human security, maritime

security, natural disasters, and epidemics. According to Pham Gia Khiem (2010), non-traditional security issues must include climate change, energy security, natural disasters, and epidemics, etc. Those issues are becoming a tough challenge to the security of Vietnam today. According to Tran Thi Ha (2017), in recent years, Southeast Asia has faced serious challenges originating from non-traditional security issues, such as climate change, pirates, and terrorism, etc. Those issues strongly affect regional countries in every aspect of the economy, security, politics, culture, and society. Besides, Southeast Asian nations develop a mechanism to deal with those new challenges.

Other authors focus on specific issues. For example, Dam Huy Hoang (2018) paid attention to the environmental pollution in the SCS. The issue of environmental pollution in the SCS has caused deep concern for either coastal countries or other countries using transport routes across the SCS. According to Dam Huy Hoang, ASEAN has launched cooperative efforts to protect the environment, including cooperation to protect the waters from being polluted by human activities since 2003, and ASEAN also works with many partners to look for solutions. However, up to now, due to many problems, cooperation in the control of discharge in the SCS among the concerned countries is still limited. Meanwhile, Vo Xuan Vinh (2018) considered the issue of piracy as a top concern. The author argued that as a region characterized by archipelago and island terrain, the world's most important sea route in terms of trade in goods, the waters in Southeast Asia are the birthplace and the ideal environment for piracy when maritime control capacity of regional countries is limited. During the post-Cold War period, when the world's commercial activity became more bustling due to regionalization and globalization, piracy developed rapidly and turned itself into a primary security concern of the region. Due to these challenges, Southeast Asia's anti-piracy cooperation mechanisms have been formed at various levels.

In short, the Party and the State of Vietnam revealed its views on non-traditional security issues through the documents of the Party Congress and the Vietnam White Book of National Defence. Additionally, Vietnamese scholars have also shown their interest in non-traditional security. In general, Vietnam has identified non-traditional security as a complex and diverse challenge that needs to be addressed to ensure national security, independence, and territorial integrity. From the studies of Vietnamese authors on the non-traditional security issues which the world has to face, those issues can be classified into two groups:

The first group includes issues associated with the relationship between the basic human social communities. Those are the relationships between groups of countries of which political and economic interests are the same or relatively similar. At the heart of the group, it is the fierce confrontation between major powers. While the likelihood of major wars, or the risk of direct collision, between major powers is low, the risk of a conflict to some extent cannot be completely ruled out. That confrontation occurs not only in bilateral interactions but also in multilateral aspects, or traditional political

and security issues, but also extends to maritime security and safety. Additionally, individuals or human groups as sub-state actors, namely marine crime and piracy, also carry undeniable threats to maritime security and safety, which have been very common for a long time.

The second group includes issues arising from the interactions between human society and the natural world. The group of issues is associated with the limitation of the natural environment when the environment is too strongly and frequently impacted by diversified activities, especially economic activities, of humans. Those are also issues related to the capability to provide energy, fuel, natural resources, etc. to meet the needs of human activities and serve societies' production. The group also includes protecting natural resources, preserving the human living environment, rational exploitation and saving of marine resources, and international cooperation to exploit sea surface serving the purpose of peace and prosperity.

3. Non-traditional security complex in the SCS

There are two layers of non-traditional security issues in the SCS. Those are entangled issues, thus making the SCS the most complicated among all territorial and maritime disputes in the world while also making traditional and non-traditional security issues intertwined.

3.1. Maritime security, the safety of navigation and marine crime

The first and most fundamental is maritime security and the use of sea lanes, which are related to overlapping sovereignty claims between littoral states and the conduct of military operations in the name of freedom of navigation by international actors, as well as marine crime. Out of the disputing parties, China emerges as the most assertive and aggressive.

To reinforce territorial claims, many countries, especially China, have forcibly seized entities in the SCS and built infrastructures (e.g., airports, wharves, harbors, and military bases for stationed troops, and so forth.) on those entities. Although many countries have engaged in such activities, the number of entities renovated and built by China and the level of militarization of features occupied by China has caused special concerns. China's action raises concerns about the potential for conflict and the possibility to strengthen the states involved as a deterrent power to limit regional conflict.

China builds artificial islands and infrastructure in the SCS for civilian purposes, benefiting the international community. That is the argument the Chinese side often makes to justify its behavior. China insists that the construction aimed at non-military purposes, but it also admits that its objectives include improving its ability to safeguard territorial sovereignty and maritime rights and interests as well as satisfy the necessary military needs" (Chase & Purser, 2015). Additionally, the inauguration of the five lighthouses in different features would "reflects China's dedication to its responsibility of boosting navigational safety in the SCS" and improve China's "capacity for maritime rescue and environmental protection" (An, 2016). In addition

to island reclamation, infrastructure construction, and other civil activities, China continues to conduct drills and illegally maintains a military presence in the occupied features. Over the years, China has repeatedly deployed weapons to the Paracel and Spratly archipelago, combined with holding exercises separately and with other countries, which intensifies the situation. China no longer conceals its ambition to establish an air defense identification zone in the SCS. "For the ADIZ in the SCS, we have repeated our position on many occasions. What I need to underscore here is that to set up an ADIZ is the right of a sovereign state and we don't need other countries to make suggestions" (Ministry of National Defense of the PRC, 2016). China's militarization and infrastructure-building activities in the SCS threaten maritime peace, stability, security, and safety, go against the UNCLOS, challenge other provisions of international law, ignore the Declaration on the Conduct of Parties in the SCS (DOC) that China signed in 2002, as well as intentionally disregard the attention and legitimate recommendations of the international community. The actions of China have affected maritime security and safety in the SCS, thus negatively impacts other countries' efforts to resolve disputes.

Maritime security and safety remain an issue because traffic through the SCS is essential for world maritime trade and communications, and the existing maritime and territorial disputes will threaten the safety of navigation there. In recent years, the term "safety and freedom of navigation" has become an important expression of the competition between China and the United States in the SCS. China is deploying its navy across Asia's seas and sea lanes, making the unipolar US maritime security order that has existed for 75 years into a more multipolar and volatile system. The Chinese naval's aggression in the East China Sea and SCS is not a single move but affects the United States' ability to control the sea across the Western Pacific Rim. Geographically, the SCS is home to some of the world's most important shipping routes. The ship carrying import and export goods between markets in Asia and Europe, Africa, and America must pass through the SCS. Regional circulation will be significantly related to both the cost and time delay in delivery. As a result, most countries are directly interested in ensuring freedom of navigation is respected in the SCS. Unfortunately, however, the SCS is home to many long-standing territorial disputes. Brunei, China, Indonesia, Malaysia, the Philippines, Taiwan, and Vietnam have overlapping sovereignty claims over different maritime entities and water areas in the SCS. Most of these territorial disputes focus on features within the Paracel and Spratly islands group, and China is the country making the most absurd demands.

The United States does not support either side in territorial disputes over the features in the SCS, and the various sovereignty claims are not discussed in detail here. However, the United States actively opposes illegal claims to the waters around those entities and illegal restrictions on sea traffic. China has made such unreasonable claims to limit freedom of navigation. The United States conducts freedom of navigation operations in

the SCS to oppose these claims and actions. Strategically, the United States has used the SCS issue as a manipulation mechanism to force either regional countries or external powers to support the ultimate goal of building a military alliance against China in the Indo-Pacific region. Tactically, the United States has increased unilateral or joint power deployments under the Indo-Pacific Strategy. That approach intensifies the geopolitical competition triggered by naval military games between China and the United States and poses new challenges to regional maritime security. The primary consideration of the US Indo-Pacific Strategy is to prevent the bilateral balance of power from developing in favor of China. US tactics are designed to undermine China's growing influence in the vast Indo-Pacific region, including the SCS, and to maintain US superiority. Because of the Indo-Pacific Strategy, the future will see increasingly fierce competition between China and the system of US allies and partners.

Therefore, the security model in the SCS is increasingly developing into competition between major countries. First, US-led freedom of navigation operations (FONOPS) in disputed areas in the SCS will be more provocative and targeted and the involvement of the United States Coast Guard (USCG). The joint FONOPS and the ioint law enforcement role played by the USCG as part of their Indo-Pacific Strategy in the SCS will provide a new means for the United States to prevent the growth of China's maritime forces and the militarization of the SCS. It is foreseeable that in the framework of its Indo-Pacific Strategy, the United States will not only continue to escalate FONOPS in the SCS in terms of frequency, scale, and geography but also bring along many challenges as well as become more diverse, which means putting pressure on China in the security realm. On the one hand, allies of the United States such as Japan, Australia, and the United Kingdom can conduct joint operations with the United States based on existing unilateral military operations in the SCS. France and the UK have announced that the two countries would promptly conduct patrols for freedom of navigation in the SCS (Lillehaugen, 2018). Australia insisted that it had the right to send naval operations to the SCS, as evidenced by sending three warships to the SCS (Strait Times, 2018)). Another US ally, New Zealand, also openly and openly criticized China in its 2018 Strategic Defence Policy Statement (New Zealand Government, 2018).

On the other hand, the United States institutionalizes and normalizes the enforcement actions of the coast guard and gradually conducts joint maritime law enforcement with relevant countries such as the Philippines, Vietnam, and Malaysia. Hence, direct competition for power between China and the United States in the SCS is ongoing. Clearly, the United States has been proving to allies as well as other countries that it is ready for a safe, secure and free SCS. The US effort has been recognized by its allies, at least in terms of freedom of navigation, to demonstrate that China's desire to hegemony the SCS is not easily achieved. Although China is taking advantage of the field and space in the SCS, the US is also slowly regaining its position. Marine crime

is another long-standing issue affecting maritime security in the SCS. SCS is known as a sea area with a very high traffic density because it concentrates on many important international maritime traffic routes. That is one reason for the development of many types of crimes operating in the SCS. Depending on the crime situation, countries focus on different types of marine crimes, such as: i) piracy and armed robbery; ii) terrorism; iii) smuggling (goods, human trafficking, rare animals and plants, weapons and banned substances); iv) violations of the sovereignty of coastal states such as illegal fishing, illegal exploitation of natural resources; and vi) acts in violation of international law on matters such as the protection of the marine environment.

In July 2005, the Lloyd Markets Association's Joint War Committee (JWC) listed the Strait of Malacca and some areas in the south of the Philippines (along with regions like Iraq, Lebanon and Somalia) as regions facing potential wars, attacks, terrorist activities and related hazards (Wu & Zou, 2009). As a result, marine insurance premiums have increased for ships passing through those areas despite firm opposition from regional authorities and shipowners. In 2003, the ASEAN Regional Forum issued a Statement on Cooperation Against Piracy and Other Threats to Maritime Security. ASEAN is also aware of the piracy threat and cooperates to a certain extent. At the 12th ASEAN Regional Forum Ministers' meeting in July 2005, ministers applauded ARF's persistent efforts in promoting maritime safety and security and highlighted the four areas of for future cooperation, namely multilateral cooperation, operational solutions for maritime safety and security, transport and port security, and the application of technology for maritime safety and security (ASEAN, 2005). There are also some truly bilateral or trilateral cooperation efforts based on no firm agreement, such as the joint patrols between Indonesia, Singapore and Malaysia, which are really reasonable as they share the waters of the Strait of Malacca and Singapore.

Additionally, the concerned countries should realize that without any great power help, eradicating piracy would be pretty tricky. The ASEAN Regional Forum then convened a meeting of maritime experts to coordinate coastal protection actions, exchange information, and investigate re-piracy. In February 2006, the United States held a meeting in Alameda, California, where representatives from Indonesia, Malaysia, Singapore, Australia, Germany, India, Japan, the Netherlands, Norway, South Korea, the United Kingdom, and the Philippines were gathered. China was invited but did not attend (Herbert-Burn et al, 2009).

Despite new moves in anti-piracy efforts and the recent decline in piracy in the SCS, there are some nagging problems in combating piracy. Long-term concerns include many unresolved overlapping disputes and jurisdictional disputes. For example, the Spratly Islands are claimed by six parties and occupied by three of them. These territorial claims are particularly important as anchors for asserting exclusive ecological zones around disputed islands and natural oil and gas resources that are believed to be on the seabed. With an insufficient number of agreed boundaries in the SCS, states act primarily

for their interests. As a result, "The lack of agreed jurisdiction complicates maritime enforcement, leads to unchecked degradation of the marine environment and facilitates illegal activities at sea, including possible maritime terrorism" (Bateman, 2005, pp. 260). Otherwise, when the objective of the meeting was to coordinate state contribution efforts to support coastal states in the Strait of Malacca / Singapore, there has been little progress in burden-sharing. On the one hand, the littoral states wanted to share the burden, including providing environmental protection and security services. On the other hand, the sea-used countries saw burden-sharing to engage more directly in maritime security measures against piracy and terrorist threats. It can be said that the anti-piracy cooperation in the SCS has only achieved limited results.

3.2. Marine resources exploitation and environmental degradation

All the issues of this second group are directly related to the human exploitation of nature to find resources that serve different human and social purposes. In fact, oil and gas exploitation, as well as fishing in the SCS, are simply an expression of a more fundamental conflict over sovereignty in the region. Given the recent strength and assertiveness in the SCS, China's interests notably deserve special attention. In addition to expanding China's security perimeter, China's regional interests in marine resources can be grouped into two issues (2 ps), namely petroleum, and protein (seafood).

As the world's largest energy importer, China wants the most assurance of energy resources, securing supplies, and not having to worry much about ownership. Due to the supply-demand nature of the global energy market, any additional supply that is developed makes the market larger and larger. As a result, the product's price will fall, both directly benefiting China as the world's largest energy consumer.

Since energy is really a China's concern, China will find ways to exploit marine energy resources. Although China continues to oppose exploration by other claimants in the "nine-dash line," it repeatedly uses its own oil and gas companies to complicate the situation in existing disputed maritime areas. While the level of competition for oil and gas resources is inflated, it is clear that state oil and gas companies in the region are being used to assert maritime claims, with rigs and oil being used as a clear indication that the state controls disputed areas. International oil and gas companies trying to operate in disputed areas also run the risk of promoting national goals over economic and business reasons. The most typical example of this is the stressful monthly incident in 2014 with Vietnam when China National Petroleum Corporation (CNOOC) used the Haiyang Shiyou 981 rig to perform exploration drilling at the disputed area near Paracel archipelago. CNOOC with its fleet and exploration rigs is a kind of tool to establish sovereignty. CNOOC itself is interested in encouraging Chinese leaders to take a hard line in protecting the right to access oil and gas resources. CNOOC is also known for promoting sovereignty claims over potential oil and gas reserves in the SCS; thus, CNOOC's credibility and political influence could be enhanced.

The sovereignty disputes and too high seafood demand from the claimants, especially China, harm seafood resources in the SCS. The most important aspect of the Spratly Islands dispute is not just oil or sovereignty; it is whether seafood from the SCS continues to be supplied to the Asian people in general and the Chinese in particular or not. For more than 20 years, every May, China unilaterally issued a ban on fishing in the SCS, lasting for three months. In line with the ban, China sent many fishing boats and China Marine Surveillance (haijian) ships to increase operations in the SCS to control and confiscate fishing boats and equipment that China considers violations of its unilateral fishing ban. There are at least three signs that seafood resources are endangered. The first sign is production. Catches remain unsustainable 10-12 million tons for decades, a figure that could double from illegal, unreported, and unregulated (IUU) fishing (Cheung & Sumaila, 2015). Stable catch conceals a severe problem: catches increasingly include smaller species with booming populations because wild predators have been overfished. The second sign is that fishermen's catch per unit effort (CPUE) has dropped drastically over the past decades as fishers are forced to spend more time and fuel to bring in the same amount of fish or seafood. Vandalism, including the use of fishing boats damaging corals, Muro-ami nets, or even explosives and cyanides that are often used to squeeze more from declining fisheries. The third sign is that vital habitat is disappearing. A 2012 meta-analysis of maritime studies show that in the past 10-15 years, the SCS's coral coverage in disputed areas decreased from over 60% to just 20%. Coral reefs along the Chinese coast are even worse and have declined by more than 80 percent in the past few decades (Hughes et al, 2013).

Under the provisions of UNCLOS, the coastal state has:

"sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the seabed and of the seabed and its subsoil, and with regard to other activities for the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds. (Article 56).

Environmental degradation in the SCS has caused deep concern for either coastal countries or other countries using transport routes across the SCS. Scholars and scientists pay great attention to the environmental degradation and pollution in the SCS. There is a noticeable activity that damages the ecological environment of the SCS, namely islands reclamation or the construction of artificial islands. Among the claimants, China is the most active.

China has diversified strategies to assert its dominance over the disputed maritime areas, including strengthening its military capabilities, researching to show a historical and diplomatic basis for its claims to ensure that the Southeast Asian claimants do not unite in the dispute with China. This is evident in the comments of Yi Xianliang, deputy head of the Chinese Foreign Ministry's Boundary and Ocean Affairs Departments, on construction activities in the SCS when he said that "the Spratly Islands are China's

intrinsic territory, and what China does or doesn't do is up to the Chinese government. Nobody can change the government's position." In other words, China has sovereignty control over the disputed territory and intends to enforce it. One tactic that China has used recently as if having undoubted sovereignty over disputed areas, is to explore potential energy resources and to build infrastructure construction. By doing those, China asserts its rights to do what it wants to do within its territory.

As for the reclamation and construction of artificial islands, it is undeniable that China is responsible for the most active implementation of island-building activities in recent years. Additionally, according to Zhang Hongzhou (2016), the giant clam mining industry began to explode in 2013, when the Chinese government decided to turn a blind eye to the illegal exploitation of a protected species to reinforce its claim in the SCS. According to Zhang (2016), in 2015, the giant clam mining industry supported the lives of nearly 100,000 people in Tanmen, Hainan. Environmental damage may have dire consequences for the people of all countries around the SCS. Actually, the Chinese side has always denied all allegations. On April 28, 2015, Foreign Ministry spokesperson, Hong Lei, rejected the notion that the construction of the Chinese island is harmful to the environment. Chinese construction projects have also undergone years of rigorous scientific evaluation and testing and are subject to strict environmental protection standards and requirements. Such projects will not damage the ecological environment of the SCS (Ministry of Foreign Affairs of the PRC, 2015). On June 16, 2015, Chinese Foreign Ministry spokesman Lu Kang told reporters that China's construction activities against the Spratly Islands did not and will not cause damage to the system and marine ecological environment in the SCS (Ministry of Foreign Affairs of the PRC, 2015).

However, in its 2016 ruling, the Permanent Court of Arbitration "strongly condemns China for the serious and permanent environmental damage it has inflicted to coral reefs and their wildlife in the SCS" (Tickell, 2016), especially regarding China's recent large-scale island reclamation (O'Neil, 2018). The court ruled that by carrying out such activities, China has violated its obligation to conserve and protect fragile ecosystems and habitats of depleted, threatened, or endangered species and threats that cannot be overcome to the marine environment. In its ruling, the court noted that it had asked China to provide the environmental assessment studies, as required by Article 206 of UNCLOS. China, which refused to participate in any court proceedings in the lawsuit, did not comply. The arbitral tribunal also determined that the Chinese government is responsible for the poaching and destruction of coral reefs in the SCS. The court ruled that the Chinese authorities were aware that Chinese fishers had caught and harvested giant endangered sea turtles, corals and clams in the SCS (by using inducing methods that seriously damage the reef) and failed to fulfill an obligation to prevent such activities. The court found that China, despite the rules of giant clams protection and conservation of the reef environment in general, was fully aware of the practice and has proactively accepted it as a means to exploit the living resource cascade of the reefs within the months before those reefs faced the near-permanent destruction brought on by island construction activities.

4. Policy implications for Vietnam

In the SCS, there are disputes in some areas of waters, leading to sovereignty in the undefined overlapping areas between disputing parties. Directly related to Vietnam are the dispute in Paracel Islands between Vietnam and China; and the Spratly Islands dispute between six parties (Vietnam, China, the Philippines, Malaysia, Brunei, and Taiwan). Because of the history of conflicts between countries related to the SCS and the continuous strengthening of military capabilities, the SCS has hidden hot spots that can threaten peace and stability. Maintaining a stable, peaceful, and cooperative SCS is an aspiration and a shared responsibility of either regional countries or the international community. To achieve this goal, it is necessary to have a joint effort of the countries in the region and the international community based on respecting international law, fully and responsibly implementing the basic principles of international law, including UNCLOS 1982. Vietnam has been and will be making a positive and responsible contribution to this joint effort towards this goal. Several policy implications should go to Vietnam's government as follows:

For maritime security, freedom of navigation, and marine crime

First and foremost, Vietnam should enhance cooperation with the United States in general and in the SCS in particular. In addition to the issue of common interests in the field of security for the SCS and Southeast Asia, the two countries have come to understand each other better. Vietnam and the US no longer look at each other through an ideological lens. Vietnam and the US both believe that the SCS is a strategic area in terms of politics, international law, economics, marine environment, and security.

Although the US is not directly involved in sovereignty disputes, the country has many interests similar to Vietnam in the SCS. The US-Vietnam cooperation in the SCS issue is very active and there are many potentials for development. While the United States essentially continued to rely on the principles outlined in May 1995 (before establishing diplomatic relations with Vietnam), under which it continued to promote peacefully resolving disputes, peace and stability, freedom of navigation, neutrality regarding disputes, respect for principles of international law, the fact that the United States is becoming more and more actively and voluntarily involved in the SCS issue. The outstanding benefit that both Vietnam and the US are concerned about is the right of unobstructed access in the SCS following international law. That right of unobstructed access is closely related to the exploitation of marine resources as well as for the navigation of commercial ships and military activities in the SCS. Besides continuously making policy statements and proposing acts related to the region and the SCS, the United States continues to strengthen its presence in the SCS with naval ships and aircraft of all

kinds, including warships. In terms of economic business, US companies such as Delta Offshore Energy, Bechtel Corporation, General Electric, McDermott, Exxon Mobil, and Murphy Oil continue to cooperate in oil and liquefied natural gas projects in Vietnam and the SCS (BBC, 2020). And defense cooperation related to the SCS continues to be of interest to the two sides, including transferring a number of big-size US patrol boats to Vietnam (US Embassy & Consulate in Vietnam, 2019).

Another important interest that both Vietnam and the United States attach importance to promoting is enhancing peace and stability in the SCS and Southeast Asia. Good relations between Vietnam and the US will help protect maritime security in the SCS. The fact that Vietnam and the US continue to pay attention to and strengthen cooperation related to the SCS has brought about practical benefits to the region. That cooperation contributes to increasing regional interest in the SCS issue, accelerating the process of dialogue at regional and international forums, creating a more balanced situation in resolving the disputes. In addition, although the United States itself has not ratified the 1982 UNCLOS, it has persisted in promoting cooperation based on The Convention's principles of facilitating regional countries in finding a common voice to realize patterns of behavior in the SCS. Otherwise, strengthening cooperation on SCS issues actively contributes to helping protect the legitimate interests of both Vietnam, the US, and some other Southeast Asian countries about dispute settlement, marine resources exploitation, using sea routes in international integration, and enhancing trade. In order to contribute to promoting peace, stability and cooperation in the SCS, Vietnam and the US have plenty of room to promote cooperation. The two sides should continue to uphold and promote the building of a rules-based regional order, for which the free and open Indo-Pacific is one of the examples a regional order. Thus, the SCS issue is also resolved according to the positive general principles of international law. Vietnam and the US established their "comprehensive partnership" in July 2013. Of course, in Vietnam's diplomatic rhetoric, China is Vietnam's most important partner, while the US is one of the least important. However, the US is in reality, the second most important partner of Vietnam. For many aspects, the United States is just as important as China. For Vietnam, the current relationship with the United States is fundamentally strategic in many vital areas, such as security and defense, although it is just called a "comprehensive partnership" by name. Vietnam and the US can also join regional and international countries to create an annual high-level security forum

¹ Linguistically, Vietnam lags behind the Philippines, Thailand, Indonesia and Singapore, which are strategic partners of the United States in the region, in their importance to the US. Meanwhile, Vietnam has raised the level of diplomacy to "strategic relations" with 16 countries including Russia (2001), Japan (2006), India (2007), China (2008), South Korea and Spain (2009), United Kingdom (2010), Germany (2011), France, Indonesia, Italy, Singapore and Thailand (2013), Malaysia and the Philippines (2015) and Australia (2017). The US, the world's largest economy and military, is even behind Vietnam's "comprehensive partnership" with Myanmar which was set up in 2017.

to discuss and resolve emerging SCS issues. The two countries can also promote cooperation related to the capacity building of each stakeholder for training, joint exercises, information exchange, economic cooperation, scientific research, marine environmental protection, terrorism, piracy prevention, and natural disaster relief in the SCS. In that process, openness and transparency of cooperation and active sharing of information and cooperation with regional countries are essential to alleviate concerns and gain access to other resources and support of the international and regional community. The tighter the US-Vietnam relationship, the higher it will enhance regional countries' confidence in the US.

For marine crime, the basis for promoting cooperation in the field of marine crime prevention in both bilateral and multilateral frameworks is the common understanding of the threats. Marine crime issues such as piracy, armed robbery at sea, smuggling, terrorism, illegal fishing, and destruction of the marine environment in the SCS created an urgent need for cooperation between countries.

Facing with these security challenges, Vietnam has actively participated in multilateral and bilateral cooperation mechanisms such as the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia, Heads of Asian Coast Guard Agencies Meeting, etc., proactively set up communication channels or hotlines, participated in joint patrols, and cooperated to improve maritime capacity with neighboring countries. All are heading towards the prevention of all kinds of marine crimes. The coastal states have come to realize that cooperation is one of the effective options for maintaining order and security in the SCS. In addition, the adjustment of the maritime security focus in the policies of major countries such as China, Japan, the US, India, and other countries also facilitates cooperation between law enforcement forces in general. It looks for opportunities to promote cooperation and capacity building for maritime law enforcement agencies in Vietnam in particular. However, in the context of increasingly fierce disputes in the SCS, cooperation between anti-crime forces is facing many challenges: (i) civil and law enforcement forces are used by some countries as political tools to assert sovereignty and unilaterally enforce their claims; (ii) the decline of confidence among countries in the region is pursued by some countries and enforced excessive claims which are inconsistent with UNCLOS, which is considered as the main cause of distrust, dissatisfaction, and conflicts between law enforcement forces in the SCS, thus creating a huge challenge in efforts to promote cooperation against threats from marine crime; (iii) it is also difficult to reach consensus due to the lack of clearly delimited maritime boundaries, thereby defining the specific jurisdiction and jurisdiction of the stakeholders. Thus, it can be seen that disputes and lack of trust are factors that limit the motivation and desire for cooperation between countries.

For marine resources exploitation and environmental degradation

Among the disputing parties, Vietnam always wishes to resolve the problem as soon as possible with the most actively proposed idea called the model of cooperation for

mutual development. General Secretary Do Muoi introduced this model during his visit to Thailand in October 1993 (Hoang Viet, 2010).

This policy is being implemented by Vietnam in practice. The legal basis for cooperation for development without the delineation of the main overlapping sea area is the Clause 3 of Article 74 (applied to the EEZ) and the Clause 3 of Article 83 (applied to the continental shelf) of the UNCLOS. Accordingly, in the period of the delimitation of the sea, states must endeavor to reach a practical interim settlement that does not prejudice or hinder the reaching of the final delimitation agreement. In other words, the provisional settlement is the ultimate solution that the Convention requires states to strive to achieve. This is an effort obligation, so no provisional arrangements are required. Unlike the Chinese model of "setting aside dispute and pursuing joint development²," the model proposed by Vietnam should be deployed in the disputed area, which is overlapping by the sovereignty demands of the related parties, with legal and historical grounds consistent with the provisions of international law, especially UNCLOS and acknowledged by the parties to be disputed. According

² In Chinese: 搁置争议,共同开发. According to the Ministry of Foreign Affairs of the PRC, the concept has four elements:

The sovereignty of the territories concerned belongs to China.

when conditions are not ripe to bring about a thorough solution to territorial dispute, discussion on the issue of sovereignty may be postponed so that the dispute is set aside. To set aside dispute does not mean giving up sovereignty. It is just to leave the dispute aside for the time being.

The territories under dispute may be developed in a joint way.

The purpose of joint development is to enhance mutual understanding through cooperation and create conditions for the eventual resolution of territorial ownership.

In fact, despite the proposed joint exploitation cooperation, China still maintains its unreasonable territorial claim. More importantly, most of the areas that China proposed to exploit collectively lie on the continental shelf which is obviously under the sovereignty of another countries. Through common exploitation intentions, China intentionally forces other countries involved in mining to understand that they are exploiting in the disputed territory with China. In addition, the policy of bilateral negotiations with each disputing country that China has introduced is not consistent with the reality of intermingling interests and claims of many parties and the international community in the SCS. Therefore, China' proposal is not feasible in practice. The model of cooperation in sharing marine resources and setting aside disputes for mutual exploitation, if carried out, will mean the recognition of Chinese claims over the entire SCS, in accordance with China's intentions to turn a non-disputed area into a dispute. Other claimants may have to accept a resource sharing within their own territorial waters. This makes the model difficult to implement. In fact, not a single country would accept to give up their sovereignty. Although China has recently signed joint mining cooperation memorandums with the Philippines (2017) and Malaysia (2019), the implementation of these agreements will be prolonged and there is always a potential risk of collapse when economic benefits are not as expected.

to this point of view, in the SCS, there are basically disputed areas such as the Paracel archipelago, Spratly archipelago, continental shelf areas in the South and Southwest of Vietnam between Vietnam and Malaysia, Vietnam - Thailand - Malaysia, and historic waters between Vietnam and Cambodia. The goal of Vietnam is to the interests of all stakeholders and contribute to building the SCS of peace, cooperation, and sustainable development is through the process of cooperation and development in the SCS. That policy of Vietnam is consistent with the principles of international law, the Charter of the United Nations, and the stakeholders' interests.

Meanwhile, the co-development model proposed by Vietnam meets the set of criteria, especially cooperation must take place in areas with factual disputes under the EEZ and the continental shelf. Therefore, the model is supported by many countries. Currently, in addition to cooperation for development between Vietnam and Malaysia, or Malaysia and Thailand, some countries are actively researching and applying this model. In the context that the settlement of sovereignty disputes in the SCS faces many difficulties and challenges, it can be expected that the related parties show their goodwill, and promote negotiations for mutual cooperation in exploitation and development, generally, in disputed waters. However, the replication of the cooperation model under Vietnam's initiative still faces many obstacles because the views of countries on joint exploitation are still different, and strategic confidence between countries is still low and deterrence by China. In addition, the application of this model is only possible in cases the related parties show their willingness to negotiate a specific disputed area, the subject to be jointly exploited, and the extraction mechanism. Although the implementation of Vietnam's model of cooperation for development is not always easy (Tran Nam Tien, 2014), in recent years, the implementation of the model has been carried out quite smoothly because it meets the criteria for identifying the real disputed area and is supported by many countries.

Besides, Vietnam needs to continue promoting the implementation of the model of cooperation for development in expanding cooperation for exploitation and development first, and at the same time negotiating and settling disputes of the overlapping areas with other countries based on suitability and respect for the interests of all parties, and in compliance with the principles of UNCLOS and DOC. If implementing that move well, Vietnam will receive the support of the international and regional community, thereby contributing to building the SCS into a sea of peace, cooperation and sustainable development. According to the regulations of UNCLOS, Vietnam can consider a temporary practical solution of joint exploitation in the overlapping area with Indonesia and the Philippines. However, it is necessary to carefully consider and comprehensively forecast the parties' response when conducting joint exploitation of marine resources in sensitive areas. Besides, in international cooperation on oil and gas exploitation, it is necessary to select potential partners, focus on international cooperation mechanisms. The implementation of exploration

and exploitation projects should focus on sovereignty and long-term interests over short-term and immediate economic interests.

Due to the geographical and historical conditions and the process of regional and world integration, Vietnam's security and defense issues are increasingly closely linked with neighboring countries. The rapid developments of non-traditional security issues in Southeast Asia have forced countries to erase the distinction between domestic and regional issues. No country, including Vietnam, can continue to assert that non-traditional security issues within its borders can be resolved unilaterally through the state's response. The range of fluctuations, the extent of the effects, and the impacts of these issues crossed national boundaries; thus, responses at the national level are insufficient. In other words, the transnational character of non-traditional security requests either responses at the national level or closer regional cooperation. Vietnam has actively cooperated with neighboring countries and regional institutions in responding to security challenges, especially climate change (Communist Party of Vietnam 2011, pp. 237).

Vietnam has also made great efforts to promote cooperation with other countries in the region in setting up legal frameworks, building a special cooperation mechanism with a particular focus on strengthening cooperation with ASEAN countries. Vietnam submitted appropriate plans and mechanisms such as participation in the ASEAN Anti-Drug Cooperation Strategy, signing the ASEAN Declaration on Counterterrorism Cooperation. Vietnam highly appreciates and actively participates in the ASEAN Defence Ministers Meeting (ADMM) and other defence industry conferences and supports initiatives to enhance ASEAN military cooperation to tackle security issues for mutual interests. In that spirit, the Ministry of National Defence of Vietnam has actively participated in multilateral cooperation mechanisms with ASEAN countries, such as attending ASEAN defence conferences at all levels, exchanging experiences on national defence, fighting against transnational crime, anti-terrorism, and humanitarian activities in disaster prevention. (Ministry of National Defence 2009, pp. 29).

Not only does Vietnam cooperate with Southeast Asian countries but dialogue partners. Vietnam and ASEAN have developed collaborative programs and plans in the field of non-traditional security, including cooperation capabilities. In other words, cooperation in non-traditional security areas is a new direction that ASEAN countries and Vietnam have implemented effectively with dialogue partners, significant partners such as China, Japan, South Korea, the United States, and the European Union. These cooperative efforts can be named here, for example, ASEAN-US Joint Statement on Counterterrorism Cooperation; ASEAN-EU Joint Statement on Counterterrorism Cooperation; Bali Declaration on building the ASEAN Community; ASEAN Regional Forum. Among those cooperation mechanisms, the ASEAN Regional Forum is the most important formal security dialogue mechanism with the participation of many dialogue partners. In addition to the ASEAN Regional Forum, the cooperation mechanism between

the 10 ASEAN member countries and the three Northeast Asian powers, including Japan, Korea, and China, also known as ASEAN +3, is becoming an increasingly mainstream channel for cooperation, particularly in the field of economics and security.

Marine investigation and research on marine resources and the environment should be carried out regularly to verify Vietnam's sovereignty over areas where Vietnam has sovereignty and jurisdiction under UNCLOS. Vietnam needs to develop marine economy sustainably, form marine eco-culture, proactively adapt to climate change, sea-level rise, and prevent low tide, pollution, degradation of the marine environment, erosion of the coast and sea erosion, restoration, and conservation of important marine ecosystems (Nguyen Chu Hoi, 2018). Besides, Vietnam must develop strategies and socio-economic development plans combining with a marine investigation, prevention of natural disasters, and sea environmental pollution. Vietnam's attention should be paid to international cooperation on marine resources and environmental investigation and research. Particularly, on the issue of fishing, it is necessary to negotiate with the concerned countries about the traditional fishing area in the SCS based on international law and the conclusions of the Permanent Court of Arbitration. This will be an essential foundation for establishing regional cooperation mechanisms to control fishing in the disputed field and prevent the degradation of marine resources.

5. Conclusion

In sum, the non-traditional security complex in the SCS covers two categories. First, the issues must be maritime security, freedom of navigation, and marine crimes. As the lifeline sea route connecting the Pacific and Indian oceans, the SCS plays an important role in the global maritime map. Thus, any emerging nation's control of the sea route will be a threat to maritime security and not be consistent with the interests of freedom of navigation for all the countries or the region as a whole because SCS is a sea area with a very high traffic density because it concentrates on many important international maritime traffic routes. That is one reason for the development of many types of crimes operating in the SCS, such as piracy and armed robbery. Second, there is a group of issues that are directly related to the human exploitation of nature in order to find resources that serve different human and social purposes. It can be said that, in terms of the immediate intensity of impact on nature, those activities are just inferior to the war. However, unlike armed conflicts or wars, natural exploitation takes place regularly, continuously, and in perpetuity. Therefore, the scope of action of natural extraction and the duration of exploitation are respectively stronger and longer than those of wars. It is undeniable that the destructive intensity of nature and habitat increases with human exploitation and economic development.

In fact, the situation in the SCS is always subject to tension or local conflict and recent years have continuously witnessed an escalation in sovereignty claims as well as tense actions in the disputed waters. Meanwhile, there is a lack of regional security

cooperation mechanisms that are strong enough to effectively handle those issues in accordance with the fundamental principles of international law, especially aiming to resolve disputes peacefully. The main factor making the situation more complicated is China with its territorial and resource ambitions. Due to its interpretation of international law and field actions, China tends to increase imposition of restrictions on freedom of navigation and overflight in most areas of the SCS. In its strategy of becoming a global power, the SCS is certainly not China's ultimate goal. Vietnam is not the only target that China wants to dominate or maintain influence. China's goal is global reach, in which Vietnam and the SCS are only important gateways for China to take steps passing on the path they want to take. If China cannot pass through Vietnam, it is difficult for China to control and monopolize the SCS. China will find every way and at any cost dominate the SCS according to the intention of the ninedash line, to completely master the sea routes to the world. The SCS is the lifeblood of oil transportation, the only way China can reach out to control the ocean. The SCS is a strategic path, a core area of interest, ensuring national safety and security as well as China's economic growth and military position.

For Vietnam, the country should be aware of heightening its relationship with the US. China's aggression in the South China Sea is one of the main factors for Vietnam to seek to tighten relations with the US, especially in defense security to balance China in the SCS. Overall, while there are certain differences, especially in political freedoms and human rights, the strategic interests of the United States and Vietnam are increasingly aligned. A better Vietnam-US relationship is beneficiary to the SCS as well as Southeast Asia' regional cooperation. Besides, Vietnam always emphasizes that peace, stability, cooperation and development in the South China Sea are the common aspirations and goals of the countries surrounding the SCS. Exploiting natural resources for economic growth has led to great achievements. However, because of not paying attention to the consequences, or by pursuing immediate benefits, the mankind has made the earth as a whole and the SCS in particular become gradually exhausted. The risk of crises, large-scale ecological disasters are appearing in the immediate future. Thus, multilateral cooperation in every aspects of non-traditional security issues in the SCS must be pushed forward.

Acknowledgements

*"This research is funded by Vietnam National Foundation for Science and Technology Development (NAFOSTED) under grant number 506.01-2019.03"

References

In Vietnamese

BBC (2020), Viet Nam va My ky 7 thoa thuan hop tac tri gia hang ti dola [Vietnam and the US

- signed 7 cooperation agreements worth billions of dollars], available at https://www.bbc.com/vietnamese/business-54655446, (accessed 18 April 2021).
- Bo Quoc phong [Ministry of Defence] (2004), Quoc phong Viet Nam nhung nam dau the ky XXI (Sach trang Quoc phong Viet Nam 2004), [Vietnam's National Defence in the Early Years of the 21st Century (Vietnam's White Book of National Defence 2004)], Hanoi: Bo Quoc phong.
- Bo Quoc phong [Ministry of Defence] (2009), Quoc phong Viet Nam (Sach trang Quoc phong Viet Nam 2009 [Vietnam's National Defence (Vietnam's White Book of National Defence 2009)], Hanoi: Bo Quoc phong.
- Bo Quoc phong [Ministry of Defence] (2019), Quoc phong Viet Nam 2019 (Sach trang Quoc phong Viet Nam 2019 [Vietnam's National Defence 2019 (Vietnam's White Book of National Defence 2019)], Hanoi: Bo Quoc phong.
- Cuong, Le Van (2008), "Tac dong cua nhan to an ninh phi truyen thong doi voi van hoa va con nguoi o mot so nuoc Dong A" [Impacts of Non-traditional Security on Culture and Human of East Asian nations', *Tap chi Thong tin Khoa hoc xa hoi*, No. 9.
- Dang Cong san Viet Nam [Communist Party of Vietnam] (2011), Van kien Dai hoi dai bieu toan quoc lan thu XI [Document of the 11th National Congress], Hanoi: Chinh tri Quoc gia Publishing House.
- Dang Cong san Viet Nam [Communist Party of Vietnam] (2016), Van kien dai hoi Dang toan quoc lan thu XII, [Document of the 12th National Congress], Hanoi: Chinh tri Quoc gia Publishing House.
- Dang Cong san Viet Nam [Communist Party of Vietnam] (2021), *Chien luoc phat trien kinh te xa hoi 10 nam 2021-2030*, [Strategy for socio-economic development in the decade 2021-2030], available at https://tulieuvankien.dangcongsan.vn/ban-chap-hanh-trung-uong-dang/dai-hoi-dang/lan-thu-xiii/chien-luoc-phat-trien-kinh-te-xa-hoi-10-nam-2021-2030-3671, (accessed 20 March 2021).
- Duong, Luan Thuy et al (2010), "Cac thach thuc an ninh phi truyen thong o khu vuc Dong Nam A" [Non-traditional security challenges in Southeast Asia], in Minh, Pham Binh (2010), Cuc dien the gioi den 2020 [World Affairs by 2020], Hanoi: Chinh tri Quoc gia Publishing House.
- Ha, Tran Thi (2017), "Mot so thach thuc an ninh phi truyen thong o Dong Nam A hien nay" [Some non-traditional security challenges in Southeast Asia today'], *Tap chi Nghien cuu Dong Nam A*, Vol. 212, No. 11.
- Hoang, Dam Huy (2018), "Hop tac cua ASEAN ve chong o nhiem moi truong o bien Dong tu nam 2003 den nay" [ASEAN cooperation on combating environmental pollution in the SCS since 2003], *Tap chi Nghien cuu Dong Nam A*, Vol. 222, No. 9.
- Hoang Viet (2010), "Giai phap nao cho tranh chap bien Dong?" [What are the solutions for SCS dispute?], *Tap chi Thoi dai moi*, No. 19, available at http://www.tapchithoidai.org/ThoiDai19/201019 HoangViet.htm> ((accessed 15 April 2020)
- Hoi, Nguyen Chu (2018), "Phat trien kinh te bien xan de giau tu bien", [Developing blue sea economy to get rich from the sea], *VOV News*, available at https://vov.vn/kinh-te/phat-trien-kinh-te-bien-xanh-de-giau-tu-bien-822093.vov (accessed 31 March 2020)
- Khiem, Pham Gia (2010), "Doi ngoai Viet Nam nam 2009: Vuot qua thach thuc, vung buoc vao nam 2010" [Vietnam's foreign affairs in 2009: Overcoming challenges and heading toward

- 2010], Tap chi Cong san, No. 807, pp. 7-13.
- Tien, Tran Nam (2014), "Hop tac giai quyet xung dot bien Dong hien nay Mot so goi y tu goc nhin cua Viet Nam" [Cooperation for conflict settlement in the SCS Suggestions from Vietnam' viewpoint], *Tap chi Phat trien Khoa hoc va Cong nghe*, Vol. 17, No. X1, pp. 59-77.
- Vinh, Vo Xuan (2018), "Nan cuop bien o Dong Nam A tu khi chien tranh lanh ket thuc den nay" [Piracy in Southeast Asia since the end of Cold War], *Tap chi Nghien cuu Dong Nam A*, Vol. 219, No. 6.

In English

- Acharya, Amitav et al (2006), *Studying Non-Traditional Security in Asia: Trends and Issues*, Singapore: Marshall Cavendish.
- An, Baijie (2016), "Fifth lighthouse to shine on South China Sea", China *Daily*, available at https://www.chinadaily.com.cn/china/2016-07/11/content_26033622.htm, (accessed 28 September 2020).
- ASEAN (2005), Chairman's Statement of the Twelfth Meeting of the ASEAN Regional Forum (ARF) Vientiane, available at https://asean.org/chairman-s-statement-of-the-twelfth-meeting-of-the-asean-regional-forum-arf-vientiane/, (accessed 15 November 2020)
- Bateman, Sam (2005), "Maritime 'Regime' Building", in Joshua Ho et al, *The Best of Times, The Worst of Times Maritime Security in the Asia-Pacific*, Singapore: World Scientific Publishing Co. Pte. Ltd.
- Boutilier, James (2005), "The Best of Times, the Worst of Times: The Global Maritime Outlook 2004", in Joshua Ho et al, *The Best of Times, The Worst of Times Maritime Security in the Asia-Pacific*, Singapore: World Scientific Publishing Co. Pte. Ltd.
- Caballero-Anthony, Mely (2010), "Non-Traditional Security Challenges, Regional Governance, and the ASEAN Political-Security Community (APSC)", *Asia Security Initiative Policy Series*, Working Paper No. 7, Singapore: Centre for Non-Traditional Security Studies, Rajaratnam School of International Studies.
- Chase, Michael S., Ben Purser (2015), "China's Airfield Construction at the Fierce Cross Reef in Context: Catch-up or Coercion?", *Asia Maritime Transparency Initiative*, available at < https://amti.csis.org/chinas-airfield-construction-at-fiery-cross-reef-in-context-catch-up-orcoercion/>, (accessed 14 June 2020)
- Cheung, William W. L., U. Rashid Sumaila (2015), Boom or Bust: The Future of Fish in the South China Sea, Ocean Recovery Alliance, available at https://www.oceanrecov.org/news/ocean-recovery-alliance-news/boom-or-bust-the-future-of-fish-in-the-south-china-sea.html (accessed 28 March 2020).
- Herbert-Burn, Rupert et al (2009), *Lloyd's MIU Handbook of Maritime Security*, London: CRC Press.
- Holland, Steve., Nguyen, Mai (2017), "Trump offers to mediate on South China Sea", *Reuters*, available at https://www.reuters.com/article/us-trump-asia-vietnam-idUSKBN1DC04H (accessed 10 October 2020).
- Hughes, Terry P. et al (2013), "The Wicked Problem of China's Disappearing Coral Reefs", *Conversation Biology*, Vol 27, No. 2, pp. 261-269.
- Klare, Michael T., Yogesh Chandrani (1998), World Security: Challenges for a New Century, New York: St. Martine's Press.

- Lillehaugen, M. (2018), *The 'Free and Open' Indo-Pacific: A Call for European Partnership*, Carnegie Endowment for International Peace, available at https://carnegieendowment.org/2018/06/22/free-and-open-indo-pacific-call-for-european-partnership-pub-76673 (access 20 March 2020).
- Ministry of Foreign Affairs of the PRC (2015), Foreign Ministry Spokesperson Hong Lei's Regular Press Conference on April 28, 2015, available at https://www.fmprc.gov.cn/mfa eng/xwfw 665399/s2510 665401/t1258874.shtml> (access 20 May 2020).
- Ministry of Foreign Affairs of the PRC (2015), Foreign Ministry Spokesperson Lu Kang's Remarks on Issues Relating to China's Construction Activities on the Nansha Islands and Reefs, 2015, available at https://www.fmprc.gov.cn/mfa_eng/xwfw_665399/s2510-665401/t1273370.shtml (access 20 May 2020).
- Ministry of National Defense of the PRC (2016), *Defense Ministry's regular press conference on Mar.31*, available at http://eng.mod.gov.cn/TopNews/2016-03/31/content_4648198.htm (accessed 1 April 2020).
- New Zealand Government (2018), *Strategic Defence Policy Statement*, available at http://www.nzdf.mil.nz/corporate-documents/strategic-defence-policy-statement-2018.htm (accessed 3 April 2020).
- O'Neill, Daniel C (2018), Dividing ASEAN and Conquering the South China Sea: China's Financial Power Projection, Hong Kong: Hong Kong University Press.
- Panda, Ankit (2017), "How Much Trade Transits the South China Sea? Not \$5.3 Trillion a Year", *The Diplomat*, available at <How Much Trade Transits the South China Sea? Not \$5.3 Trillion a Year (accessed 17 August 2020).
- Strait Times (2018), *Australia asserts right to SCS passage*, available at https://www.straitstimes.com/asia/australianz/australia-asserts-right-to-south-china-sea-passage (accessed 3 April 2020).
- Sukma, Rizal (2010), *ASEAN and Non-traditional Security*, paper presented at the Fourth International Symposium 'Security Cooperation and Regional Integration in Asia', Waseda University, Japan, 3 December 2010.
- Terriff, Terry et al (2001), Security Studies Today, Singapore: Blackwell Publishers Ltd.
- Tickell, Oliver (2016), "China condemned for massive coral reef destruction", *The Ecologist*, available at https://theecologist.org/2016/jul/12/china-condemned-massive-coral-reef-destruction (accessed 14 June 2020).
- US Embassy and Consulate Vietnam (2019), *United States Transfer Six Patrol Boats to Vietnam Coast Guard Region III*, available at https://vn.usembassy.gov/pr20190401-united-states-transfers-six-patrol-boats-to-vietnam-coast-guard-region-iii/, (accessed 15 March 2021).
- conventional oil and gas resources, available at https://www.eia.gov/todayinenergy/detail.php?id=10651> (accessed 7 June 2020).
- Williams, Paul D and McDonald, Matt (2018), *Security Studies: An Introduction* (3st edn.), London: Routledge.
- Wu, Shicun and Zou, Keyuan (2016), Maritime Security in the South China Sea: Regional Implications and International Cooperation, New York: Routledge.
- Zhang, Hongzhou (2016), "South China Sea: The Story of the Tanmen Fishermen", *The Diplomat*, available at https://thediplomat.com/2016/01/south-china-sea-the-story-of-the-tanmen-fishermen/ (accessed 3 July 2020).

Rising Strategic Competition Between the United States and China in Mekong River Subregion

Duong Van Huy* • Tran Thi Hai Yen**

Abstract In recent years, the Mekong River Subregion has become central to the strategies of major global powers due to a series of economic and geopolitical factors. The growing importance of the Mekong Subregion in global dynamics spurred several actors to develop specific strategies. While the United States (US) created regional fora for policy discussions as well as development funds, China increased its presence by offering loans, constructing infrastructures, and creating a specific regional institution. Due to the rising strategic competition by powers, so that, Mekong River Subregion is now at the crossroads of great power competition, especially the strategic competition between the US and China in the Indo-Pacific region. The US-China strategic competition in the Mekong Subregion differs from the maritime Southeast Asia regions, especially in the South China Sea, in this region; the competition is between China, which has almost won the foothold in the region, and the United States, which is trying to find ways to increase engagement in the region to find a place for itself. This scenario would be detrimental for Mekong River Subregion countries. The countries in the Mekong River Subregion pursue the "hedging strategy" to respond to the growing competition between the US and China, to manage the regional order. In pursuing such a strategy, the countries in the region look to other external powers such as Japan, India, South Korea, Australia, Russia, and the European Union (EU) not only for the pursuit of security cooperation but also for deeper economic involvement. However, the "hedging strategy" through economic cohesion gives the impression that the smaller powers in Southeast Asia are actively chasing the larger powers for funding and privileges.

The effectiveness of such a cohesive strategy largely depends on how larger powers allow things to happen. Given that situation, this article seeks to explain and analyze the rising strategic competition between the US and China in Mekong River Subregion and how the Mekong Revier Subregion countries respond to this situation in detail.

Keywords: China, the United States, China-US relations, Mekong River Subregion, Strategic competition

Duong Van Huy*(⋈), Tran Thi Hai Yen**

E-mail: huyiseas@gmail.com

^{*}Associate Professor, PhD, Research Fellow at Institute for Southeast Asian Studies, Vietnam Academy of Social Sciences, Vietnam.

^{**} PhD, Research Fellow at Institute of Chinese Studies, Vietnam Academy of Social Sciences, Vietnam. E-mail: haiyenbn1987@gmail.com

Introduction

Mekong River is about 4,350 km long, flows through 6 countries, including Vietnam, Cambodia, Laos, Myanmar, Thailand, and China. Its upstream area in Chinese territory is called Lancang River by this country. This is considered one of the lifeblood of Southeast Asia; this region is home to nearly 242.8 million people (in 2018) and is the source of life for about 65 million people living in the downstream area. Its natural resources really attract huge economies, including China, the US, and Japan, South Korea, India, etc. In addition, the need to take advantage of the competitive advantage of human resources and the need to expand markets of major countries' areas that are also met by the inherent conditions of the Mekong Subregion further boost their presence in this region. The countries of the Mekong Subregion also welcome the presence of many major countries with interests in taking advantage of other competitive advantages in capital, advanced science and technology, and management experience.

Besides the South China Sea, the Mekong region has now become a strategic point for strategic competition between the US and China. In recent years, the Mekong Subregion has seen the re-engagement of foreign powers, especially the US, Japan and South Korea. The China factor remains to be the main reason for this re-engagement. The re-engagement is characterized by creating a new impetus for existing narrow multilateral cooperation mechanisms, namely the US's Lower Mekong Initiative (LMI), the Mekong - Japan Cooperation and the Mekong - South Korea Cooperation. These cooperation mechanisms place emphasis on economic improvements and human development indices in this Subregion. Each major power not only has its own policy towards the Mekong Subregion, but also links their respective policies together and collaborates through projects. These re-engagements will diversify financial and technical support for the Mekong Subregion in the context of China's increasing economic and political influence. It also enhances the subregion's position in the foreign policy of regional powers. The re-engagement of major countries, especially the US in the Mekong Subregion in the context of China's increasing influence in this region, signals fierce competition for power in Southeast Asia. Despite the mediumterm benefits, the region will face challenges in its equivocation defense strategy.

The increase in strategic competition between China and the US in the Mekong region has now become the concern of countries in the region. In geostrategic terms, the Subregion also has a special geographical location, connecting with major Asian markets and dynamic economies such as China, India, as well as ASEAN countries. With their strategically important trading positions, the countries of the Mekong Subregion were once the places where major powers established their institutions and outposts in the past. In the current period, the Mekong Subregion becomes the place where Japan and China compete for increasing influence in the region. It is also a "buffer zone" for China to develop its influence over the wider parts of Asia - the Pacific and the Indian Ocean, where it wields its rise to the international community.

This is the buffer zone for the US to implement Asia policy, exercise restraint on China. The US's LMI and China's Mekong Subregion Countries Summit have overlapping components. On the other hand, the Mekong Subregion is also a potential area for development and competition in international economics. (Duong Van Huy, 2020: 14101-02) Currently, the Mekong Subregion is becoming a new hot point in strategic competition between the US and China. This not only creates an opportunity to expand cooperation space for countries in the Mekong Subregion, but also creates many new challenges that those countries are facing.

For the research methodology, the research design of this research follows a way of qualitative analysis with the case study as the main research methodology. Besides, the main research questions of this research are: Why is the Mekong River Subregion becoming strategic competition between the US and China? How do the US and China increase in strategic competition in this region? To answer these questions, the paper highlights the sections as follows: the first section is the introduction, the second section mainly analyzes the strategic objectives of the US and China to the Mekong Subregion. The third section of the article analyzes the ways to promote competition between the US and China in the Mekong River Subregion. The fourth section of the article assesses the response of the countries in the Mekong Subregion to the rising strategic competition between the US and China in this region. And, the last section is the conclusion and findings.

1. The Strategic Objectives of the US and China in the Mekong River Subregion

For China

The country also has ambitions to create a belt of influence of this country in the South. At the beginning of the 21st century, China wisely implemented the strategy of "Dongwen Beiqiang Xijin Nanxia" (东稳、北强、西进、南下) that would "stabilize in the east, gather strength in the north, to advance to the west and descend to the south" (*Huanqiuwang*环球网, 2012), "is the doctrine that can be seen as China's long-term strategy for transport exits beyond its borders, which Xi Jinping is actively realizing" (Minakir, P. A. and Suslov, D. V, 2017), thus creating a safe "buffer zone" around China. In which, "descend to the south" (Nanxia南下) focuses on tightening economic relations with neighboring ASEAN countries in the South, brings China's economy into integration with this market (Duong Van Huy, 2020: 14102).

Thus, the region where China can gain influence more easily is the South, which is home to a group of smaller and weaker neighbors compared to China. The Mekong region is the one that China most easily exerts its influence, and also the one that China has had relatively good relations with the countries in. China's objective of approaching the Mekong Subregion is shown in several aspects.

Firstly, promoting China's presence in its "traditional influence area." Mainland Southeast Asia, namely the Mekong Subregion bordered by China's Guangxi and

Yunnan Provinces — China's relatively low-developed region in the southwest, including the "Xibu Da Kaifa Zhanlüe" (西部大开发战略), that would "Great Western Development" (GWD) policy and the opening-up in the Southwest region of China, which is also the door to go down to Southeast Asia by road, and go into the Indian Ocean via Myanmar. In addition, the region includes mainly the countries with close trade relations with China, especially now that many countries in this region are increasingly tightening their relations with China. Therefore, for China, this area can be seen as Beijing's "traditional influence area" (Duong Van Huy, 2020: 14102), so promoting a new, more efficient cooperation mechanism will be of major role in the overall strategy of China in Southeast Asia.

Secondly, the Mekong Subregion has become a "pilot" place for China's cooperation initiatives such as "Belt and Road Initiative" (BRI) and building a "Community with shared future" (Mingyun gongtongti命运共同体) (Renminwang人民网, 2019) between China and its neighbors. Currently, China is promoting the strategy of building a "Community with shared future for mankind" in the region, so mainland Southeast Asia (countries in the Mekong Subregion) is considered a "pilot" area for China to implement the Asian Community with Shared Future strategy. China also emphasized the "cooperation in solving competition for water resources for transboundary rivers in the spirit of community with shared future for mankind of regional cooperation" to enjoy the water of the same river; the future is closely linked." Lancang-Mekong Cooperation (LMC), and more broadly BRI is an important tool to promote building a community with shared future. China also assessed that the Lancang - Mekong cooperation is a newly innovative regional cooperation model. This cooperation model aims to inderit the spirit of building an Asian community with a shared future for mankind. This mechanism will not replace the existing regional cooperation mechanism but rather new addition. This can be considered as an important cooperation mechanism in China's neighboring diplomatic strategy (Liú, Jūnshèng刘均胜, 2016).

This area is an important gateway for China to implement China's "go out" strategy and consolidate the regional infrastructure network connecting China with Southeast Asia and South Asia. China is involved in the development of the North-South Economic Corridor (NSEC) because it has a role in assisting Yunnan province and Northern Laos provinces to access important seaports. (Duong Van Huy, 2020: 14102) The corridor also connects to the existing road network from Kunming to Beijing. Currently, NSEC is almost complete, except for several transport routes between Laos and Thailand. In addition, China is also promoting the economic corridor of Kunming - Lao Cai - Hanoi - Hai Phong - Quang Ninh, the economic corridor of Bangladesh - China - India - Myanmar (although it has not yet achieved any practical results). Building China's Trans-Asia railway from Kunming to Singapore.

In addition, the promotion of the "Belt and Road Initiative" (BRI) will help China accelerate the expansion and formation of transport infrastructure in the Greater

Mekong Subregion (GMS) in the past five years and China is a driving force. The appearance of "International Hubs" linked and driven by China is not only changing "geo-economics", but also shaping visions of "geostrategy and geopolitics" in the area. Infrastructure de-bottlenecks are forming other economic and strategic bottlenecks, of which Beijing is the coordinator.

Thirdly, strengthening cooperation with the Mekong River Subregion, China wants to reduce the presence of other powers in this region, such as the US, Japan, South Korea, India, etc. In the recent period, the subregion's potential for development has attracted the attention of many investors and development partners who capture the trend of regional and international integration. Up to now, in the Mekong Subregion, many cooperation mechanisms have been formed within the Mekong countries as well as between the Mekong countries and major partners such as the US, Japan, Korea, India and the EU. Cooperation mechanisms such as the Mekong- Japan, the Mekong-Korea cooperation mechanism, the US Ganges-Mekong River Cooperation, etc. These cooperation mechanisms are strongly competing with China's cooperation with the region. Therefore, the strengthening of bilateral and multilateral cooperation mechanisms under the "Belt and Road" framework is hoped by China to create a new space for China to increase regional influence, to compete with the increasing influence of other external powers, especially the US and Japan. (Duong Van Huy, 2020: 14103) Fourthly, China aims to "contain" the Taiwan factor in Mainland Southeast Asia, especially in the context of Taiwan's implementation of the "New Southbound Policy" in the Era of Ms. Tsai Ing-wen. Although Taiwan has no formal diplomatic relations with mainland Southeast Asian countries, Taiwan's influence on this region is enormous, especially in the economic and human exchange fields. Taiwan is still an important economic partner of many mainland Southeast Asian countries, especially Vietnam and Thailand. Even Taiwan is trying to sign a free trade agreement with Thailand, especially where Thailand has set out the national development strategic target "Thailand 4.0", which can create a lot of cooperation space between Taiwan and Thailand. (ThanlandBusinessNews, 2021) As a result, Taiwan will increase its strongly increasing presence to the Southeast Asia area as well as mainland Southeast Asia by "New Southbound Policy." (*Nationthailand,* 2017; Tu Lai, 2019; Lín, Tínghuī林廷輝, 2020) This makes China feel anxious, so China's stepping up its regional strategy may also mean increasing pressure on Taiwan's economic cooperation space and calling the countries to support China's "one China" policy (Duong Van Huy, 2020: 14103).

For the US

Strategically, to contain China's increasing influence in the Mekong Subregion is the most important reason for the increased re-engagement of the US and its allies in this region. The Mekong Subregion is of paramount importance in the context of broader developments in US policy, including increasing US-China competition and the free

and open Indo-Pacific strategy of the Trump administration. Moreover, at various times in history, the Mekong has served as the point of connection or conflict between mainland Southeast Asian countries and among the major powers fighting there, including the United States during its peak period of the Vietnam War. The Mekong's importance in the US's Asia policy has only grown in recent years, with the Mekong countries' increasing their economics but grappling with governance challenges and China's growing assertiveness. Meanwhile, the Mekong itself is under threat due to a series of developmental pressure, demographics, and climate change, including the rise of hydropower dams. Today, the Mekong remains the center of the US's Asia strategy. Indeed, in the Free and Open Indo-Pacific (FOIP) strategy as outlined by the Donald Trump administration, the Mekong Subregion is where principles of freedom and openness are arguably the biggest challenge. This Subregion is also the best example of the connection between the three main FOIP pillars, including security, economics, and governance that the US officials have outlined because of existing cross-border challenges. The future of the Mekong region also looks towards the US's broader objectives, including fostering alliances and partnerships, fostering ASEAN's greater unity, increasing the US's economic engagement, and managing China's rise. (Prashanth, Parameswaran, 2019) As stated by US's Secretary of State Michael R. Pompeo in a press release dated September 14, 2020, "The inception of the Mekong-US Partnership has reflected the importance of the Mekong region towards the US. Our relationship with the Mekong region partners is an integral part of our Indo-Pacific vision, as well as our strategic partnership with ASEAN." (Vn.usembassy.gov, September 2020)

In addition, the US's increase in involvement in the region not only strengthens relations with allied nations and partners in the region but also reinforces the role and influence of its allies in the Mekong Subregion, especially Japan and Korea. The US's promotion of LMI also provides a foundation to bring Japan, South Korea and other stakeholders to collaborate on joint projects. For example, the US partners with Japan will provide \$ 29.5 million to develop power line systems in the region. LMI is funding a project with South Korea on satellite imagery to improve the assessment of floods and droughts in the Mekong basin. The US also supports a Thailand's recent initiative to utilize the Ayeyawady-Chao Phraya-Mekong Economic Cooperation Strategy (ACMECS) as a platform to coordinate projects related to agricultural development and capacity creation.

2. The Ways to Promote Competition Between the US and China in the Mekong River Subregion

2.1. The Increase in Diplomatic Disputes between the US and China over the Mekong issue

The Mekong River, with its part located in Chinese territory called Lancang River, has a length of 4,350 km, is the 12th long river in the world. Currently, the life of 60 million

people in the Mekong basin countries in Southeast Asia is estimated to depend on the health of the Mekong River. According to the Mekong River Commission (MRC), hydroelectric dams can cause water flow in the downstream area of the Mekong River turn from mobile water to dead water, preventing fish from moving and causing a decrease in fish species from 26% to 42%. Hydropower dams will make agricultural land of downstream countries lose their fertility due to the absence of sediment and even turn into barren land (*Mrcmekong*, 2010).

The Mekong River is becoming a geopolitical issue between China and the US, very similar to the South China Sea issue and cause of the dryness of the Mekong River leads to the China-US war of words. In 2019, the highest drought in the downstream area of the Mekong River in the past decade was recorded. In recent years, the people of the area share that the number of aquatic products caught has been less and less and of smaller and smaller size. A US Ambassador described that China's storing water in 11 dams on the Mekong River part that flows through the country has affected the lives of millions of people in the countries located in the downstream area of the river. The river's upstream area reaches 4,350 km (2,700 miles) long, damaging the livelihoods of millions of people in downstream countries. Meanwhile, the China Foreign Ministry responded to Reuters that the US's charges were unfounded. The ministry emphasized: "Countries outside the region should refrain from causing trouble." China Foreign Ministry told Reuters that any suggestion by the United States that Beijing is trying to take over the Mekong conversation was groundless (Johnson, Kay and Panu, Wongcha-um, 2020). The US Ambassador in Thailand has criticized China for blocking water resources, while the China Ambassador in Thailand has rejected the US Ambassador's statement and said that this opinion is intended to cause disagreement between relevant countries. China emphasized, "ignoring the joint efforts made by China, Thailand and other relevant parties to promote Mekong water resources cooperation for the benefit of the people in the region, these groundless accusations mislead the readers, and undermine the good atmosphere of sub-regional cooperation." (Chinaembassy.or.th, 2021)

The research category supported by the US's LMI is also notable. In April 2020, the Water Resources Monitoring Organization released a research report, which suspects that China keeps a large amount of water resources, indirectly causing drought in the countries in the downstream area of the Mekong river. This information went viral. Immediately, China, through the Embassy in Thailand, issued a rebuttal, stating that countries along the Mekong River experiencing drought is due to climate change, and China's hydroelectric dam has the function of regulating the amount of water flowing downstream of the Mekong River, assisting relevant countries to deal with drought. In addition, since 2002, China informed the countries in the downstream area of the Mekong river every time they flooded but was criticized for giving too little information. In February 2020, at the Foreign Ministers Meeting of the Mekong River Cooperation, China committed to expanding hydrological information sharing.

However, according to Reuters news agency, officials in the Mekong River basin implicitly expressed some doubts. Sebastian Strangio-author of "In the Dragon's Shadow,"-states that the countries in the downstream area of Mekong rivers basically do not trust China, but due to dependence on China for living resources, it is difficult to challenge Beijing's hydroelectric dams. (Johnson, Kay and Panu, Wongcha-um, 2020) In addition, the US and China recently turned to the scientific aspect when the two governments released a separate report on China's 11 dams impacting downstream countries. China's dam construction in the upstream area has affected the flow of the Mekong River in the downstream countries such as Laos, Myanmar, Thailand, Cambodia, and Vietnam - countries with the Mekong river's important role in agriculture and aquatic products. The US has for decades promoted projects on the Mekong River to exert more influence on the region. Mr. Witoon Permpongsacharoen at the Mekong Ecology and Energy Network commented: "This has become a geopolitical issue like the South China Sea, between America and China" (*Straitstimes*, 2020).

The war of words between Beijing and Washington erupted after research by a Washington-backed US-based company named Eyes on Earth in April concluded that China's dams stored much water during the drought in 2019. Also, according to Eyes on Earth's research, based on satellite images and MRC data, they show that the water "is lost" in the downstream area, starting from about 2010. US Ambassador in Cambodia Patrick Murphy said he was "quite amazed" by the staggering findings. Mr. Murphy said, "the main source of the river level's decline and the changes in the downstream area of the Mekong river is what is happening in the upstream Chinabasically is storing water." China reacted outrageously with its embassy in Thailand, accusing the study of "politically motivated, aimed at China with malicious intent." In July 2020, Global Times (Huanqiu) published an article that disproved the report of the Eyes on Earth (Johnson, Kay and Panu, Wongcha-um, 2020).

Besides, in a press statement dated September 14, 2020, US Secretary of State Michael R. Pompeo said: "The unilateral decisions of the Chinese Communist Party to keep the upstream water have exacerbated add historical drought. The United States will stand side by side with the region and the Mekong River Commission in calling for transparent data sharing. We encourage countries in the Mekong region to request the Chinese Communist Party to be responsible for a commitment to share its water data. Data must always be made public. Data must be disclosed throughout the year and include water and water-related data, as well as land use, construction, and operation of dams. Data should be shared through the Mekong River Commission, which serves the interests of the countries of the Mekong region instead of Beijing." (*Vn.usembassy. gov*, September 2020) At the same time, Mr. Pompeo also criticized the economic and security risks that China may pose to countries in the region: "We are also concerned about debts related to infrastructure and take advantage of shady business activities of Beijing's state-owned enterprises, such as China Media Construction Company. We

are also concerned about the explosion of human, narcotics, and wildlife trafficking, largely stemming from organizations, companies, and special economic zones linked to the Chinese Communist Party." (*Vn.usembassy.gov*, September 2020)

2.2. The US and China promotes the building of multilateral mechanisms led by themselves in the Mekong River Subregion

In recent years the Mekong River Subregion has drawn the attention of great powers (such as China, Japan, the US, and the European Union (EU), as well as medium powers (such as South Korea, India and Australia). Significantly, the Mekong River Subregion has become a new front in US-China rivalry. China and the US have rival bodies working with Mekong countries: The Beijing-based Lancang-Mekong Cooperation (LMC) and the Washington-based Mekong-US Partnership (Johnson, Kay, and Tostevin, Matthew, 2020).

For the US

Washington promotes the Mekong Subregion regional mechanism, which promotes the MRC and the LMI. The MRC stems from the US's efforts to promote development during the Cold War. This commission has worked with the governments of Laos, Thailand, Cambodia and Vietnam to promote sharing and sustainable development of the river and its resources.

The US promoted relations with the Mekong River Subregion by proposing the LMI in 2009 and has been unanimously agreed upon by countries in the lower region of the Mekong River, including Cambodia, Laos, Thailand and Vietnam. The LMI is a program to promote cooperation in this Mekong Subregion further. The cooperation program covers six main areas: Agriculture and Food Security, Connectivity, Education, Energy Security, Environment and Water, and Health, Gender, and Other Issues and Overlays. LMI is created as a forum for partners participating in LMI to work together to develop common solutions to the most urgent cross-border development challenges. The Lower Mekong Subregion countries share a wide range of interests, including issues such as transboundary water resources management, infectious diseases such as dengue fever, and pandemic flu, and vulnerability due to climate change. The objective of LMI is to assist in building a common regional understanding of these issues and promote effective solutions with coordination among countries (*Usaid*, 2019).

From the time LMI was born in 2009, the United States also emphasized that the nucleus of the current US-Southeast Asian relationship is the newly established LMI-intending to call for efforts from all parties to improve the quality of education, environment, health, and infrastructure in the region. The policy also clearly has a geopolitical objective to balance external influence over the ASEAN region, where China's influence has grown steadily over the past decade. In spite of being a fast-growing region, Mekong is also facing many difficult decisions, especially issues

related to energy security and water security. Hydropower is the focus of recent proposals, but the trend of using hydropower in the region is minimal or pays no attention to adverse environmental and socio-economic impacts. The US can provide technology and assist in identifying and promoting regional solutions to address energy, food, and security needs. LMI strengthens information sharing between US agencies operating in the basin and regional governments and provides new equipment to improve information quality and support decision-makers.

Cooperation between the US and Mekong region has also achieved some cooperation results. Over the past ten years, US's agencies have provided more than \$ 3.5 billion in assistance to countries in the Mekong region. Direct investment from the US in the region hit \$ 17 billion in 2017, increasing compared to \$ 10 billion in the previous decade. Two-way trade reached \$ 109 billion in 2018. Since 1999, US's exports to the Mekong countries have created more than 1.4 million jobs in the US in industries such as electronics, agricultural products, and machines. More than 33,000 students in the region were enrolled in US colleges and universities in 2018 alone. More than 72,000 young people in the region have been members of the US-initiated Young Southeast Asian Leaders Initiative (YSEALI) since the Initiative's official launch in Manila in December 2013 (State.gov, 2019).

Projects under the LMI framework have brought significant improvements to people's lives in the Mekong region, in particular. (*Vn.usembassy.gov*, 2019) At the same time, the United States has also strengthened the region's capacity to respond to and recover in emergencies through Pacific Disaster Response Maneuvers and Exchange organized by the Army Corps of American (*State.gov*, 2019).

Under the administration of President Donald Trump, despite foreign policy adjustments, with the lower Mekong region, the Donald Trump administration continued to actively participate in this region through the LMI with two outstanding activities. Firstly, the Mekong Water Data Initiative (MWDI) proposal at the 10th LMI Foreign *Ministerial* Meeting (August 2017). Secondly, the active participation of US Secretary of State Michael Pompeo at the 11th (August 2018) and 12th (August 2019) LMI Foreign *Ministerial* Meeting proves the interest of the Donald Trump administration to LMI.

Besides, the US also affirmed that the Mekong region is currently facing new challenges, including dependence on loans; the massive construction of hydroelectric dams to focus on flow control downstream; river-bed dredging and expansion plans; border patrols on the river; and pressure of some parties in introducing new rules to govern the river in a way that undermines the role of existing institutions. The US commits to coordinate with countries in the Mekong region to cope with these new challenges. At the same time, the US is also coordinating its efforts with the "Lower Mekong Friends" Group to strengthen coordination between donors and the Asian Development Bank (ADB), Australia, EU, Japan, New Zealand, South Korea, and World Bank (WB). Together with

countries in the LMI, the United States cooperates to implement programs based on shared values, principles, and visions for this region (*State.gov*, 2019).

On August 1, 2019, the 12th LMI *Ministerial* Meeting (LMI-12) took place while the 52nd ASEAN *Ministerial* Meeting (AMM-52) was taking place, in which the US and the small countries in the Mekong Subregion emphasized the implementation of the Mekong Water Data Initiative (MWDI) and puts the "Mekong Water" data page intending to support strengthening the role of MRC, promoting push data sharing for disaster forecasting and policy-making support. The Ministers also welcomed the US's initiative on the LMI Joint Impact Program to align LMI's projects with the actual needs of each locality. At the same time, the parties also agreed to continue supporting the activities of the Mekong River Commission; enhancing information sharing and coordination between LMI and the activities of the Friends of the Lower Mekong (FLM) working group; and supporting the development of the Ayeyarwady-Chao Phraya-Mekong Economic Cooperation Strategy (ACMECS) and other cooperation mechanisms among the Mekong countries. On the other hand, the US also pledged to join Japan to establish "Japan-US Mekong Power Partner" (JUMPP) to support Mekong countries in sustainably ensuring energy security.

On the other hand, in the first Mekong - US Partnership *Ministerial* Meeting that took place online on September 11, 2020, the Meeting officially announced the upgrade of cooperation to the Mekong - US Partnership (MUSP) based on the successes of the Lower Mekong Initiative (LMI) mechanism established in 2009, laying the foundation for promoting the potential of the partnership, effectively contributing to the sustainable and prosperous development of the region in a new period. At the Meeting, the US Department of State announced that the US would spend nearly \$ 153.6 million on cooperation projects in the Mekong region, of which \$ 55 million on cross-border crime prevention projects, \$ 1.8 million on supporting the Mekong River Commission to increase water resource data sharing for policy-making, and several disaster management projects, organized a multilateral policy dialogue on developing Mekong region (*Baoquocte*, 2020).

In addition, the US funded a project of using satellites to monitor and publish water levels at China's dams in the Mekong River. The Mekong Dam Monitoring Project, partly funded by the US State Department, uses data from trans-cloud satellites to monitor the water level of dams in China and other countries. A separate "surface humidity" indicator of the project will somewhat indicate the cooler or drier level than usual level, which shows how dams affect the natural flow.

For China

Beijing accelerates the construction of the Mekong-Lancang Cooperation (MLC) mechanism and accelerates implementing the Belt and Road Initiative (BRI). China promotes the use of the Lancang-Mekong initiative as a multilateral mechanism

to promote regional cooperation. Deepening the practical cooperation and friendly neighbor relationship of the six countries of the Lancang-Mekong, promoting the socio-economic development of the Lancang-Mekong countries, creating a river basin economic development region, together, building a community with the shared future of the Lancang - Mekong countries. Enhancing the well-being of people of all countries, supporting the building of the ASEAN Community (AC) and regional integration process, and contributing to promoting of the South-South cooperation program and implementing 2030 Agenda of UN on sustainable development. Member countries: China, Myanmar, Laos, Thailand, Cambodia, and Vietnam. Main mechanisms: Summit, Foreign Ministers Meeting, Senior Officials Conference, Diplomacy, and Joint Working Groups for priority fields.

One noteworthy point is in the Vientiane Declaration of the 3rd LMC Summit, held on August 24, 2020, in the online form, with the participation of senior leaders of 6 member countries (include China, Cambodia, Myanmar, Laos, Thailand and Vietnam) the issue of strengthening political and security cooperation was brought to the top position. (*Xinhuawang* 新华网, 2020) This shows that, China is worried about major country strategic competition in the region, especially the increasing engagement of the US and its allies in the region, in the South China Sea and the Mekong region as well, which intensifies the pressure on Beijing.

China promotes investment, aid and trade activities in the Mekong Subregion. In particular, the economic factor is considered as a "gift" for China to use in exchange for the political support of the countries in the region. China has actively built a network of economic links relatively closely with this region. Infrastructure is an important means of supporting effective trade, investment and cooperation in other fields between countries and regions. Realizing this, since the early years of the 21st century, after the comprehensive increase in synergy, China has accelerated its infrastructure connection with the GMS countries, in order to realize the strategy of connecting comprehensively with the region (Duong Van Huy, 2020: 14104).

The China government has urgently promoted road connectivity and infrastructure construction on the North-South Economic Corridor. The North-South corridor system has been put into operation, connecting traffic between China and GMS countries. The West route of the North-South corridor (Kunming-Laos-Bangkok highway) was officially opened in 2008. The Chinese government and the Thai government have provided half of the funding to build the third-largest bridge crossing the Mekong River connecting the border between Thailand and Laos; the project was officially started in February 2010 and completed at the end of 2012. The mid-route of North-South Economic Corridor (Kunming-Hanoi-Hai Phong). Roads on the South route of North-South Economic Corridor (Kunming-Dali-Shuili-Myanmar) with a total length of 820 km, September 2010 up to now, the two countries China and Myanmar, have established the Joint Work Group to initiate the master planning for this route.

In connecting the railway, China actively participates in Trans-Asia railway cooperation. The plan to build three railway routes including East, Mid and West railway routes in the master plan of Trans-Asia railway, particularly the sector located in Chinese territory, has been included in the "Mid-to-Long-Term Railway Network Plan" (Zhongchangqi Tieluwang Guihua中长期铁路网规划) by China's government and is being urgently deployed by this country. Thus, an international traffic network with the focal point is Kunming-China has spreaded and will spread across Southeast Asian countries, from the road system in the North-South Economic Corridor project connecting China with Vietnam, Cambodia, Thailand, to the trans-Asia railway stretching from Kunming to Singapore.

Besides, China is also actively promoting connection in terms of national development strategy. China promotes strategic connections for development with mainland Southeast Asian countries. For Myanmar, China increased the connection of the BRI with Myanmar's national development plans, including the two parties' promoting the construction of the China - Myanmar Economic Corridor, considering this as an essential part of the two countries in promoting the construction of BRI. In May 2017, China and Myanmar also signed a BRI cooperation agreement. In August 2017, the two parties also established the Belt and Road Initiative Development Association. For Thailand, Thailand associates a national development strategy, such as the "Thailand 4.0" vision, with China's BRI. In 2016, Thailand officially launched a new value-added economic model that is the "Thailand 4.0" economic strategy. Thailand and China connected the "Thailand 4.0" strategy to BRI. In the "Thailand 4.0" strategy, the connection of Thailand's East Economic Corridor and BRI of China is the central task of connecting development policy. Thailand has proposed such an East Economic Corridor development strategy in order to utilize and develop economic connectivity with China through the BRI.

For Vietnam, China and Vietnam have also committed to connecting the One Belt One Road Initiative with "Two Corridors, One Belt." It is known that the framework of "Two Corridors, One Belt" is the idea to build an economic development area between Vietnam and China jointly. The "Two Corridors" here are Guangxi-Quang Ninh-Hai Phong and Yunnan-Lao Cai-Hanoi-Hai Phong. And "One Belt" includes several border provinces in southern China and some northern provinces of Vietnam, extending as far as Quang Binh province. Infrastructure connectivity between Vietnam and China has been strongly promoted. Currently, the deployment of infrastructure connection between Vietnam and China has also achieved certain development steps, especially the connection between the two parties through "Two Corridors, One Belt". At the same time, China's contractors are flooding into Vietnam for bidding for infrastructure projects such as road traffic and electricity (Duong Van Huy, 2020: 14105).

In recent years, China has strengthened digital economic cooperation with ASEAN countries, especially with the Mekong Subregion countries, including cooperation

on digital infrastructure construction included in China's "Digital Silk Road" (数字 丝绸之路Shuzi sichou zhilu, also known as the 信息丝绸之路 xinxi sichou zhilu, "Information Silk Road"), such as 5G technology cooperation, Artificial Intelligence (AI), smart city network building cooperation. In the Joint Declaration of the 3rd Lancang - Mekong Cooperation Summit, this was emphasized: "Strengthening cooperation in new growth points such as digital economics, artificial intelligence, promoting socio-economic recovery of Lancang - Mekong countries, overcoming the impact of the COVID-19 pandemic, promoting sustainable economic growth" (Xinhuawang 新华网, 2020).

China and other countries are gradually setting up the Digital Economic Dialogue Mechanism. In the immediate future, China-Thailand have built a Ministerial Dialogue Mechanism on Digital Economic Cooperation, and in March 2019, the two parties held the first Conference. During this conference, the two parties introduced their digital economic development, and discussed topics such as digital economics, smart city, unified applications, software, and IT services, infrastructure connectivity and 5G, industrial networks, network security, artificial intelligence. At the same time, the E-commerce cooperation mechanism between China and ASEAN countries has gradually been formed. In November 2017, China and Cambodia signed the Memorandum of Understanding on E-commerce Cooperation with Vietnam in May 2017. In August 2018, China and Malaysia kicked off the negotiation process to sign the Memorandum of Understanding on bilateral cross-border e-commerce cooperation. In December 2018, in Beijing and Hangzhou, there were two State-owned Enterprise Partnership Dialogues with partner countries on "Silk Road E-commerce" (Sichou zhilu Dianzi Shangwu丝绸之路电子商务), to implement the MOU on e-commerce cooperation signed with countries related to BRI, deepening cooperation in the field of electronics within the BRI framework.

At a higher level, China wants to promote the process of building a community with shared future for China and the Mekong Subregion countries. We know that, in 2018, China launched an initiative to build a Lancang - Mekong Community with Shared Future. (*Zhongguozhengfuwang* 中国政府网, 2018) In fact, China has signed agreements to realize a community with a shared future between China and other countries. For example, for Cambodia, China will put Cambodia as a model in building BRI." The ultimate goal of the BRI deployment in Cambodia is to build a China-Cambodia Community with Shared Future. And the Community with Shared Future of these two countries also serves as a model for building the China-ASEAN Community with Shared Future, then proceeding to the Asian Community with Shared Future and finally, the Community with Shared Future for Mankind. (*Renminwang*人民网, 2018) On April 28, 2019, China and Cambodia signed the China-Cambodia Action Plan to build a Community with Shared Future. According to the assessment of the Chinese Ambassador in Cambodia Wang Wen Tian, this Plan represents that the China-Cambodia

comprehensive strategic partner relationship has achieved a high level of historical development, and became a 'promotion' for China-Cambodia relations", been the "glue" in the promotion of confidence in neighboring cooperation and been the "pilot field" of building a Community with Shared Future (*Xinhuawang*新华网, 2019).

2.3. The US and China promote bilateral cooperation with countries in Mekong Subregion

For the US

Among Southeast Asian countries, the Mekong Subregion countries is strategically vital to the US. The US states that "the Mekong region-including Cambodia, Laos, Myanmar, Thailand and Vietnam-is strategically important to the US. The region is central to the US's Indo-Pacific Strategy, and is an essential part of the cooperation between the US and ASEAN. Through its cooperation with its Mekong partners, the US seeks to maintain and promote sovereignty, transparency, good governance, ASEAN-centricity, and a rules-based order. The US's relations with the Mekong region have been tightened". (*Xinhuawang*新华网, 2019) Therefore, the US now actively promotes bilateral relations with the Mekong Subregion countries.

First of all, the US continues to strengthen its alliance with Thailand. Of the five treaty allies in the Asia-Pacific, Thailand is clearly being left out of the US's strategy towards the region. For Thailand, the US remains an important economic partner and security partner that it chooses. For the United States, military cooperation - especially Thailand's periodic permitting of American military vehicles entering into the country - is irreplaceable in Southeast Asia, making a significant contribution to the overall strategy of the US in this region. Every year, the two parties still hold the Golden copperhead military exercises. The US-Thailand relationship provides important opportunities for the US to pursue its interests in Southeast Asia and, more broadly, the Indo-Pacific. For the US, coordinating with Thailand in the efforts mentioned above will be the prelude to the US-Thailand cooperation relationship in a broader region, with a solid foundation of existing cooperation between the two parties according to LMI. Outward-looking economic policies will bring US economic sectors many opportunities to invest in Thailand and the region.

Recently, the two countries' relations are recovering strongly after a period of declining relations. However, Thailand is the US's oldest ally in Southeast Asia, especially after the military coup in 2014, headed by Mr. Prayuth Chan-o-cha leading to overthrowing the civilian government; the relations between the two countries became strained. The US then discontinued its military training and aid program to Thailand. However, the visit of Thailand's Prime Minister Prayuth Chan-o-cha to the US in October 2017 improved bilateral relations in various fields. This is a move that marks a significant change in the US's stance towards Thailand since the 2014 coup. The administration of President Donald Trump insisted that it would only restore

full relations with Thailand when this country comes back to democracy. This is also considered a move to cope with China's influence over countries in this region, especially Southeast Asia, including Mekong Subregion.

In addition, the US promotes the "partner" relationship with Vietnam. Vietnam is now considered a key partner in the US's current regional strategy in geostrategic aspects. Therefore, strengthening the comprehensive relationship between the US and Vietnam is one of the key US's priorities over the Southeast Asia region, including the Mekong Subregion. US-Vietnam relations have developed rapidly in recent years. Even the Vietnam-US relationship has been described by Mr. Pham Quang Vinh, former Ambassador Extraordinary and Plenipotentiary of Vietnam in the US, that "up to now, not only the 'comprehensive characteristic' has been increased, but also the 'strategic characteristic' has been included in it." Vietnam and the US established a Comprehensive Partnership in 2013, thereby enhancing and expanding cooperation in all fields, from politics, diplomacy, economics, investment to defense, security, culture, education, science and technology, overcoming consequences of war and people exchange. Especially President Donald Trump chose Vietnam as the first destination in Southeast Asia in the first year of his term.

In addition, US National Security Advisor Robert C. O'Brien visited to Vietnam during November 20 - 22, 2020, to celebrate the 25th anniversary of US - Vietnam diplomatic relations and to highlight the joint efforts of the two countries to promote a Free and Open Indo - Pacific (*Vn.usembassy.gov*, November 2020).

On the other hand, the US promotes democratic reform in Myanmar. Marking a turning point in the relationship between the US and Myanmar was reflected in the fact that on October 7, 2016, President Barack Obama officially removed the sanctions that lasted for nearly two decades applied to the Southeast Asian country. This event opened up the process of "thawing" and improved relations between the two countries. This move by the United States was intended to encourage US businesses and nonprofit institutions to increase Myanmar investment while expressing the hope that Naypyidaw would increasingly become a democratic and prosperous partner of the US in the region. Myanmar's democratic transition and the dynamic between Naypyidaw and Washington have been prioritized in the US's Asia policy. China's long-lasting influence in Myanmar and Myanmar's new moves to diversify its relations seem to provide geostrategic implications for the US-Myanmar relationship.

So far, investments from the US and the West have not been compared with investments from China. Therefore, now the US and its allies, especially Japan, are increasing their influence in Myanmar to compete with this nation's increasing influence. However, in recent times, the relationship between the two countries has faced many challenges not only related to the Chinese factor in this country, but also related to the Myanmar government's inadequate handling of the Rohingya issue. Especially on July 16, 2019, the US State Department issued sanctions on Myanmar's

four top military commanders for their involvement in the mass murder of Rohingya Muslims in the state of Rakhine in the North of this country. This also has a significant impact on the current relations between the two countries.

Furthermore, the coup in Myanmar in early February 2021, abruptly curtailed the country's democratic transition and has sparked mass protests that could lead to deadly violence. Myanmar's coup will benefit China in the US-China competition in the Indo-Pacific (Yun, Sun, 2021); this means that, it would benefit the US. The coup might also push Myanmar closer to China, by necessity, if many democracies downgrade links to the country and apply more pressure. Even so, Beijing is not necessarily thrilled by the military takeover. Chinese leaders had built close links with Aung San Suu Kyi and the NLD (National League for Democracy) government, and China prefers stability in neighboring states, which the military coup hardly guarantees (Kurlantzick, Joshua, 2021).

In addition, the US has strengthened relations with Laos and Cambodia although the US's relationship with these two countries has not really changed significantly. In 2009, the US removed Laos and Cambodia from the trade blacklist, which opened a new era in the US's relations with these two countries. However, the US and Cambodia relations have recently been somewhat tense regarding the dissolution of the CNRP by the Government of Cambodia until the absolute victory in the election of the 6th National Assembly (July 2018), the US and the West always showed disapproval and performed acts to increase pressure on Cambodia. The decline in relations between Cambodia and the West had been shown before the occurrence of the election.

After the end of the election, relations between Cambodia and the US and the West worsened; even after the election took place, the US and the West expressed their views on increasing sanctions against Cambodia, mainly limiting the blockade of assets and increasing immigration orders to some Cambodian officials. Typically, on November 17, 2017, the US announced stopping funding Cambodia's 2018 election. Next, on June 12, 2018, the US Department of the Treasury announced sanctions against General Hing Bun Hieng, the commander of Prime Minister Hun Sen's Bodyguard Force, which has thousands of soldiers. The sanctions accused General Hing Bun Hieng of engaging in serious human rights abuses over the past 21 years. With these sanctions, this Cambodian general will not have access to any of his assets on American territory. Meanwhile, the relationship between China and Cambodia has increased rapidly in the current period; China is almost present in almost all fields in this country. This is creating a big challenge for the US in the region today.

However, the US and Cambodia relations have improved dramatically since the beginning of November 2019; the two countries' relations have shown big changes with the fact that on November 21, Cambodia's Prime Minister Hun Sen received a letter from the US President Donald Trump with content that America wants to strengthen long-term friendship with Cambodia. Responding to goodwill from the US, Cambodia also moved to show goodwill on improving human rights records such as

on November 9, 2019, the Cambodian government ordered the release to opposition director Kem Sokha, who was under house arrest on charges of treason in 2017.

At the same time, on November 21, 2019, Prime Minister Hun Sen met with the US Ambassador in Cambodia, Patrick Murphy in Phnom Penh. Through this meeting, Mr. Patrick Murphy sent Mr. Hun Sen two letters from President Donald Trump. The meeting between Mr. Murphy and Mr. Hun Sen also mentioned democracy, human rights that promote bilateral relations. (*Khmertimeskh*, 2019) At the same time, Donald Trump also pledged that the United States would assist in maintaining Cambodia's national sovereignty, continue to help Cambodia build a solid and transparent financial management system, prevent money laundering and supply technical aid, increase the friendship and trust between the US and Cambodia.

For China

China has many advantages over the US in promoting bilateral relations with countries in the Subregion. China shares a common border with mainland Southeast Asian countries, and is located in the upstream area of the Mekong river system, which is a huge advantage of China forcing countries in this region wanting to develop stably to strengthen friendly cooperation with China as they have no other choices. In addition, China's economic relations with countries in this region are on the rise, the level of dependence of those countries on Chinese economics is increasing. Therefore, China is a crucial partner of the countries in the region. Therefore, China is easier to increase relations with the countries of the Mekong Subregion, although doubts of countries towards China are not small. However, with the asymmetric nature of this bilateral relationship, those countries do not dare to criticize Beijing in certain circumstances. China promotes the "quasi-alliance" relationship with Cambodia: Cambodia is considered a country having a "quasi-alliance" relationship with China in the region. At the same time, China has good political relations with Thailand, Laos, Myanmar and Vietnam. China built Cambodia into the "political center" of China in the Mekong Subregion and Southeast Asia. Political relations of China and Cambodia have developed strongly in recent years. China is increasingly involved in Cambodian politics. So far, analysts assess Cambodia as one of China's "closest allies" (HENG, Pheakdey, 2012) or "quasi-alliance" (BBC, 2021). Cambodia's Prime Minister Hun Sen also emphasized that "China is Cambodia's most trusted friend" (Atimes, 2021), the two countries have considered each other's best friends. Accordingly, China and Cambodia comprehensively support each other in bilateral and multilateral relations and aim to build a "a new type of strategic partnership" model. (Renminwang人民网, 2017) Besides, the two countries also aim to build a China-Cambodia community with a shared future (Xinhuawang新华网, 2018).

In the economic field, on October 12, 2020, China and Cambodia signed a Free Trade Agreement (FTA) on the occasion of China's Foreign Minister Wang Yi's visit

to Cambodia (October 11-12, 2020). This agreement creates tariff reductions for each other's products, affecting many fields, including trade, tourism, and agriculture. The signing marks this as the first free trade agreement officially reached by Cambodia with a foreign country. Previously, the talks between the two parties started at the end of 2019 and did not take as many years as usual, showing that Cambodia hopes that such bilateral agreement with China could mitigate the impact of sanction order of the European Union (EU) to the country of pagodas. According to Xinhua News Agency, during a meeting with Cambodia's Deputy Prime Minister Hor Namhong on October 11, 2020, China's Foreign Minister Wang Yi said he chose Cambodia as the first destination on his Southeast Asia tour because "our two countries are trustworthy friends and are a community with shared future for mankind." Mr. Wang said China would continue to help Cambodia in the fight against COVID-19, including supplying vaccines developed by China on a priority basis and importing more high-quality Cambodian agricultural products. Chinese Foreign Minister said that in addition to traditional fields, the two parties also needed to expand cooperation in newly emerging fields such as artificial intelligence (AI), 5G network, big data, cloud computing.

Besides, China strongly promotes its relations with Laos. For Laos, the two countries' political relations have been increasingly tightened and rapidly developed in recent years; the two parties make efforts to promote the healthy and stable development of the Sino-Laos comprehensive strategic cooperation partnership and efforts to revive the cause of socialism. At the same time, Laos also believed that the achievements and experiences of China also encouraged and initiated Laos to continue building a unique Lao socialist society. (La.china-embassy, 2013) Even China is trying to promote political-diplomatic relations between China and Laos as a polity with a shared future, shared interests and especially the phrase "special relations" (Teshu guanxi) was used. In response, Laos also stated that "Laos attaches great importance to the relationship of 'Sharing joys and sorrows' ("Tong gan ku, gong huan nan" de guanxi 同甘苦共患难的关系) with China." (La.china-embassy, 2013) In addition, China and Laos pledged to connect China's "One Belt and One Road" with the strategy of "Turning a continental nation into a connection nation". The two parties also work together to promote the building of a "Community with shared future", and propose a cooperation planning outline to promote the construction of "One Belt and One Road" (Meiritoutiao每日头条, 2016).

In addition, increasing comprehensive relations with Myanmar, China, and Myanmar relations have been strengthened in recent times. During the official visit to Myanmar by Chinese President Xi Jinping from January 17 - 18, 2020, the two parties officially announced the joint building of a China-Myanmar community with a shared future. This event is considered to mark not only a strong development in the relationship between China and Myanmar but also a new development step of Beijing in promoting the building of a community with a shared future for humankind between

China and other countries around, especially Southeast Asian countries. Besides, China and Thailand also increased strongly, especially in the economic field. At the same time, the relationship between China and Vietnam has also been strongly strengthened, although the two parties still have disagreements regarding the South China Sea issue. Recently, China has pushed "vaccine diplomacy" in Southeast Asia, including Mekong River Subregion countries. Southeast Asian nations now seek help from international partners to cope with the coronavirus pandemic, particularly in securing access to vaccines. China is eagerly answering the call. The US, by contrast, has been a nonfactor in the region's early vaccine diplomacy. From January 11 to 16, 2021, Foreign Minister Wang Yi of China toured four countries in the region: Myanmar, Indonesia, Brunei, and the Philippines. It also follows a tour from October 11 to 15, 2020, that took Wang Yi to Cambodia, Malaysia, Laos, and Thailand and paid a transit visit to Singapore. Mr. Wang Yi then visited Vietnam, Cambodia and Singapre from September 10 to 15, 2021. The aim of Wang Yi's visit was to bolter the cooperative relationship between China and these countries. At each of his stops, Wang coupled promises of Chinese vaccine access with other foreign policy priorities, including advancing major projects under China's BRI, which have been stalled amid the pandemic. Beijing promising help with vaccine distribution and cooperation on infrastructure and trade to fuel the post-pandemic recovery. China's offer of vaccines to ASEAN nations is part of the national "Health Silk Road" (Jiankang Sichouzhilu健康丝绸之路) agenda to ensure economic recovery after the pandemic remains a priority for both China and Southeast Asian governments (Eugénia, C. Heldt, 2021; Renminwang人民网, 2020; Strangio, Sebastian, 2021; Devonshire-Ellis, Chris, 2021; Gregory, B. Poling and Tran Hudes, Simon, 2021).

3. The response of the countries in the Mekong Subregion to growing competition between the US and China

Three decades ago, Southeast Asia was concerned about the strategic dilemma of maintaining the balance between the US and China, including Mekong countries. This concern is not only present in islands Southeast Asia, where disputes in the South China Sea occurred. The recent growing role of China in the Mekong Subregion and the growing US involvement has also raised concerns among countries in the region.

The countries in the Mekong Subregion pursue the "hedging strategy" to respond to the growing competition between the US and China, in order to manage the regional order. In pursuing such a strategy, the countries in the region look to external powers such as the US, China, Australia, India, Japan, South Korea, Russia, and the European Union (EU) for the pursuit of security cooperation and for security cooperation deeper economic involvement. This two-pronged strategy aims-to prevent any major powers from gaining a dominant role while creating economic interdependence and benefiting from cooperation.

However, the "hedging strategy" through economic cohesion gives the impression that the smaller powers in Southeast Asia are actively chasing the larger powers for funding and privileges. The effectiveness of such a cohesive strategy largely depends on how larger powers allow things to happen. Their success is primarily because these small powers are not seen as a threat to major powers.

Now, this strategic trend, instead, appears to be led by certain regional powers. Such powers as the US, Japan, and South Korea have become more proactive in increasing their presence and reinforcing their importance in the region. Mekong Subregion is one of the most critical areas where this phenomenon can be observed.

So far, although the influence competition between the US and China in the Mekong Subregion has intensified more and more, countries in the region are very limited in expressing their views on this issue. Perhaps the main reason is that those countries are still confused in finding ways to deal with US-China competition in this region. Countries in the region expressed concern about being forced to choose between the US and China. Countries in the region try to exercise balanced or equivocation defense diplomacy in their relations with the US and China, but this is not easy if the US-China tensions in the region continue to increase.

Cambodia is an example of an attempt to demonstrate an equivocation defense diplomacy strategy in relations with the US and China. Although relations between Cambodia and China have grown dramatically, the country exhibits a balanced foreign policy in its relations with China and the United States. Although the Western world has criticized Cambodia as an "ally" of China, Cambodia has always denied this.

This balance is reflected in the case of Cambodia's dealings with China and the US regarding the COVID-19 pandemic issue. On the one hand, Cambodia asserted it as a loyal friend of China in the context of this pandemic breaking out strongly in China from late 2019 to early 2020. Along with that, Cambodia has actively improved relations with the US, for example, in November 2019, the two countries' relations showed strong changes with the event that on November 21, Cambodia's Prime Minister Hun Sen received a letter from US President Donald Trump with content that the US wants to strengthen long-term friendship with Cambodia. Next, Cambodia also actively improved its image with the US and the West when on February 12, 2020, the country agreed to let Holland America Line's MS Westerdam cruise dock in Sihanoukville town on February 13, Cambodia after two weeks of wandering at sea, and allow tourists to get ashore in the context of Westerdam cruise falling into the irony of being refused to dock by five places.

For the Vietnam case, its response to the growing competition between the US and China in Mekong Subregion is somewhat different from that of the other countries in the Mekong region. Vietnam has pursued its hedging strategy towards China and encourages continued US presence in the region. Vietnam and China have similar political institutions; both countries are pursuing the path to socialism. However,

Vietnam's attitude towards China is somewhat more complicated than that of other countries in the region. Officially, Vietnam has always shown strong support in cooperation with China as well as the cooperation mechanisms that China introduced in the Mekong region, but the concerns on the influence of China in the region are shown clearly in the elite division and people of Vietnam. This is also related to the sovereignty dispute in the South China Sea between China and Vietnam, as well as the conflict on the use of water between the downstream. Among Mekong countries, Vietnam bearing the biggest impact from the change in the Mekong flows in relation to upstream hydroelectric dams (to date, China has built 11 dams on the Lancang River, and a further 11 mainstream dams in the lower Mekong and 120 dams in the tributaries are under construction or being planned) (Haefner, Andrea, 2020), as well as China makes Vietnam express more anxiety on the rise of China's influence in the Mekong region. According to the assessment of Chinese experts Li Wei and Luo Yifu, it is also emphasized: «In the relations between the Mekong countries, there is an existence of potential concerns about historical resentment, territorial disputes and interests conflicting that make LMC an unstable element which is difficult to be predicted in relations between countries. The sovereignty disputes in the South China Sea are like a 'timeless bomb' between China and Southeast Asian countries; in the relationship between China and mainland Southeast Asian countries, the China-Vietnam relation is the most strongly affected... As this dispute has not been resolved in a fundamental way, it is difficult for China-Vietnam relation to stabilize in the long term". (Lĭ, Wēi and Luō, Yífù李巍 罗仪馥, 2020) At the same time, Vietnam pursues a cooperation strategy with the US; however, Hanoi would not align itself with Washington against Beijing. Indeed, increased diplomatic relation with both Washington and Beijing shows that Vietnam's multidirectional foreign policy is growing even stronger in the face of a Sino-US comprehensive confrontation, and including strategic competition of two powers in the Mekong Subregion. Vietnam has been promoting diplomacy at both high and low levels with the US and China.

Conclusion

In recent years the Mekong Subregion has drawn the attention of powers. This region is now at the crossroads of power competition, especially between the US and China. So that, the Mekong Subregion risks becoming a battleground for powers. This scenario would be detrimental for Mekong Subregion countries. The countries of the Mekong Subregion are currently receiving a lot of China's investment in the framework of the BRI of President Xi Jinping. Meanwhile, in the approach to the Mekong Subregion, China focuses on increasing its comprehensive engagement with the region, in which it focuses on implementing the model of "top-down approach", using relationships in terms of politics and using economic tools as the main spearheads. China is the region's most significant power and the country where the Mekong originates from

the Tibetan Plateau; China is constantly using its economic influence to achieve larger objectives. Greater control right from the Mekong River up to the South of Vietnam gives Beijing a decisive voice in using the river's key resources and has the advantage to force countries to follow its political intentions. China uses its "traditional" approach to increase influence on the Mekong Subregion by "using economic factors", mainly in infrastructure investment and aid, in exchange for political support from these countries. Currently, China can be considered to be in a dominant position in the Mekong Subregion compared to the US, even Japan. (Duong Van Huy, 2020: 14109) At the same time, the US's increase in engagement in Mekong Subregion is an important part of the Indo - Pacific strategy's deployment and is also a key move to strengthen the belt of restraint of the increase in China's influence in the region. The US uses its "traditional" approach to increase influence on the Mekong Subregion by "using an environmental protection approach" and reviving 'China threat' theory (Zhongguo Weixielun中国威胁论) to attack the Chinese factor in the Mekong Subregion, including th US have further aggravated the problem of the notion of Chinese "debt-trap" diplomacy (Zhongguo de Zhaiwu Xianjing Waijiao中国的 债务陷阱外交). The US is thus attempting to become an essential ally to Mekong states against foreign interference. In other words, Washington is advocating to become a security guarantor, essential to counterbalance China. Therefore, the Mekong Subregion has become a new location for competition between major countries, especially between the US and China. The main driving force behind this competitive trend is China's increasingly proactive foreign policy and the increase in influence through the BRI and MLC in this region.

Meanwhile, the US is at the forefront in this strategic competition, especially in the Indo - Pacific framework. The LMI re-activation has become a policy tool specific to the Mekong Subregion. The US's action has encouraged and facilitated the participation of other major countries in the region, namely Japan and South Korea. Faced with the increase in competition among major countries in the Mekong Subregion, countries in the region have also gained many economic and technical benefits and benefits in increasing the ability to choose to promote their own economic development. However, maintain a delicate balance between great powers, especially between the US and China. This task becomes more difficult as the confrontation between China and the United States becomes increasingly fierce and fierce, placing countries in the Mekong Subregion at risk of choosing between two parties - which no nation wants.

In the race to increase influence between the US and China in the Mekong Subregion currently, China has more advantages in many aspects, such as: Firstly, China has the geographical advantage of in promoting relations with the Subregion countries because China is a country located in upstream Mekong river, so the countries in downstream Mekong river are forced to find ways to increase cooperation with China in Mekong River management and cooperation. China and the countries

of the subregion have a shared future on security aspects with the region, especially non-traditional security issues. Secondly, China has a longer and deeper history of cooperation than the US; Thirdly, China is now the most important economic partner of the Subregion countries, the economic relationship between China and the Mekong Subregion countries is increasing and growing faster than the economic relationship of the Subregion countries with the US. However, the US also has an advantage over China in increasing influence in this region; for example, the US's soft power in this region still outperforms China, the building of China's image has not yet kept up with the growing political and economic influence in the region.

The US-China strategic competition in the Mekong Subregion differs from the maritime Southeast Asia regions, especially in the South China Sea, in this region; the competition is between China, which has almost won the foothold in the region, and the United States, which is trying to find ways to increase engagement in the region to find a place for itself. Accordingly, the US and its allies aiming primarily at the Chinese factor are two issues: First, it is the issue of water resources in the Mekong River related to China's hydroelectric dams upstream; Second, it is that the US aims at the risk of a debt trap over China's investment projects in the BRI framework in this region. Therefore, the competition here mainly are activities of criticizing each other and seeking to entice countries in the region to restrain each other, which promotes the attraction of Thailand and Vietnam in preventing the increase of China's influence in the region. Therefore, the risk of a China-US collision in the Mekong Subregion is much lower than US-China competition in the South China Sea region.

Conflicts of interest

The authors declare that there are no conflicts of interest regarding the publication of this article.

References

- Atimes. (2021). "Hun Sen sings a different tune on China". March 3, 2017. Available at http://www.atimes.com/article/chinese-largesse-shields-cambodian-repression/ cccessed February 08, 2021
- Baoquocte. (2020). "Mekong-Mỹ hướng tới mục tiêu thúc đẩy hoà bình, ổn định, thịnh vượng tại khu vực" [The Mekong-US aims to promote peace, stability and prosperity in the region]. September 11, 2020. Available at https://baoquocte.vn/mekong-my-huong-toi-muc-tieu-thuc-day-hoa-binh-on-dinh-thinh-vuong-tai-khu-vuc-123601.html accessed February 05, 2021
- BBC. (2021). "Zhōngguó huò yuán jiǎnpǔzhài zhànjiàn dǎzào dōngméng "zhǔn méngyǒu" 中国或援柬埔寨战舰 打造东盟"准盟友" [China may aid Cambodian warship to build ASEAN's "quasi-ally"]. 2016年 2月 26日. Available at http://www.bbc.com/zhongwen/simp/world/2016/02/160226_china_cambodia_navy accessed February 08, 2021

- Chinaembassy.or.th. (2021). "Chinese Embassy Spokesperson's Remarks on Mekong-related Media Report Targeting China. 2019/07/05. http://www.chinaembassy.or.th/eng/sgxw/ t1678896.htm accessed January 23, 2021
- Devonshire-Ellis, Chris. (2021). "China's Foreign Minister Wang Yi's Mini 2021 ASEAN Tour: Highlights". *China Briefing*, January 18, 2021. Available at https://www.china-briefing.com/news/chinas-foreign-minister-wang-yis-mini-2021-asean-tour-highlights/ accessed February 09, 2021
- Duong Van Huy. (2020). Assessing China's Rising Influence on Mekong Subregion: A Vietnamese Perspective. *International Journal of Current Research*, Vol. 12 (10): 14101-14111. DOI: https://doi.org/10.24941/ijcr.39905.10.2020
- Eugénia, C. Heldt. (2021). "China's "Health Silk Road" Offensive: How the West should Respond", *Global Policy Journal*, 09 December 2020. Available at https://www.globalpolicyjournal.com/blog/09/12/2020/chinas-health-silk-road-offensive-how-west-should-respond accessed February 08, 2021
- Gregory, B. Poling and Tran Hudes, Simon. (2021). "Vaccine Diplomacy Is Biden's First Test in Southeast Asia". *The Center for Strategic and International Studies (CSIS)*, January 28, 2021. Available at https://www.csis.org/analysis/vaccine-diplomacy-bidens-first-test-southeast-asia accessed February 09, 2021
- Haefner, Andrea. (2020). "The Mekong River Is Becoming a Geopolitical Hotspot". *Brink*, November 9, 2020. Available at https://www.brinknews.com/the-mekong-river-is-becoming-a-geopolitical-hotspot/accessed February 09, 2021
- HENG, Pheakdey. (2012). "Cambodia–China Relations: A Positive-Sum Game?". *Journal of Current Southeast Asian Affairs*, 31, 2, 2012. https://doi.org/10.1177/186810341203100203
- Huanqiuwang环球网. (2012). "Lǐ chángjiǔ: Zhōngguó quánqiú zhànlüè "dōng wěn, běi qiáng, xī jìn, nánxià" 李长久: 中国全球战略"东稳、北强、西进、南下" [Li Changjiu: China's Global Strategy "stablize in the east, gather strength in the north, to advance to the west and descend to the south]. December 16, 2012. Available at https://world.huanqiu.com/article/9CaKrnJycfC accessed December 12, 2020
- Johnson, Kay and Panu, Wongcha-um. (2020). "Water wars: Mekong River another front in U.S.-China rivalry". *Reuters*, July 24, 2020. Available at https://www.reuters.com/article/us-mekong-river-diplomacy-insight-idUSKCN24P0K7 accessed January 23, 2021
- Johnson, Kay and Tostevin, Matthew. (2020). "Chinese dams under U.S. scrutiny in Mekong rivalry". Reuters, December 14, 2020. Available at https://www.reuters.com/article/ mekong-river-idUSKBN28N0N4 accessed January 25, 2021
- Khmertimeskh. (2019). "Prime Minister Hun Sen meets with US Ambassador Patrick Murphy".
 Khmer Times, November 22, 2019. Available at https://www.khmertimeskh.com/50663152/prime-minister-hun-sen-meets-with-us-ambassador-patrick-murphy/ accessed February 08, 2021
- Kurlantzick, Joshua. (2021). "The regional implications of Myanmar's coup". *Aspeniaonline*, Feb 12, 2021. Available at https://aspeniaonline.it/the-regional-implications-of-myanmars-coup/ accessed February 26, 2021
- La.china-embassy. (2013). "Lǐ Yuáncháo huìjiàn lǎowō guójiā fù zhǔxí běn yáng" 李源潮会 见老挝国家副主席本扬 [Li Yuanchao Meets with Lao Vice President Boungnang]. June 02, 2013. Available at http://la.china-embassy.org/chn/zlgxdbwj/t1046401.htm accessed

- February 08, 2021
- Lǐ, Wēi and Luō, Yífù李巍 罗仪馥. (2020). "Zhōngguó zhōubiān wàijiāo zhōng de lán méi hézuò jīzhì fēnxī" 中国周边外交中的澜湄合作机制分析 [Analysis of the Lancang-Mekong Cooperation Mechanism in China's Peripheral Diplomac],来源: Xiàndài guójì guānxì《现代国际关系》,2019年第5期,2020年05月11日. Available at http://www.cssn.cn/gjgxx/gj_zgwj/202005/t20200511_5126301.shtml accessed February 09, 2021
- Lín, Tínghuī林廷輝. (2020). "Měiguó jījí jiéméng méigōnghé wǔ guó, táiwān nán xiàng kě wàng yíng shùnfēng" 美國積極結盟湄公河五國,台灣南向可望迎順風 [The United States is actively aligning with the five Mekong River region countries, and Taiwan's New Southbound Policy is expected to face the downwind]. September 28, 2020. Available at https://www.storm.mg/article/3056979 accessed January 18, 2021
- Liú, Jūnshèng刘均胜. (2016). "Lán Méi hézuò: Shìfàn yàzhōu mìngyùn gòngtóngtǐ jiànshè" 澜湄合作: 示范亚洲命运共同体建设 [Lancang-Mekong Cooperation: Demonstrating the Building of a Community of Shared Future in Asia]. *Zhongguo Jingji Zhoukan*中国经济周刊 (CHINA ECONOMIC WEEKLY), 2016.4.4. Available at http://niis.cass.cn/xscg/xslw/qyhz/201611/U020161130519203748520.pdf accessed January 19, 2021
- Meiritoutiao每日头条. (2016). "Yīdài yīlù" jiākuài lǎowō biàn "lù suǒguó" wèi "lùliánguó" "一带一路"加快 老挝变"陆锁国"为"陆联国" [The Belt and Road Initiative accelerates Laos' change from a "land-locked country" to a "land-linked country"]. May 06, 2016. Available at https://kknews.cc/zh-sg/world/23gamr.html accessed February 08, 2021
- Minakir, P. A. and Suslov, D. V. (2017). "Prospects and Limitations of Russo-Chinese Economic Relations". *The Asan forum*, October 23, 2017. Available at http://www.theasanforum.org/prospects-and-limitations-of-russo-chinese-economic-relations/ accessed December 12, 2020
- Mrcmekong. (2010). "Strategic Environmental Assessment of hydropower on the Mekong mainstream: summary of the final report". ICEM International Centre for Environmental Management, October 2010. Available at http://www.mrcmekong.org/assets/Publications/Consultations/SEA-Hydropower/SEA-FR-summary-13oct.pdf accessed January 22, 2021
- Nationthailand. (2017). "Taiwan president keen for free-trade deal with Thailand". May 07, 2017. Available at https://www.nationthailand.com/news/30314520 accessed January 12, 2021
- Prashanth, Parameswaran. (2019). "The Mekong in US Asia Strategy: Opportunities and Challenges". *The Diplomat*, July 08, 2019. Available at https://thediplomat.com/2019/07/the-mekong-in-us-asia-strategy-opportunities-and-challenges/accessed January 22, 2021
- Renminwang人民网. (2019). "Gòng jiàn yīdài yīlù, gòujiàn yàzhōu mìngyùn gòngtóngtǐ (guójì lùntán)" 共建一带一路,构建亚洲命运共同体(国际论坛 [Jointly build the Belt and Road Initiative to build an Asian community with a shared future (International Forum)]. 2019年05月02日. Available at http://world.people.com.cn/n1/2019/0502/c1002-31061383. html accessed December 12, 2020
- Renminwang人民网. (2020). "Jiànkāng sīchóu zhī lù" wéi shēngmìng hùháng"健康丝绸之路" 为生命护航 ["Healthy Silk and Road" to escort life]. 2020年03月24日. Available at http://theory.people.com.cn/n1/2020/0324/c40531-31645276.html accessed February 08, 2021
- Renminwang人民网. (2018). "Wáng Wén Liú Diǎn, Jiǎnpǔzhài: "Yīdài yīlù" guójì hézuò de xīn yàngbǎn" 王 文 刘 典, 柬埔寨: "一带一路"国际合作的新样板 [Wang Wen Liu Dian, Cambodia: A New Model for International Cooperation in the "Belt and Road" Initiative].

- 2018年01月26日. Available at http://world.people.com.cn/n1/2018/0126/c1002-29789732. html accessed February 05, 2021
- Renminwang人民网. (2017). "Zhōngguó zhù jiǎn dàshǐ Xióng Bō: Zhōng jiǎn guānxì zài xīn shíqí jiāng bùduàn gŏnggù fāzhǎn" 中国驻柬大使熊波: 中柬关系在新时期将不断 巩固发展 [Chinese Ambassador to Cambodia Xiong Bo: China-Cambodia relations will continue to consolidate and develop in the new era]. 2017年10月27日. Available at http://world.people.com.cn/n1/2017/1027/c1002-29612909.html accessed February 08, 2021
- State.gov. (2019). "Strengthening the U.S.-Mekong Partnership". U.S. DEPARTMENT of STATE, August 2, 2019. Available at https://www.state.gov/strengthening-the-u-s-mekong-partnership/ accessed February 02, 2021
- Straitstimes. (2020). "Water wars: Mekong River another front in US-China rivalry". The Straits Times, Jul 24, 2020. Available at https://www.straitstimes.com/asia/se-asia/water-wars-mekong-river-another-front-in-us-china-rivalry accessed January 25, 2021
- Strangio, Sebastian. (2021). "Amid US Crisis, Chinese Foreign Minister Embarks on Southeast Asia Tour". *The Diplomat*, January 12, 2021. Available at https://thediplomat.com/2021/01/amid-us-crisis-chinese-foreign-minister-embarks-on-southeast-asia-tour/accessed February 09, 2021
- ThanlandBusinessNews. (2021). "Taiwan seeks Free Trade Agreement with Thailand". July 8, 2010. Available at https://www.thailand-business-news.com/economics/19239-taiwan-seeks-free-trade-agreement-with-thailand.html accessed January 19, 2021
- Tu Lai. (2019). "A Vietnam Perspective on Taiwan's New Southbound Policy", East-West Center, *Asia Pacific Bulletin*, No. 492, October 2, 2019. Available at https://www.eastwestcenter.org/system/tdf/private/apb492.pdf?file=1&type=node&id=37298 accessed January 13, 2021
- Usaid. (2019). "Sáng kiến hạ lưu sông Mê Kông (LMI)" [The Lower Mekong Initiative (LMI)]. August 12, 2019. Available at https://www.usaid.gov/vi/vietnam/lower-mekong-initiative-lmi accessed January 25, 2021.
- Vn.usembassy.gov. (November 2020). "Chuyến thăm Việt Nam của Cố vấn an ninh quốc gia Hoa Kỳ Robert C. O'Brien" [The visit to Vietnam by US National Security Advisor Robert C. O'Brien]. November 22, 2020. Available at https://vn.usembassy.gov/vi/chuyen-tham-viet-nam-cua-co-van-an-ninh-quoc-gia-hoa-ky-robert-c-obrien/ accessed February 06, 2021
- Vn.usembassy.gov. (2019). "Ngoại trưởng Michael R. Pompeo Phát biểu khai mạc tại Hội nghị Bộ trưởng Sáng kiến Hạ nguồn Mekong" [Secretary of State Michael R. Pompeo Opening remarks at the Lower Mekong Initiative Ministerial Meeting]. January 8, 2019. Available at https://vn.usembassy.gov/vi/ngoai-truong-pompeo-phat-bieu-khai-mac-tai-hoi-nghi-botruong-sang-kien-ha-nguon-mekong/ accessed February 02, 2021
- Vn.usembassy.gov. (September 2020). "Tuyên bố báo chí: Michael R. Pompeo, Ngoại trưởng Hoa Kỳ" [Press Statement Michael R. Pompeo, Secretary of State]. September 14, 2020. Available at https://vn.usembassy.gov/vi/quan-he-doi-tac-mekong-hoa-ky-khu-vuc-mekong-xung-dang-co-duoc-nhung-doi-tac-tot/ accessed January 22, 2021
- Xinhuawang 新华网. (2020). "Láncāngjiāng-méigōnghé hézuò dì sān cì lǐngdǎo rén huìyì wànxiàng xuānyán (quánwén)" 澜沧江 湄公河合作第三次领导人会议万象宣言 (全文) [The Vientiane Declaration of the Third Lancang-Mekong Cooperation Leaders'

- Meeting (full text)]. August 24, 2020. Available at http://www.xinhuanet.com/world/2020-08/24/c_1126407752.htm accessed February 05, 2021
- Xinhuawang新华网. (2019). "Zhuānfǎng: Zhōng jiǎn gòujiàn mìngyùn gòngtóngtǐ xíngdòng jìhuà biǎomíng liǎng guó guānxì dádào lìshǐ xīn gāodù——fǎng zhōngguó zhù jiǎnpǔzhài dàshǐ wángwéntiān" 专访: 中柬构建命运共同体行动计划表明两国关系达到历史新高度——访中国驻柬埔寨大使王文天 [Interview: The China-Cambodia Action Plan for Building a Community of shared future shows that the relationship between the two countries has reached a new historical height-Interview with Wang Wentian, Chinese Ambassador to Cambodia]. May 05, 2019. Available at http://www.xinhuanet.com/asia/2019-05/05/c 1124453857.htm accessed February 05, 2021
- Xinhuawang新华网. (2018). "Lǐ Kèqiáng tóng jiǎnpǔzhài shǒuxiàng Hóngsēn jǔ háng huìtán shí qiángdiào xiéshǒu dǎzào zhōng jiǎn jùyǒu zhànlüè yìyì de mìngyùn gòngtóngtǐ" 李克强同柬埔寨首相洪森举行会谈时强调 携手打造中柬具有战略意义的命运共同体 [During talks with Cambodian Prime Minister Hun Sen, Li Keqiang emphasized that China and Cambodia will work together to build a strategically meaningful community with a shared future for China and Cambodia]. January 11, **2018.** Available at http://www.xinhuanet.com/2018-01/11/c_1122246865.htm accessed February 08, 2021
- Yun, Sun. (2021). "China's Stakes in the Myanmar Coup". *Institut Montaigne*, February 19, 2021. Available at https://www.institutmontaigne.org/en/blog/chinas-stakes-myanmar-coup accessed February 26, 2021
- Zhongguozhengfuwang中国政府网. (2018). "Wáng Yì: Jiànshè lán méi guójiā mìngyùn gòngtóngtǐ kāichuàng qūyù hézuò měihǎo wèilái" 王毅: 建设澜湄国家命运共同体开创区域合作美好未来 [Wang Yi: Building a community of shared future for Lancang-Mekong countries to create a bright future for regional cooperation]. 来源: 人民日报. March 23, 2018. Available at http://www.gov.cn/guowuyuan/2018-03/23/content_5276766. htm accessed February 05, 2021

The United States' Multilateral Security Cooperation in Southeast Asia in the First Two Decades of the Twenty-First Century and the Impacts on Vietnam

Bui Thi Thao* • Le Van Anh** • Nguyen Tuan Binh***

Abstract The purpose of this article is to clarify the issue of the US multilateral security cooperation in Southeast Asia during the first two decades of the twenty-first century and its impact on Vietnam. This study focuses on analyzing two fundamental issues: the crucial drivers to promote the US multilateral security cooperation with Southeast Asian countries; the main multilateral security cooperation activities that the US conducted in Southeast Asia from 2001 to 2020 and their impacts on Vietnam. To carry out this research, in addition to the historical research method, the author focuses on using analytical - synthesis method academic documents, diplomatics papers to deeply understand the research object, combining systematize method author's research data to make relevant assessments. From the research results, the article shows that: 1. Multilateral security cooperation is an effective way for the US to minimize the disadvantages of its geopolitical position in Southeast Asia; 2. The content of multilateral mechanisms proposed or joined by the US in Southeast Asia is aimed at comprehensive security but tends to focus on the military-security; 3. The "US' multilateral security cooperation activities in Southeast Asia have had profound and vital impacts on Vietnam, especially since the establishment of the Comprehensive Partnership (July 2013) in the context of Vietnam is facing security challenges in its sovereignty dispute in the East Sea.

Keywords: Multilateral security cooperation, the US, Southeast Asia, impact, Vietnam.

Introduction

There have been many studies on the security situation and security architecture in Asia-Pacific, including studies on the situation of multilateral security cooperation in

E-mail: nguyentuanbinh@dhsphue.edu.vn

Bui Thi Thao* (⋈), Le Van Anh**, Nguyen Tuan Binh***

^{*} Associate Professor, History Department, University of Education, Hue city, Vietnam.

Email: btthao@hueuni.edu.vn

^{*} Assoc. Prof., History Department, University of Education, Hue University, Hue city, Vietnam. E-mail: levananh@dhsphue.edu.vn

^{***} Ph.D., History Department, University of Education, Hue University, Hue city, Vietnam.

Southeast Asia. The typical studies can be mentioned as" "Cooperative Security in the Asia - Pacific: the ASEAN Regional Forum" (Hürgen, & Noel, 2010), "The Architecture of Security in the Asia-Pacific" (Ron, 2011), "Bilateralism, Multilateralism and Asia-Pacific Security: Contending Cooperation" (William & Brendan, 2013), "Southeast Asian Security in the New Millenium" (Richard & Sheldon, 1996). These studies all confirm the complexity of Asia-Pacific security in general, including Southeast Asia' security, from the beginning of the twenty-first century to the present and recognize the role and dominance of the 'US's bilateral security alliances in this region. Typically as the evaluation of Ralf Emmers: security cooperation in Asia-Pacific continues to be dominated by bilateral alliances between the US and regional partners. These links are keys to regional stability (See & Amitav, 2004: 3-18).

Meanwhile, several other scholars have studied the US national security strategy for Southeast Asia in the post-Cold War period (Fraser Cameron, 2005), (Nguyen Hoang Giap, Nguyen Thi Que & Nguyen Thi Le, 2007), (Pham Cao Cuong, 2019) and debated the multilateralism in the foreign policy of this great power (Stewart Patrick, Shepard Forman (Ed.), (2002). However, these studies focus on analyzing the content of each security strategy (Nguyen Hoang Giap, Nguyen Thi Que & Nguyen Thi Le, 2007) or presenting the views of the US government on multilateralism in foreign policy. Therefore, the 'US' multilateral security cooperation aspect is also mentioned but is generalized because of the "se studies' access vast space. They access the Asia-Pacific region instead of just in Southeast Asia. As a result, there is a lack of a separate study on the US multilateral security cooperation in Southeast Asia.

In Vietnam, there are two main approaches related to the topic of multilateral security cooperation in Southeast Asia. These are:

- Research on strategic competition among great powers (especially between the US and China) in Southeast Asia (Nguyen Thai Yen Huong Ed., 2011), (Nguyen Hoang Giap Ed., 2013), (Tran, Khanh Ed., 2014);
- Introduce multilateral security cooperation mechanisms and analyze their role in the general security architecture of East Asia (Hoang Minh Hang 2014), (Phan Thi Thu Dung 2018).

Both these approaches refer to the presence of the US but are not intended to systematically analyze multilateral security cooperation issues of this great power in Southeast Asia. The studies mentioned above have suggested ideas and provided valuable data for us to carry out this research.

1. The Driving Forces Promote the US Multilateral Security Cooperation in Southeast Asia in the First Two Decades of the Twenty-first Century

1.1 The Objective Factors

The key reason driving the US to promote security cooperation in Southeast Asia at the beginning of the twenty-first century was the transformation of the security

environment in this region, with growing complex and vital security issues that have profound effects on strategic interests and position of the US. In addition to the historical and traditional internal security issues¹, there are also challenges of nontraditional, multi-faceted and multi-border security in Southeast Asia from the earlyfirst century up to now. Among them, the most serious challenges are the rise of international terrorism, the development of radical nationalism, territorial disputes, the proliferation of weapons of mass destruction, pandemics, environmental degradation, out of resources. All of these security challenges require a multitude of countries to work together. According to Thayer Carlyle A. (2010), at least eight major trends driving strategy changed the strategy of Southeast Asian countries strategy, which led to many difficulties for their foreign partners like the US. However, despite this security status, Southeast Asia's role - through the ASEAN organization and individual Southeast Asian countries - has grown with the advancement of the geostrategic values of this region. In addition to the dynamic, fairly sustainable economic development and the thriving regionalism consciousness of Southeast Asian countries, 'China's expansion of influence in the region serves as a "catalyst" powerful in upgrading the geopolitical position of Southeast Asia. China has been quietly, quickly filling the "power vacuum" created by the US and Russia in Southeast Asia after the Cold War ended in the mid-1990s and has stepped up to do so with a "Charm offensives" from the early twenty-first century. Accordingly, along with the sudden and continuous increase in economic and military strength, China drastically has implemented neighboring diplomacy, focused on multilateral cooperation modalities, and gained many achievements in all aspects², especially economy and military. Not only cooperating

The Southeast Asean countries have to resolve the historical existence of bilateral and multilateral between them. Southeast Asia is the regional capital of the native security elements complex, is influenced strongly, deeply from the Cold War security situation becomes more and more complex. In particular, territorial disputes, territorial Asean's potential risks, the biggest threat to stability within Asean. That was the cases of territorial dispute between the Philippines and Malaysia in Sabah; between Malaysia and Singapore in Pedra Branca island; between Malaysia and Indonesia in two islands of Sipadan and Ligitan; between Malaysia and Thailand on the border of the two countries; between Thailand and Cambodia over ownership of the temple Preah Vihear; territorial sovereignty dispute over the East Sea ... These problems were resolved through different degrees and ways, but there is no end. In addition, differences in political institutions and national interests lead to differences in some cognitive issues and security concepts. In addition, the recent security developments showed, the Southeast Asian countries not only face the non-traditional security problems but also the emerging traditional security problems, especially disputes territorial sovereignty, the rise of extreme nationalism ... (Bui Thi Thao 2014: 549).

² Since the Asian financial crisis in 1997, China has promoted to build a legal basis to move towards establishing multilateral cooperation mechanisms in many fields with Southeast Asian countries through ASEAN's role. Most notably: the issuance of the ASEAN-China Joint Declaration (December 16, 1997), signing the ASEAN-China Free Trade Area Framework Decree (2002), signing the "Joint Declaration on

with individual countries, but China also promotes multilateral cooperation with Southeast Asian countries through the role of ASEAN. The noteworthy aspect here is that China is increasingly acting assertively in international relations besides "financial diplomacy," "cultural and carrot diplomacy." China's worrisome acts have a profound impact on the security environment and the security structure of the area; it threatens the interests and position of the US and prompts the US to implement a corresponding multilateral security strategy.

As for Southeast Asian countries, besides interests, Southeast Asian countries also recognize economic dependence, political and diplomatic pressure, and the increasing risk of insecurity from over-dependence on China, especially when its ambitions are increasingly evident through its ambition to monopolize the East Sea and the "China's Dream" grand strategy. These threats from China are the basis for Southeast Asian countries to implement the policy of balancing the big powers, promoting the need for security cooperation with the US (and other powers) as a balancing factor in relations with China. These are also favorable objective conditions for the US to promote security cooperation in Southeast Asia in the first two decades of the twenty-first century.

It could be said that, from the beginning of the twenty-first century until now, Southeast Asia's role in the US has been emphasized more and more than ever by the integrated impact of many major security issues and related to the rise of China - a global strategic rival of the US. In particular, security of the East Sea, the Chineseization trend, and the substantial, fundamental role of ASEAN in the security architecture of Southeast Asia are the security aspects that urge the US to prioritize multilateral cooperation than focus on traditional bilateral security alliances as before. However, the U.S' skepticism of multilateralism stemmed from past failures to build broad-based institutions (Jürgen Haacke and Noel M. Morada 2010: 37).

1.2 Internal Dynamics

Minimizing the disadvantage of geopolitical position in strategic competition with other regional powers in Southeast Asia is one of the motivations for the US to orient itself towards multilateral security cooperation in Southeast Asia from the beginning of the twenty-first century. The US's geopolitical weakness in East Asia in general and Southeast Asia makes it difficult for the US to defend its multi-faceted interests,

the Conduct of Parties in the East Sea (DOC) and "Joint Declaration on Cooperation in Non-Traditional Security" (2002), expanding "Strategic Partnership" (2004) relationship with ASEAN in all fields ... According to China's data, from the first half of 2020, China's bilateral trade with neighboring Asia reached 632.1 billion USD, accounting for 31% of China's total foreign trade turnover. In particular, China's trade turnover with ASEAN increased by 5.6% over the same period in 2019. Accordingly, Southeast Asian countries have become China's largest economic and trade partners. About 76% of China's non-monetary direct investment capital into countries along the "Belt and Road" goes to Southeast Asia (La Chieu Huy 2021).

universalizing American values, and affirm its leading position in this area. Indeed, while China and other regional powers such as Japan and India have apparent geographical proximity advantage and relations in Eastern culture mutual exchanges, the US is recognized as a "Western" power with many spatial, cultural, and historical differences... The disadvantage of geopolitical position created a great barrier for the US to "come back" Southeast Asia after the Cold War. The US had "a lack of understanding" about Southeast Asia and neglected the region until the late 1990s. The United States had engrossed in the punitive war in the Middle East, deeply involved in Europe, North Africa, underestimated the role of ASEAN, and neglected Southeast Asian countries in the 1997 financial and monetary crisis. As mentioned above, actions stemming from the distraction caused the US role in Southeast Asia to be overshadowed and compromised its position. On the contrary, that created a great opportunity for China to promote geopolitical dominance through "neighboring diplomacy", step by step building up favorable foundation conditions for promoting of their enormous initiatives and strategies such as "Community of Common Destiny" for mankind (2012), "Belt Road Initiative" (BRI - 2013) to realize and universalize "China plan" by economic, military, cultural ..., affirms regional leadership, realizing the "Chinese Dream". The above contradictory results reflect the strategic mistakes of the US and clearly reveals the geopolitical disadvantage of this power in East Asia and Southeast Asia.

Therefore, the US must adjust the strategy to overpower this adverse status and curb China's influence rapidly. Accordingly, favorable access enhances the frequency, scale, and level of presence to show strength; expanding space and content cooperation requires the United States to develop security links and promote multilateral cooperation. In implementing this cooperation method in Southeast Asia, the September 11, 2001 event makes sense as a push. It marked the return of the United States and opened a new period in the US Security Policy for Southeast Asia. After establishing a Department of Homeland Security (DHS) in 2002, the United States quickly built a global multilateral alliance against terrorism, in which Southeast Asia was identified as "The Second Front." The US' new positioning of Southeast Asia in the global alliance against terrorism is a convenient opportunity for the US to adjust its security cooperation strategy to multilateral trends. However, to overcome a limited geostrategic position in competing with China, the US needs more than a terrorist alliance. So, the contents security cooperation of the US in Southeast Asia in the first two decades of the 21st century and the future are multilateral and multi-field, towards comprehensive security goals. This goal reflects the cooperation needs of the United States with Southeast Asian countries and in the opposite direction.

The second essential driving force is that the US must overcome the mismatch between the security strategy for East Asia, which is increasingly spatially expanded, growing in size by the United States with the other side the actual limited presence of security links (resources) to deploy them. In Southeast Asia, this has been observed through the US" delay in diversifying their security partners network. By the end of 2000, key US military links remained bilateral alliances with Thailand and the Philippines. The first bricks for the US to expand security links in Southeast Asia are the commitment to strengthening defense cooperation with the traditional partner (Singapore) and the "new partner" (Vietnam) after their coalition against terrorism was established in 2001. This was not enough, significantly when terrorism in Southeast Asia grew relatively "benign" and quickly gave way to a more significant threat from China's wields decisive, systematic, and comprehensive influence expansion through their series of multilateral commitments, enormous initiatives, and actions.

In fact, the US had adjusted their East Asia security strategy towards a broader and more inclusive direction, while they were approaching Southeast Asia increasingly directly since G.W. Bush (2001 - 2008) and more substantially from the B. Obama period (2009 - 2016) to D. Trump (2017 - 2020) through the "Pivot to Asia strategy" and the "Free and Open Indo-Pacific strategy." However, the tendency to "selectively deploy" security issues and focus on bilateral security alliances that have been maintained for a long time has created security linkage blanks, preventing the US from having enough resources to implement these great new security strategies. Therefore, expansion of the partnership network, spatial development, scale, and content of cooperation are the driving forces for the US to promote multilateral security cooperation in Southeast Asia and maintain and consolidate bilateral security alliances.

The tradition of security cooperation between the US and Southeast Asian countries is favorable for the US to deploy this dynamic. Security cooperation in Southeast Asia can be viewed as an advantage for the US. The reason for this strength is the presence of the US's five bilateral military alliances with some 100,000 troops in East Asia (Jürgen Haacke and Noel M. Morada 2010: 36). These security alliances allow the United States to maintain a relatively regular military influence and presence in Asia. As a result, the US is almost entirely proactive in its decision to return to Southeast Asia. The inherent security ties are an advantage even though it gives the US a subjective mentality (as it seems that all of the security concerns have been resolved by the bilateral alliances). However, the traditions of security cooperation and these bilateral alliances are key links for the US to expand security cooperation in a multilateral way.

In addition, the achievement of an essential forward step in relations with ASEAN is also a favorable condition for the United States to implement the multilateral security cooperation process in Southeast Asia. Since the second term of President G.W. Bush (2004 - 2008), the US and ASEAN have reached many cooperation agreements in essential areas: Joint Vision Statement on the ASEAN - US Enhanced Partnership (November 17, 2005); Trade and Investment Framework Agreement between the US and ASEAN (TIFA - August 25, 2006). In 2007, the US Senate also passed a resolution upholding 30 years of US-ASEAN relations (June 2007), appointed an ambassador to ASEAN (2007). The United States became ASEAN's first dialogue partner to appoint

an ambassador, opening a phase to promote US-ASEAN relations. This is a foundation for accelerating the US' multilateral strategy implementation in Southeast Asia, first of all in the security and defense field.

In short, from the beginning of the 21st century, in addition to objective factors (in which China's impact plays a key role), the US multilateral security cooperation process is also driven by internal dynamics. All of these factors show that the US promotes multilateral security cooperation in Southeast Asia is inevitable.

2. The US Multilateral Security Cooperation Activities in Southeast Asia in the First Two Decades of the Twenty-first Century and Their Impacts on Vietnam

2.1 Actively Participating in Multilateral Security Cooperation Mechanisms Led by ASEAN

The participation in ASEAN-led security cooperation mechanisms was promoted by the United States after more than two decades (1977-2000) underestimated ASEAN's role as a significant regional organization. By the beginning of the twenty-first century, after President G.W.Bush started the war on terror (2001) and signed with Southeast Asian countries the Joint Declaration on Cooperation against Terrorism (August 2002), the US promoted multilateral security cooperation in this region. By 2020, the US has joined the four most important multilateral security cooperation mechanisms led by ASEAN. In which, except ARF, which the US has joined as a founding member since 1994, the remaining three mechanisms (includes Shangri - La Dialogue (SLD), East Asia Summit (EAS), ADMM +) all are new mechanisms that were established in the early twenty-first century³. ARF concentrates on political and security issues, while SLD and ADMM + favor security-military issues, and the EAS focuses more on non-traditional security issues. The US has gradually joined these mechanisms and deployed strategic security objectives in Southeast Asia as a focal point in its comprehensive strategic competition with China in Asia.

The US joined SLD as a founding member in 2002. Although Southeast Asian countries host SLD, it is an open, intergovernmental security forum in the Asia-Pacific region. Therefore, participation in SLD helps the US to share, express their views and attitudes about urgent common security concerns in the region. Through this forum, the US affirms its status as a Pacific nation, increasing its presence and sharing of security concerns, seeking opportunities for cooperating and promoting security solutions for

³ SLD is an intergovernmental security forum for Asia-Pacific countries, chaired by Southeast Asian countries through Singapore's leading role, established in 2002; East Asia Summit (EAS) was established in 2005 by 10 ASEAN countries and 6 East Asian countries (China, Japan, Korea, India, Australia and New Zealand) on the ASEAN +3 platform; ADMM + was established in 2010 on the basis of ADMM, which is ASEAN's highest private defense-security mechanism with key partners outside the region. In addition to the US, ADMM + 's main partners include China, Korea, Japan, India, Australia, New Zealand and Russia.

urgent security issues in the region, especially solving the East Sea issue by two main channels: political-diplomatic route; deploys military moves in the East Sea. At the 14th SLD (May 2015), with China rushing to build artificial islands and build illegal military facilities on 7 rocks in Spratlys, the US began the Maritime Security Initiative (MSI) for a military exercise with Southeast Asian countries only. Through his speech at the forum, the US Secretary of Defense - Ash Carter - publicly expressed the US government's views on the East Sea issue and objected to China's behaviors in this sea (Prashanth Parameswaran 2015). At this forum, the US also pledged to appoint a new Defense Advisor to represent the US Mission to ASEAN to improve coordination and share information for maritime security, disaster response, and humanitarian activities.

Under President Donald Trump (2017 - 2020), the US uses SLD as an essential security cooperation channel. At the 16th SLD (June 2017), the US publicly supports ASEAN's centrality role in the regional security architecture. Along with the above statement, US Defense Secretary J. Mattis has been frankly opposed to China's blatant encroachment on international law, declaring in favor of an area order that was built based on the rule of law, and announced the plan to send their troops to the Asia - Pacific area. Accordingly, the US will transfer 60% of the Navy, 55% of the Army force, and 2/3 of the Marine force to the Asia - Pacific (Nguyen Ngoc Anh 2017: 38). From the 17th SLD (2018), the US has gradually established a common voice with European countries in the freedom of navigation issue in the East Sea. With the support activities from France, the UK, and recently the Netherlands and Germany, the US urged European countries to work together to carry out regular "patrols" in the East Sea. The moves, as mentioned above, show the positive and decisive character and the significant role and influence of the US on regional security, especially East Sea issues and ASEAN's central role.

After promoting the "Pivot" to Asia strategy and signing ASEAN's Treaty of Amity and Cooperation (TAC - July 2009), the B.Obama administration has quickly integrated ADMM + and EAS (2010). The content of these new mechanisms reflects the current and rapidly evolving situation of a complex security environment in Southeast Asia and East Asia from the beginning of the twenty-first century to the present. ADMM+ is an official ministerial-level multilateral cooperation mechanism dedicated to security and defense. At ADMM+, the content of cooperation includes policy dialogue and practical activities implemented (includes: drills on the sand-table and in the field). Thanks to that, the US military and armies of Southeast Asian countries can train together, build confidence and habits of cooperation. Dialogue and exercises within the framework of ADMM+ contribute to capacity building and enhancing interactions among member countries in addressing shared security challenges, especially the security of the East Sea. Together with SLD, ADMM+ provided an additional opportunity for US Defense Ministers to go to Southeast Asia, exchange views with all of their key counterparts in the region, and articulate the

vision of the US government on regional security and building personal relationships. In the framework of ADMM +, the US participated in 2 large-scale anti-terrorist battles in Indonesia (2013) and Brunei (2016), contributing to the improvement of the combat capabilities of the anti-terrorist forces of Southeast countries. Asia (Nguyen Thi Thu Huong 2017: 61). The US attended the East Asia Summit (EAS) as an official member from the 6th EAS (November 2011) in Bali, Indonesia. With a diversity of cooperation content, focusing on 17 areas, and an annual forum for dialogue on strategic issues at the head of state level of Southeast Asian countries and major partners, the EAS is the fundamental pillar in the regional security structure. As a result, joining the EAS is a way for the US to regain a legitimate position in regional diplomacy, understanding the security challenges that Asia is facing and understanding thoroughly the internal and outside political dynamics in Southeast Asia as well as in East Asia (Vietnam Academy of Social Sciences 2009: 151). Participating in EAS is an effective way for the US to be deeply present in Southeast Asia's political-security architecture.

It can be said that the active participation in and active operation in ASEAN-led security mechanisms is the fastest and most effective way for the US to establish the foundation for multilateralization of a security cooperation strategy in Southeast Asia in the context of fierce strategic competition between the great powers. However, it should be noticed that these cooperation mechanisms are all open mechanisms with weak legal constraints and the presence of many regional powers (China, Japan, India). Therefore, the major challenge for the US in these mechanisms is to design helpful cooperation options that meet the interests and the need to solve practical security problems of Southeast Asian countries, providing them with substantive confidence and consensus in recognizing the US' vital role in the security and prosperity of the region.

2.2 Launching Initiatives to Promote Multilateral Security Cooperation in Southeast Asia

From the end of the first term, the G.W.Bush administration began to promote multilateral security cooperation initiatives in East and Southeast Asia. In Southeast Asia, the US proactively proposes and implements three important multilateral security initiatives, including Regional Maritime Security Initiative (RMSI), Southeast Asia Maritime Security Initiative (MSI), and Lower Mekong Initiative (LMI). All of these initiatives focus on non-traditional cross-border security issues. In particular, RMSI and MSI concentrate on maritime security, LMI focuses on economic security, health, and civil issues. In addition, the US participates in other complementary security initiatives such as the Container Security Initiative (CSI) to guarantee the security of seaports and the two Southeast Asian countries, Singapore and Thailand.

RMSI was launched in March 2004 by Admiral Thomas B. Fargo, Commander of the US Pacific Command (USPACOM), to develop partnerships with countries in the Asia-Pacific region in the detector, track and prevent transnational security threats in the strait. Although it goes beyond Southeast Asia, RMSI is powerfully deployed by

the US in this region - where the arterial maritime routes such as the Strait of Malacca and East Sea are present, closely linked with the US and its allies interests, are facing many security threats, especially terrorism, piracy, maritime resource disputes, and serious territorial disputes... For the US, even these Southeast Asia shipping routes (including the Sea East) accounts for only 4% of US trade (Nguyen Hoang Giap et al. 2007: 136) but ensuring they are smooth is a key benefit to the development of the entire marine trading system in East Asia (especially energy, military equipment trade), ensuring freedom of navigation security and maintaining the US influence in the region. Outside the US, the members of RMSI in Southeast Asia are Indonesia, Malaysia, Singapore, and Thailand. Initially, RMSI cooperation included information sharing, early warning to combat marine security threats but was later expanded to include: joint patrol, technical assistance, and human training. However, the issue is "who will act as a backup force in the strait?

Furthermore, who will order if something goes wrong"? These are related to national sovereignty and perceptions about security and the security capacity and responsibility of the strait states, especially Indonesia and Malaysia. Therefore, while Singapore welcomed Indonesia (2004), then Malaysia (2005) rejected the US proposal of a joint patrol under the RMSI (AlfredDaniel Matthews 2011: 54). They thought that this US proposal had denied security capacity and violated the sovereignty of the strait states. Therefore, the operational content of RMSI is narrowed down and cannot be maintained for long. However, RMSI is closely related to the "Popular Security Initiative" (PSI) in East Asia - aimed at preventing the proliferation of WMD, targeted by the US for security purposes in Northeast Asia. According to security experts, RMSI was part of the new US maritime and defense strategy transition under President G.W.Bush (Kwa Chong Guan 2007: 134-145). RMSI is one of the ways to help the US adapt to a grand strategy in Southeast Asia in the new security context.

MSI was officially announced by the US Secretary of Defense - Ash Carter - in June 2015 at the 2015 Shangri-La Dialogue in Singapore. MSI aims to assist Southeast Asian countries in building collective capacities to coordinate to address a wide range of maritime security challenges, mainly in the East Sea. MSI was included in the Department of Defense Asia-Pacific Maritime Security Strategy by the US administration in August 2015 and granted 425 million USD for 5 years, starting from fiscal 2016 for deployment on behalf of is part of the Defense Authorization Act. Specifically: 2016: 50 million USD, 2017: 75 million USD, and 100 million USD for each year 2018, 2019, 2020 (Prashanth Parameswaran 2016). MSI is also called the "East Sea Initiative," which the US applies to countries along the East Sea, including Indonesia, Malaysia, the Philippines, Thailand, and Vietnam. The items supported by the US through authorization to the MSI's members are small-scale military equipment, supplies, training, and construction. In addition to the member countries mentioned above, Brunei, Singapore, and Taiwan also participate in MSI as

"supplementary sponsor countries" and may be involved in MSI's training and other activities. MSI focuses on enhancing regional maritime domain awareness (MDA) and moving towards establishing a common operating picture (COP) in Southeast Asia. The establishment of COP is one of the four contents of the goal of building "lines of effort" of the US in Southeast Asia. The three remaining contents are strengthening the US military capacity, taking advantage of military diplomacy, and strengthening regional security institutions. Through funding for building maritime security capacities for Southeast Asian countries, MSI is a commitment of sustainable resources of the US to partners in the challenging budget environment. This initiative represents the US administration's "rebalancing" effort in Southeast Asia and is a US step towards expanding its security partnership network to realize its broad strategic goals in East Asia. MSI also affirmed the trend of multilateral security cooperation of the US. MSI is promoted by the Donald Trump administration (and the incumbent President J.Biden administration) in the context of complicated East Sea security with increasingly aggressive behaviors and militarization tendency from China.

To promote multilateral cooperation in civil security in the Mekong sub-region, the US initiated the LMI in 2009. LMI aims to promote cooperation and assistance of the US to the Lower Mekong countries (Thailand, Laos, Cambodia, Vietnam, and Myanmar⁴) on the environment, health, education, and infrastructure. Through the LMI, the US has proposed and funded many projects to help Southeast Asian countries improve their capacity to manage and efficiently use natural resources from the Mekong River, promote agricultural economics, develop energy markets, respond to disasters & epidemics, empower women and develop sustainable infrastructure ... Under the LMI framework, from 2009 to 2020, the US launched many valuable initiatives such as the "Mekong Forecasting Program" (2009), Initiative of the Partnership between the Mekong River Commission (MRC) and the Mississippi River (2010), the "Water and Food Security" program in 2012. LMI is seen as evidence demonstrating the determination to "return to Southeast Asia" by the B.Obama Government. The D.Trump Administration has continued to pursue LMI with the prominent proposal of the 2017 Mekong Water Resources Data Initiative (MWDI). These assist countries in collecting and sharing information for sustainable water management, especially in the context that China's energy development by hydroelectric dams upstream poses a severe threat to people's lives in downstream countries. US Secretary of State Mike Pompeo has continuously attended the 11th LMI Foreign Ministers Meeting (August 2018) and the 12th (8-2019). In particular, at the 12th LMI Foreign Ministers Meeting, Secretary of State Mike Pompeo announced that the US would join Japan to establish the "Japan-US - Mekong Power Partnership" (JUMPP) to support the Mekong

⁴ Three years after the establishment of the LMI, Myanmar just joined and became an official member of this initiative at the 2020 Mekong River Initiative Conference at the level of Foreign Affairs in Cambodia, on July 13, 2012.

countries to ensure energy security sustainably. As a result, LMI is well received by the member countries. It can be said that this is an important geostrategic security initiative of the US in South East Asia because it opens the way for the US to penetrate into the Southeast Asian continent, develop soft power and strengthen the indispensable role of the US in this region.

2.3 Hosted and Participated in Joint Exercises with Southeast Asian Countries

Since the early 1980s, the US has focused on implementing joint exercises with Southeast Asian countries, first of all with traditional allies (Thailand, the Philippines) in a bilateral manner. From the beginning of the twenty-first century to the present, along with the development of regionalism and the complexity of the security environment in Southeast Asia, the US has increased its development and participation in multilateral joint exercises with Southeast Asian countries. By 2020, the US has conducted many multilateral exercises with Southeast Asian countries. In which, the four most critical multilateral drills include: "Cobra Gold" - upgraded to multilateral since 2000 with the participation of Singapore in addition to the US and Thailand armies⁵; "Southeast Asia Cooperation and Training Exercise" (SEACAT); COPE Tiger exercises and ASEAN -US Maritime Exercise (referred to as AUMX). In which, "Cobra Gold" is the largest annual multi-modal exercise of the US in Asia, mobilizing from 3,600 to 5,500 soldiers from the Army, Navy, and Marines and many of the most modern weapons of America. SEACAT⁶ is the US's only annual multilateral naval exercise in Southeast Asia (with 8 Southeast Asian countries: Thailand, the Philippines, Indonesia, Singapore, Malaysia, Brunei, Cambodia, Vietnam, and 2 South Asian countries (Bangladesh and Sri Lanka.) COPE Tiger is considered Southeast Asia's most prominent multinational air drill and includes humanitarian projects, community activities, helping people (Thailand), health care, and cultural exchanges among participating countries. With these exercises, the US formed a multipurpose security partnership network that could effectively cooperate on a large scale in Southeast Asia. On that basis, the bilateral security alliances have also been strengthened and expanded.

The most prominent event in US multilateral security cooperation in Southeast Asia was the first maritime exercise between the US and 10 ASEAN countries (ASEAN - US Maritime Exercise, or AUMX for short) in September 2019⁷. This exercise is aimed at "enhancing the combat together skills of ASEAN and the United States" and "not against or targeting anyone else," as US Rear Adm. Murray Joe Tynch, US navy's Western

⁵ Initially, "Cobra Gold" was a military exercise bilateral between the US and Thailand, held since 1982.

⁶ SEACAT was developed in 2012 from the SACAT- Southeast Asia Cooperation Againts Terrorism exercise between the US Navy and 6 Southeast Asian countries, namely Thailand, Singapore, Brunei, Indonesia, Malaysia and the Philippines. SACAT started in 2002

⁷ AUMX was first proposed at the Association of Southeast Asian Nations Defense Ministers' Meeting Plus (ADMM-Plus) in 2017 and confirmed during the 12th ADMM in October 2018.

Pacific logistics group commander in Southeast Asia, said. However, no one can deny the significance of this exercise. The AUMX and the exercises mentioned above are both a strong US commitment to Southeast Asian partners, affirming the US's pillar role in the regional security order and the most powerful deterrent to China's ambitions.

2.4 Impact on Vietnam

The US is a major power factor that significantly influences the security and development of Vietnam's defense. Although established on a challenging foundation and started later than other fields, cooperation between the United States and Vietnam in the field of security and defense since the beginning of the twenty-first century has developed rapidly and positively8. For Vietnam, the US is the earliest power to develop the Defense Strategy Dialogue (2010) compared to other major partners such as Russia, China, and Japan. Through these cooperation mechanisms, the US holds an important position in security-defense policy-making (especially after the two countries established the Comprehensive Partnership 7-2013) and factors that directly impact the implementation of security-defense goals in Vietnam. The most important objectives are: strengthening defense potential and defense personnel capacity; modernizing weapons and defense equipment; foreign defense - security; and the settlement of the East Sea issue (Bui Thi Thao 2016: 17-21). From the beginning of the twenty-first century up to now, along with the GWBush administration's implementation of the war on terror, Vietnam was mentioned for the first time in the US National Security Strategy to strengthen the "Asian Alliance". Accordingly, the content of US-Vietnam securitydefense cooperation was extended out of the framework of a bilateral settlement of war legacy issues during the period 1991-2000 and strengthened through multilateral cooperation. Therefore, enhancing multilateral security cooperation with the US and Southeast Asian countries is essential content in Vietnam's foreign security-defense policy and has a direct and vital impact on Vietnam's national security.

In the first two decades of the twenty-first century, Vietnam has been present in most of the multilateral security cooperation mechanisms that the US participates in and implements in Southeast Asia except the RMSI security initiative (for the Strait countries as Malacca and Singapore) and COPE Tiger exercises (for the air force of Thailand and Singapore). In particular, it should be seen that the majority of multilateral security initiatives and multilateral exercises in Southeast Asia have only

⁸ After laying the foundation by the annual exchange mechanism at the Department level in 1997, up to now, the US and Vietnam have 3 mechanisms for security-defense cooperation: Bilateral defense dialogue (The US Pacific Command presides over, since 2005); Political - Security - Defense Dialogue (Ministry of Foreign Affairs of the two sides preside over, since 2008) and National Defense Policy Dialogue (Ministry of Defense of the two countries preside over, since 2010).

⁹ See the US National Security Strategy, June 2002 https://georgewbush-whitehouse.archives.gov/nsc/nss/2002/. Accessed 25 March 2020

been promoted by the US since the end of the first decade of the twenty-first century, with the fierce expansion of the influence of China, especially in maritime security and the East Sea issues. As a state in a territorial dispute with China, participation in US-led security initiatives and multilateral exercises profoundly impacts Vietnam.

On the positive side: multilateral security cooperation with the US helps Vietnam supplement cooperation content that the bilateral channel of the two nations does not have or have but not fully. On the other hand, joining the US in multilateral mechanisms helps Vietnam quickly integrate into the regional and international security cooperation environment as a partner with a unique historical relationship. Thereby, the two countries continue to build, consolidate strategic trust and support each other's international role. The US is also a significant power factor, helping Vietnam realize important (tangible and intangible) security goals, especially dealing with major security threats, maintaining a peaceful environment for modernizing the country, doing a foreign policy of peace, neutrality, integration, and integration enhancement of national position.

On the negative side: Because the US-Vietnam relationship in security-defense faces many obstacles and develops later than other traditional partners of the US (Thailand, Philippines, Singapore...), in many multilateral cooperation mechanisms with the US, Vietnam joined later than neighboring countries. Therefore, Vietnam must quickly settle the preparations and concentrate many resources to catch up with cooperation progress. Pursuing these multilateral security mechanisms could scatter Vietnam's national security goals over a given period. More importantly, Vietnam is deeply affected by the increasingly comprehensive and US-China solid strategic competition. Vietnam's participation in multilateral security cooperation mechanisms, especially maritime security initiatives and joint exercises with the US, may cause an adverse reaction from China, especially between Vietnam and China are in a complicated sovereignty dispute over the East Sea. Choosing a cooperation mechanism with appropriate participatory modalities, demonstrating a neutral foreign policy, cooperating in good faith and without harming economic relations with China is a challenge for Vietnamese policymakers.

3. Conclusion

Multilateral cooperation has been a strategic priority trend developed in the US security policy towards Southeast Asia from the beginning of the twenty-first century to the present. Then we are actively implementing this trend in Northeast Asia and in the entire Indo-Pacific region. This is a fact that reflects the development of "Security Pluralism" increasingly deployed by the US in the first two decades of the 21st century under the impact of increasing number and degree complexity of threats and cross-border security challenges in East Asia. Multilateral security cooperation is an indispensable method of the US and more indispensable for small and medium

Southeast Asian countries to minimize disadvantages in the goal of countering hegemonic ambitions by grand strategies of China. It is also suited in the context of the explosion of multilateral cooperation mechanisms in Asia from the beginning of the twenty-first century to the present. From President GWBush (2001-2009) to D. Trump (2017-2021) and present (2021), when President J. Biden continued to pursue the Free and open Indo-Pacific strategy with a comprehensive awareness of security challenges; multilateral security cooperation will be the "way of working of the US with the world" in the future. There, Southeast Asia will continue to be the US area to deploy a solid military-security presence for two major goals: freedom of navigation and control of regional order, against all hegemony ambitions to change the status.

Multilateral security cooperation mechanisms that the US participates in Southeast Asia diversified form, size, and mode of implementation. More importantly, the content and target of these mechanisms are essential for Southeast Asian countries because they create a functional interactive environment in various security aspects, making a significant contribution to prevent and solve common security threats. However, most of them tend to focus more on security-defense than on other areas. The majority of security-defense mechanisms reflect a characteristic of the US security policy towards Southeast Asia, especially when this region is witnessing fierce competition among great powers, a military modernization trend taking place firmly, and security-military solutions are recognized as a deterrent effective immediately. However, non-traditional security challenges, especially climate change, pandemics, biological risks, and hightech security, will focus on the US and Southeast Asian countries in the medium-term future. In Vietnam, multilateral cooperation with the US is an important content in the defense - foreign security policy. The promotion of this cooperation content not only reflects the development of the Comprehensive Bilateral Partnership between the US and Vietnam but also Vietnam's security strategy to actively take advantage of opportunities for active cooperation to build a strong defense - security, protect national interests and implement a balance of powers foreign policy to assert the nation's position in regional security conditions, and the security of the East Sea are extremely complicated, danger.

¹⁰ In the US "Interim National Security Strategic Guidance" published on March 3, 2021, the new J. Biden administration showed the inevitability of multilateral security cooperation by asserting: "... Recent events show all too clearly that many of the biggest threats we face respect no borders or walls, and must be met with collective action. Pandemics and other biological risks, the escalating climate crisis, cyber and digital threats, international economic disruptions, protracted humanitarian crises, violent extremism and terrorism, and the proliferation of nuclear weapons and other weapons of mass destruction all pose profound and, in some cases, existential dangers. None can be effectively addressed by one nation acting alone. And none can be effectively addressed with the United States on the sideline"(p.7). Source https://www.whitehouse.gov/wp-content/uploads/2021/03/NSC-1v2.pdf. Accessed 15 April 2021

Acknowledgment

This research is the result of the Hue University-level Science and Technology Project. Project Code: DHH2020-03-140.

References

- Amitav, A. (2009). Constructing a Security Community in Southeast Asia: ASEAN and the Problem of Regional Order. Routledge Publisher.
- Bui, Truong Giang (2008). Northeast Asia Multilateral Security Cooperation Mechanism: Current Situation and Prospects. In: Luu, Ngoc Trinh (Ed.). (2008). World economy, politics: problems and trends in progress. Labour Publisher, pp.171-182.
- Bui, Thi Thao (2014). New Steps in Securitty Military Relations between the United States of America and Vietnam in the First Decade of the 21st Century and thier Impacts on the Southeast Asia. *Journal of Southeast Asian Studies*, 2(167), 3-10.
- Bui, Thi Thao (2016). The US Factor in Vietnam's Current Defence Security Policy. *Journal of Southeast Asian Studies*, 8(197), 14 23.
- Bui, Thi Thao (2020). Impact of the US Factor on Vietnam Security and Development. *Americas Today Journal*, 2(263), 16-27.
- Fraser, C. (2005). US Foreign Policy after the Cold War Global Hegemon or Reluctant Sheriff?. Routledge Publisher.
- Hoang, Minh Hang (2014). Northeast Asia Multilateral Security Cooperation Mechanism: Challenges and prospects. *Vietnam Review of Northeast Asian Studies*, 5(159), 3-10.
- Kang, D. C. (2017). American Grand Strategy and East Asian Security in the Twenty-First Century. Cambridge University Press.
- Kwa, C. G., & John, S. (Eds.). (2007). *Maritime Security in Southeast Asia*. Routledge Publisher.
- La, Chieu Huy (2021). China promotes neighboring diplomacy before a one-hundred-year situation (La, Thi Thanh Loan translated from Chinese). http://nghiencuuquocte.org/2021/03/27/trung-quoc-phat-huy-ngoai-giao-lang-gieng/Accessed 27-3-2021.
- Le, Ba Thuyen (1997). *The US Engagement and Enlargement Strategy*. Publisher of Social Sciences.
- Le, Van My (Ed.). (2020). China and America with East Asian security since the 19th Congress of the Chinese Communist Party: Impacts and Forecasts. Publisher of Social Sciences.
- Le, Van Sang (Ed.). (2005). World economic situation in the first two decades of the twenty-first century. Publisher of the World.
- Matthews, A. D. (2011). ""Indonesia Maritime Security Cooperation in the Malacca Straits"." Indonesian Defense University Publisher.
- Nguyen, Ngoc Anh (2017). Shangri-La Dialogue 16: Perspectives and efforts to find solutions to the security challenge for a peaceful and developed region. *Journal of Defense Relations*, 39, 37-43.
- Nguyen, Nam Duong (2011). About the security structure in the Asia-Pacific region. *Journal of International Studies*, 3(86), 119-135.
- OECD (2016). https://www.oecd.org/dev/asia-pacific/near-term-moderate-growth-in-asean-says-

- <u>update-of-the-oecd-economic-outlook-for-southeast-asia-china-and-india-2016-vietnamese.</u> htm. Accessed: 17-3-2021.
- Pham, Cao Cuong (Ed.). (2019). US East Sea Policy in the New Context. Publisher of Social Sciences.
- Phan, Thi Thu Dung (2018). The Role of the Asia-Pacific Multilateral Security Cooperation Soft Mechanisms in Addressing Regional Security Issues. *Communist Journal*, 140, 92-96.
- Prashanth, P. (2015). ""US Launches New Maritime Security Initiative at Shangri-La Dialogue 2015". *The Diplomat* https://thediplomat.com/2015/06/us-launches-new-maritime-security-initiative-at-shangri-la-dialogue-2015/. Accessed: 15-7-2020.
- Prashanth, P. (2016), ""America's New Maritime Security Initiative for Southeast Asia A look at the Southeast Asia Maritime Security Initiative as it gets underway". *The Diplomat*. https://thediplomat.com/2016/04/americas-new-maritime-security-initiative-for-southeast-asia/. Accessed 15-3-2021
- Richard, J. E., & Sheldon, W. S. (Eds.). (1996). Security of Southeast Asia in the New Millennium. Publisher of M.E.Sharpe (Translation of the American Research Institute and Institute of Strategy and Science Ministry of Public Security. Hanoi, 2004).
- Ron, H. (Ed.). (2011). The architecture of security in the Asia-Pacific. ANUE Press.
- See, S. T., & Amitav, A. (Eds.). (2004). *Asia-Pacific Security Cooperation- National Interests and Regional Order*. M E Sharpe Inc.
- Ta, Minh Tuan (2007). US Role in Soft Security Mechanism in Asia-Pacific. *Journal of International Studies*, 2(69), 53-60.
- Thayer, C. A. (2010). Southeast Asia: Patterns of Security Cooperation (Australian Strategic Policy Institute. https://www.eastasiaforum.org/2010/10/29/southeast-asia-patterns-of-security-cooperation/. Accessed 1st July 2020.
- Tran, Van Tho (1998). *Industrialization of Vietnam in the era of Asia Pacific*. Publisher of Ho Chi Minh city and Saigon Economic Times (VPEC).
- Tran, Khanh (Ed.). (2014). Strategic Cooperation and Competition between the US and China in Southeast Asia in the First Three Decades after the Cold War. Publisher of the World.
- Vietnam Academy of Social Sciences and the Asia Foundation (2009). *America's Role in Asia the perspective of American and Asian scholars*. Publisher of Social Sciences.
- Japan Institute for Peace and Security Protection (1994). *Security Issues in Southeast Asia*. Publisher of National Politics (Translated by Doan Ngoc Canh).
- William, T. T., & Brendan, T. (Eds.). (2013). *Bilateralism, Multilateralism and Asia-Pacific Security*, Contending Cooperation. Routledge Publisher.

Food Policy, Governance and the South African Food Security

Adrino Mazenda*

Abstract Good governance and properly aligned food policies are necessary strategies for food security. This article explores the impact of governance on South Africa's food security. The article utilised a cross-section time series analysis, underpinned by the Ridge regression modelling technique to test the relationship between the endogenous latent Food security (FS) variable (Food production index, Food Imports, Household dietary index, Gross Domestic Product and Prevalence of malnutrition in the total population) and the exogenous Governance indicators (Government effectiveness, Voice and accountability, Political Stability, Regulatory Quality, the rule of law, and Control of corruption), from 1996 to 2020, utilising secondary data from the Food Agriculture Organisation (FAO), and World Bank. Results from the article show that the South African food governance challenges are mostly related to Corruption, Government ineffectiveness, and Regulatory quality. Political stability and the Rule of law are almost insignificant to explain an impactful relationship. The article recommended developing a compendious food security framework targeting agriculture productivity, societal inclusion, and overall improvement of dietary intake in poor communities.

Keywords: Governance, Food Policy, Food Security, South Africa.

JEL Classification: Q18

1. Introduction

Food insecurity causes chronic undernourishment to over 12% of the global population (FAO, 2015). At the same time, a third of the world's food supply goes to waste every year (Rossi, Vink & Sigge, 2017). Tirivangasi (2017) argued that food security is regarded as a major priority for all countries worldwide. However, people who\ live with chronic hunger and extreme poverty are often excluded from political representation, government services, and government benefits. The relationship between chronic hunger and governance is implicit in the Food and Agriculture

Adrino Mazenda*(⊠)

^{*} University of Pretoria, School of Public Management and Administration, Pretoria, South Africa. E-mail: adrino.mazenda@up.ac.za

Organisation's (FAO) definition of food security as "all people, at all times, having physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life" (FAO, 2015). Akanle, Adeshina, and Adesokan (2017) argued that food is a basic necessity that is key to human survival, and any state that failed to provide food supplies to its citizens adequately is regarded as underdeveloped. In many cases, food insecurity and malnourishment aggravate poverty, human wellness, and citizens' negative perceptions towards the state. The right to access food has been universally declared as a human right under the United Nations Declaration on Human Rights, the 1996 Rome Declaration of World Food Security and the United Nations Sustainable Development Goals set to be achieved by 2030.

Governments are directly and indirectly involved in enhancing food security. As such, all attempts to improve food security must also consider the role of governance (Candel, 2014). Sustainable agriculture and functioning governance systems are necessary for enhancing the food security position of a country.

The correlation of food security and governance suggests that attempts to reduce chronic hunger must integrate food security with governance systems, particularly accountability, transparency, effectiveness, and the rule of law (Haysom, 2015). This should extend to all stakeholders and should be part of food policies and the realization of the Sustainable Development Goals on food security.

Food security requires governance in all spheres. This follows the evidence of factors affecting governance, namely, globalization, the dominance of multinational companies, and weak public institutions, as major drivers of food insecurity in the world (McKeon, 2011). This is worsened by rising global food demand, putting pressure on already strained government resources. Effective coordination of governance, food security, and agriculture are key to reducing food insecurity (McKeon, 2011).

The challenges in South Africa's food security are mostly socio-economic, environmental, and governance-related. This is a major obstacle to the country meeting the Sustainable Development Goals and also fulfilling the constitutional mandate on the right to sufficient nutritious food (Pereira & Drimie, 2016). The environmental challenges encompass climate change, which has affected the overall food output. The socio-economic challenges relate to structural economic challenges, responsible for limited access to credit lines and smallholder farming support. The governance issues shape the South African economy's management and distribution of resources. Within the broad *governance* term are indicators determining the functioning of the state in fulfilling various mandates. It is against this background information that the article seeks to address the following research question:

• How does governance affect South Africa's food security? In support of the research question, the article hypothesises that: governance (as manifested by government effectiveness, regulatory quality, the rule of law, control of corruption, political stability and voice and accountability) positively impacts South Africa food security as denoted by the latent variables of the Food Production Index, the Household Dietary Diversity Index, Gross Domestic Product, Food Imports and Malnutrition Prevalence within the total population.

Similarly, the article answers the following sub-questions:

- What is the prevailing food policy framework in South Africa?
- What does the literature say about the relationship between food security and governance?
- What synthesis can be drawn from the preceding discussion?

This article draws on a Ridge Regression Model (RRM) to analyse the effect of governance on South Africa's food security. It argues that the country's food security challenges require, apart from institutional arrangements, good governance systems to eradicate poverty. It supports the essence of integrating supply-side and demand-side governancein enhancing the country's food security. Little is known, neither have adequate tests been done in the country, of how governance is a key factor in addressing national food security issues. The RRM presents an appropriate methodological framework for measuring the relationship between food security and governance. The reason is the model assumes non-normality and accounts for multicollinearity among test variables.

The first section provides an overview of the South African food policy framework. The second section provides the conceptual framework of the relationship between food security and governance. The third section presents the data and econometric approach materials and methods, followed by findings and analysis in the fourth section. The last section presents conclusions and recommendations.

2. South Africa food policy framework

Every country in the world has policies that govern the management and distribution of food to people. National policies and strategies are used importantly to show a country's vision, budgetary concerns, priorities, and the course of action (Schönfeldt, 2015). The South African government likewise has robust policy frameworks that aim to promote food management and food security. As Mupindu (2015) observes, food security policy has become an increasingly critical global issue that is affected by interrelated variables. The need to curb malnutrition has been on the agenda of various global villages in line with the Committee on World Food Security, the Rome Declaration on Nutrition, and achieving sustainable development goals.

Therefore, the South African government instituted the Integrated Food Security Strategy in 2002, with the main focus on ensuring food availability. It emphasized relief on food price inflation through school feeding schemes, welfare pay-outs, and food parcels (Kirsten, 2012). While these mechanisms were essential as safeguards for food-insecure households, the strategy failed to provide a framework for addressing the complex dimensions of the food system. This was due to ineffective institutional

arrangements combing the food security programmes of both government and private participants (Pereira & Drimie, 2016).

The 2013 Food and Nutrition Security Policy, together with the Fetsa Tlala, was endorsed by the cabinet with the aim of meeting the four pillars of food security at all economic levels. The policy expanded the Integrated Food Security Strategy and proposed inter-sectorial harmonization of existing policies. The policy did not meet the expected results due to the non-functional chain of command within the State's departments. Moreover, there was an absence of dialogue between the state institutions and various participants in the food sector. Specifically, the policy weakly recognized composite societal challenges in the South Africa food system (Pereira & Drimie, 2016). During the same period as the Food and Nutrition Security, the government enacted the National Development Plan, Vision 2030, which dictates strategies to improve food access. The NDP supports the food security social engagement between civil society, the private sector, the state, and other stakeholders. Such a gesture indicates the positive contribution of the state through the multi-sectoral approach (Pereira & Drimie, 2016). The equitable distribution of resources, continuous learning, and agriculture development were key in achieving food security from the program. This is in line with social safety nets, public works programs, agro-processing, and food value chains (NPC, 2012).

Many factors attribute to the failing policy systems governing food security in South Africa. In her study, Nkwana (2017) revealed that poor implementation of government policies due to insufficient synchronization in various spheres of government are responsible for the food insecurities experienced in the country. This is further constrained by the unplanned and inadequate information that would enable an analysis of food security gaps in the country (Altman, Hart & Jacobs, 2009). The latter scenario is blamed on prevailing poor communication, a lack of feedback, poor monitoring and evaluation, and a failure to report the consequences of food insecurity to citizens.

The lack of precise and recognized food security measures, especially policy targeting, shows a gap in the literature (Paes-Souza & Vaitsman, 2014). Therefore, in respect of these assertions, a measurement that is part of the greater monitoring and evaluation framework is critical for food security.

3. Conceptual framework

Food security is a multidimensional and interdependent process encompassing numerous actors and activities. This study conceptualizes food security from the Sen (1999) capability approach and the integrated framework of Chiappero Martinetti and Pareglio (2009). The capability approach evaluates well-being and poverty for an individual person. The integrated framework postulates food security as a function of composite factors: macro-economic, micro-economic, social, environmental, and individual factors (Burchi & De Muro 2012; Aurino, 2013). The integration of the two is presented as a composite framework as presented in Figure 1.

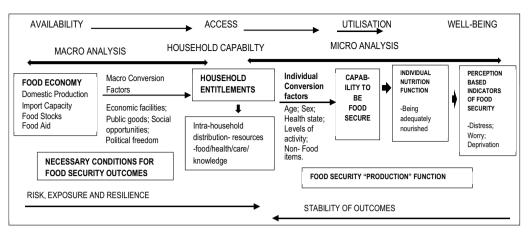


Figure 1. Integrated Food Security framework

Source: Author iterations

The framework encompasses all four components of food security. Food availability, which is the supply side of food security, is entered as a macro-economic factor when all people have adequate quantities of food. Food access, which is the ability of households and individuals to acquire adequate food for a nutritious diet, as well as food utilization, which is proper feeding linked to sanitation, health care, clean water, and an adequate diet, are all entered as micro-economic factors. Finally, food stability, which is the capability to obtain food over time and protection from chronic threats, encompasses all the composite factors and is a state all nations aspire to (Aurino,2013; UNDP,1994).

The framework is unprecedented in its inclusion of consequences of food insecurity, such as psychological distress and societal exclusion, both critical aspects of human well-being. Second, it explores the association between micro-and macro-economic factors, unearthing the drivers of food security in each category. The macro-economic category emphasizes an enabling environment for sustainable food security outcomes through the interaction of socio-economic, micro-economic, environmental, and institutional factors. Finally, the micro-economic category shows that the composite food capability component is dependent on other basic factors, such as the distribution of resources, nutritional health, and education.

Both categories of the composite food security framework encompass governance issues. Governance is concerned with how the state distributes and manages public resources. Good governance leads to well-functioning state institutions. These institutions are key in employment, poverty eradication, and the food security of the nation. On the other hand, food insecurity can destabilize governance. (FHI, 2018). This manifests in the influx of armed conflicts within the low-income, food-deficient countries, depending on agricultural production (Pingali, 2002). Policies and programs that address agriculture and food security are hindered by complex political processes and

interactions between stakeholders (government, private sector, and farmers), who have unequal power and access to resources. Moreover, agricultural systems are often harmed by conflict, insufficient institutional capacity, and the bad design and implementation of government policies, and countries that do not adequately invest in agriculture are more likely to experience chronic food insecurity (FAO, 2016; Candel, 2014).

On the other hand, good governance supports the aims of agriculture and food security through multiple systems. A good governance system must be able to respond to a food crisis and address the complex problems of food insecurity in order to eliminate hunger (Pereira & Ruysenaar, 2012). The integration of governance to food security allows the formulation of food security strategies that respond to diverse and ever-changing needs by aligning objectives and actions across all three spheres of government. At the local level, civil society organizations can develop linkages with strategists and affected households, poor farmers, and other marginalized groups (women and black South Africans) by developing integrated programs that can address political and socio-economic obstacles that prevent improvements to nutrition and food security (Duncan, 2015).

Integrating principles of good governance, for instance, accountability and citizens' participation in food security interventions, could enhance positive development outcomes and improve farmers' access to agricultural food value chains. Senegal, Bolivia, Brazil, and Niger have operationally inclusive participation of farmers in food policy formulation, with visible successes in their food value chains (Suttie & Hussein, 2015).

The households should be encouraged to contribute to the goals of governance, particularly civic participation and the effective rule of law. Food insecurity increases grievances against institutions, hinders political participation, and contributes to outbreaks of social unrest (Hendrix & Brinkman, 2013). Reducing food insecurity and socio-economic and political obstacles necessitates that the government is responsive to its citizens. The implications are government stability, social cohesion between local partners and the government, and the empowerment of partners (stakeholders) in policy development in line with local needs (Hendrix & Brinkman, 2013).

Such exchanges have seen positive outcomes in several parts of the world. For example, food security programs in Nepal have improved community relationships with the government, and short-term jobs in agricultural programs promoted peace in Liberia (McCandless, 2011). The relationship between food security and governance can be supportive or destructive; a food-secure population can bolster stable governance, whereas a food-insecure population can destabilize governance (Brinkman & Hendrix, 2011). The following section presents the data and econometric approach to examine the impact of governance on South African food security.

4. Materials and methods

This study used a quantitative research approach, based on a cross-section time-series analysis of South African data on food security and governance indicators, obtained

from the World Bank World Development Indicators and Food and Agriculture Organisation (FAO) food security indicators, from 1996 to 2017.

The Ridge Regression Modelling (RRM) technique was utilised in analyzing the relationship between food security, latent variables, and governance indicators. The RRM technique is a method in statistics used to analyse a single response variable with two or more multicollinear variables (Sunril, 2015). This would likely be the case with the governance indicators, which all are related to each other.

According to Montgomery (1974 cited in NCSS, 2019), multicollinearity results from five sources, namely, data collection (data collected from a narrow space of the independent variables), physical constraints (differences in population range), overly defined models (more variables than observations), model specification (using independent variables that are powers of an original set of variables), and outliers. Multicollinearity is detected by first studying pairwise scatter plots of pairs of independent variables, identifying the near-perfect association of variables, and interpreting the correlation matrix. Secondly, it is detected by considering the Variance Inflation Factor (VIF). A VIF of less than 10 indicates the absence of collinearity. Thirdly, one can interpret the Eigen Values (EV) of the correlation matrix of independent or exogenous variables. Values close to zero indicate multicollinearity. A similar interpretation can be obtained by looking at the condition number of the EV. Large numbers above 100 indicate multicollinearity. Finally, the sign of the regression coefficient is significant. Variables with opposite signs of the expected might indicate multicollinearity.

The correction of multicollinearity should start with the source problem, either by collecting additional data, using a variable selection technique for an over-identified model, or removing the observations which could have induced the multicollinearity. When these steps are not possible, it is necessary to use the RRM. Ridge regression lowers conventional faults by adding a degree of bias to the regression estimates. Ridge regression estimations are based on standardized variables. Standardization is done by subtracting the means of variables (both dependent and independent, and dividing by their standard deviations) (Sunil, 2015). The ridge regression is drawn from the estimated ordinary least squares, regression coefficients, shown as:

$$\tilde{B} = (\bar{X'X})^1 X' \bar{Y}$$

The analysis assumes standardization of variables, as such, $X^2X = R$, where R is the correlation matrix of the independent variables. The estimates are unbiased and could relate to the population.

$$E(\hat{B}) = B$$

The variance-covariance matrix of the estimates is:

$$V(\hat{B}) = \sigma^2 R^1$$

 $\delta^2=1$, on the assumption that the independent variables are standardized.

From the above, we find:

$$V(\hat{b}j) = r^{jj} = \frac{1}{1} - R_j^2$$

where R^2 is the variance obtained from regressing the independent variables, on the dependent variable Xj. This variance is the VIF, positively related to the R^2 . Thus, as the R^2 in the denominator gets closer to one (0,9 and above), the VIF will increase, and will have to face multicollinearity.

The ridge regression proceeds by adding a small value, k, to the diagonal elements of the correlation matrix (presented as a ridge); that is,

$$\dot{B}(R+kI)^{-1}X'\bar{Y}$$

where k is a positive quantity less than 1. The amount of bias in this estimator is given by:

and the covariance matrix is given by:

$$V(\dot{B}) = (X'X + kI)^{-1}X'X(X'X + kI)^{-1}$$

where k is the mean squared error (the variance plus the bias squared in the ridge estimator is less than the least-squares estimator), the appropriate value of k depends on knowing the true regression coefficients (which are being estimated).

Hoerl, Kinnard, and Baldwin (1975) proposed an iterative method for selecting k, based on the formula:

$$k = ps^2/\dot{B}'\dot{B}$$

The least-squares coefficients are used to obtain the value of k. The k value is a catalyst for the determination of a new set of coefficients. The procedure's weakness is non-convergence. As such, NCSS has modified the procedure such that if the resulting k is greater than one, the new value of k is equal to the last value of k divided by two. This calculated value of k is mostly preferred to the ridge trace method, which is subject to human error on choosing high values of k (NCSS, 2019).

The RRM implicit model function is presented as:

$$Yt = \beta 0 + \beta 1X1 + e$$

Where Yt = Food security (FS) latent variables (FPI, HDDI, MN GDP, FI), $\beta 1$ = Parameter estimate, X1 = Governance Indicators (Contr Crpt, Rul Law, Reg Qual, Gov Eff, Polit Stab, Vc Acnt), and e is the idiosyncratic error term. The regression model is presented as follows:

$$FS(FPI,HDI,MN,GDPFI) t = \beta 0 + \beta 1GOVt + \mu t$$

The FS are outcome indicators of distinct dimensions of food security, namely, (i) Food Production index (FPI) (availability) (World Bank, 2019); (ii) Household Dietary Diversity Index (HDDI) (utilization) World, Bank, 2019); (iii) Prevalence of Malnutrition

in the Total Population (utilization); (iv) Gross Domestic Product (GDP) (annual % growth) (access); and (v) Food Imports (% of total population) (Stability) (FAO, 2019). The FPI is a composition of edible and nutritious food crops. The composition excludes tea and coffee, which, although edible, have no nutritional value. The HDDI is the ratio of aggregate dietary energy supply (kilocalories/per day/per person) provided by staple foods (cereals and starchy roots). A low value indicates a high diet diversification. The prevalence of malnutrition (MN) is a utilization dimension providing data on the nutritional status of the whole population (Aurino, 2013).

GDP reflects the food access component of food security and consists of three parts: physical, economic, and socio-cultural. The physical component entails efficiency in food production. The economic component reflects the affordability status of the population in buying adequate food. The socio-cultural component arises when conflict, strife, and other social barriers, such as gender, hinder people's access to food (Napoli, 2011).

FI expresses the proportion of food imports in total merchandise imports. The increase is attributed to increases in consumption. The increase can be due either to changes in diet or to population demand from migration and urbanization (Rakotoarisoa, Lafrate, & Paschali, 2012). Low food imports reflect stability in food security.

As argued in the main research question and literature review, the ability of a nation to be food secure is undoubtedly influenced by governance issues. The indicators form part of the RRM, providing possible channels of policy intervention. The indicators are obtained from the World Bank, and the rationale for their inclusion are i) Voice and Accountability (Vc Acnt), which refers to the democratic right of selecting government leadership. ii) Government Effectiveness (Gov Eff), shows the people's views on both public service and civil service quality. It also relates to government commitment to integrity in policy formulation and implementation. iii) Political Stability (Polit Stab) measures the probability of violence from political activism, including terrorism, sabotage, and crime. v) Regulatory Quality (Reg Qual) shows the ability of the government to implement sound policies and regulations, mostly in the private sector. vi) the rule of law (Rule Law) relates to satisfaction agents have with the law and society. Of importance is the enforcement of property rights and contract enforcement. vii) Control of Corruption (Contr Crpt) shows the degree to which public power is misused for private gain. Of importance are issues of state capture, nepotism, and other composite forms of corruption.

5. Results and analysis

Results of the relationship between Food Security and Governance are reported from the ridge regression analysis, presented in Table 1. The ridge regression analysis is recommended for the ability to control for multicollinearity in Governance, which is an independent variable comprising collinear variables.

Five models explained by each of the FS latent variables are presented in the regression analysis. The models present first results on the preliminary variable multicollinearity tests, namely, correlation tests, VIF, and EV. Second is the analytical session, comprising the model specification, presented by k, the variance of the model, presented by R², standardized coefficients, and the F- statistical, Analysis of Variance (ANOVA). The F statistic interprets the statistical significance of group means. If the null hypothesis is true, F should be close to 1. A high F-statistic shows that the model is not compatible with the data. The interpretations of k, R² and the standardized coefficients are presented in Section 4.1.

Table 1. Food Production Index Analysis
Model 1: Food Production Index (FPI): K=100 000 (R²⁼0.5644) F= 2.5916

Variable	Correlation	VIF	EV	EV Condition	Standardized Regression Coefficient
Vc Acnt	-0,778220	0,1130	3,339641	1,00	-0,1948
Polit Stab	0,566246	0,1810	1,266776	2,64	0,1185
Gov Eff	-0,736476	0,1353	0,919396	3,63	-0,1435
Reg Qual	-0,419860	0,2041	0,281147	11,88	-0,0959
Rul Law	-0,185777	0,2399	0,123281	27,09	0,0079
Contr Crpt	-0,848598	0,1302	0,069759	47,87	-0,2372

Source: Author iterations from NCSS 2020

In model 1, k=100 000, Governance indicators explain 56% of the FPI variance, which is a strong relationship. The correlation matrix explains the prevalence of a negative association between FPI and most Governance indicators. The VIF, EV, of less than 10, and the EV condition less than 100, shows an absence of multicollinearity in the model. The model fits well with the data, with a low F statistic of 2.5.

Vc Acnt, Gov Eff, Reg Qual, and Contr Crpt have a negative relationship with FPI. A 1-unit change in Vc Acnt, Gov Eff, Reg Qual, and Contr Crpt will cause a decline in FPI by 19%, 14%, 9%, and 23%, respectively.

Low regulatory quality, government ineffectiveness, lack of voice and accountability of citizens towards agriculture production activities, and high incidences of corruption in agriculture, and production-related processes, including distribution of resources and financial support services, will result in an overall decline in agriculture output, measured by the FPI. Furthermore, government ineffectiveness is evidenced by the regulation of food systems on multiple levels, with little coordination funneling into the three spheres of government. This has hampered inclusive and just food

systems in the country. Understanding and working with all spheres of government and relevant stakeholders will promote an inclusive and just food system in South Africa, which is needed to improve food production (Makwela, 2018).

Similarly, clear differences exist between the goals of the South African corporate agri-food system and the government's socio-economic development goals. There is, therefore, a need to align the system outcomes with governance processes (Ledger, 2016). A positive relationship exists between Rul law, Polit Stab, and FPI. For a unit change in Rul law, and Polit Stab and FPI increase by 11% and about 1%, respectively. The contribution of Polit-Stab is almost insignificant, while Rul law is lower due to a lack of government oversight in the food sector. It is also from a failure to regulate the entire food sector in line with the Hazard Analysis and Critical Control Points (HACCP) safety approach of the United Nations. Only peanut butter complies due to the high risk of aflatoxin contamination and inclusion in school feeding schemes (Crouth, 2018).

Table 2. Household Dietary Diversity Index analysis

Model 2: Household Dietary Diversity Index (HDDI): K=100 000 (R²=0.3845)
F=1,2494

Variable	Correlation	VIF	Eigen Value	EV Condition	Standardized Regression Coefficient
Vc Acnt	-0,643969	0,1130	3,339641	1,00	-0,1992
Polit Stab	0,395086	0,1810	1,266776	2,64	0,0395
Gov Eff	-0,690018	0,1353	0,919396	3,63	-0,2383
Reg Qual	-0,105315	0,2041	0,21147	11,88	0,0471
Rul Law	0,105315	0,2399	0,123281	27,09	0,1278
Contr Crpt	-0,551935	0,1302	0,069759	47,87	0,1238

Source: Author iterations from NCSS 2020

In model 2, k=1 000 000, Governance indicators explain 38% of the FPI variance, which is a moderate relationship. The correlation matrix explains the prevalence of a negative association between HDDI and most Governance indicators. The VIF, EV of less than 10, and the EV condition less than 100 show an absence of multicollinearity in the model. The model fits well with the data, with a low F statistic of 1,2.

A positive relationship exists between Polit Stab, Reg Qual, Rul Law, and Contr Crpt and HDDI. A 1-unit change in Polit Stab, Reg Qual, Rul Law and Contr Crpt will cause an increase in HDDI of 3%, 4%, 13%, and 12 %, respectively.

Upholding the rule of law, control of corruption, and regulatory quality, as reflected by the government's ability to formulate policies, is positively related to HDDI. The South African government has introduced numerous agriculture policies since 1994. Even though implementation is still a challenge, there is a positive reflection on improvement and revision, with the government enacting the food security policies in the 2030 development agenda (Nkwana, 2017).

Vc Acnt and Gov Eff will cause a decline in HDDI by 19% and 23%, respectively. An ineffective government riddled with skills challenges and corruption, as evidenced in various inquiries, such as the Zondo commission, faces challenges in achieving nutritional food adequacy for its citizens (Gordhan, 2018). This is further worsened by the lack of cooperation between state departments in the provision of key information on state-capture allegations. This is particularly notable in the non-compliance of the state security agency in issuing security clearance certificates (Ramphele, 2018).

Table 3. Total Malnutrition analysis Model 3: Total Malnutrition (MN): K=0,437699 (R²⁼0,5630) F=2,5770

Variable	Correlation	VIF	Eigen Value	EV Condition	Standardized Coefficient
Vc Acnt	-0,166706	9,0971	3,339641	1,00	0,1427
Polit Stab	-0,054106	3,8193	1,266776	2,64	-0,1413
Gov Eff	-0,657379	5,3501	0,919396	3,63	-0,2822
Reg Qual	-0,692557	2,4553	0,281147	11,88	-0,2573
Rul Law	-0,266045	1,3430	0,123281	27,09	-0,2573
Contr Crpt	-0,651641	6,1151	0,069759	47,87	-0,1028

Source: Author iterations from NCSS 2020

In model 3, k=0,437699, Governance indicators explain 56% of the MN variance, which is a strong relationship. The correlation matrix explains the prevalence of the negative association between MN and all Governance indicators. The VIF, EV of less than 10, and the EV condition less than 100 show an absence of multicollinearity in the model. The model fits well with the data, with a low F statistic of about 2,5.

Except for Vc Acnt, all the other governance indicators have a negative relationship with FPI. A 1-unit change in Polit Stab, Gov Eff, Reg Qual, Rul Law, and Contr Crpt will cause a decline in FPI by 14%, 28%, 25%, 25%, and 10%, respectively.

According to FAO (2019), 4,6 % of the population suffers from hunger. From this population, children are the most affected, with stunting prevalent in the 0-59-month category. The same problem affects children under 14 years, pregnant women 14-65,

and the whole population, mainly affected by obesity, as the other form of malnutrition. According to Van de Merwe (2017), a quarter of South Africa's 0-59-month children are stunted, costing the nation over R40 billion (US\$2 743 billion) annually. This is further worsened by corruption scandals in nutritional support and the South African Social Security Agency's child grant support administration case. The agency is a necessary source of income to finance the country's children's food and nutrition. In the administration of the grant, corruption challenges impact negatively on child food security and nutrition, leading to continuous incidences of stunting and malnutrition in the school-going age (Department of Social Development, 2019).

Government ineffectiveness in enacting effective food security and nutrition policies is manifest from the Department of Health and Basic Education and Social Development, with many service delivery challenges needing to be addressed (Health Professional Councils of South Africa, 2016).

Table 4. Gross Domestic Product analysis Model 4: Gross Domestic Product (GDP): K=1 000 000 (R²⁼ 0,3368) F=1,0156

Variable	Correlation	VIF	Eigen Value	EV Condition	Standardized Regression Coefficient
Vc Acnt	0,161268	9,0971	3,339641	1,00	0,0428
Polit Stab	0,257175	3,8193	1,266776	2,64	0,2014
Gov Eff	0,369258	5,3501	0,919396	3,63	0,0676
Reg Qual	0,616262	2,4553	0,281147	11,88	0,2293
Rul Law	0,292180	1,3430	0,123281	27,09	0,1013
Contr Crpt	0,289133	6,1151	0,069759	47,87	0,1680

Source: Author iterations from NCSS 2020

In model 4, k=1 000 000 and Governance indicators explain 33% of GDP variance, which is a moderate relationship. The correlation matrix explains a positive association between GDP and all Governance indicators. The VIF, EV of less than 10, and the EV condition less than 100 show an absence of multicollinearity in the model. The model fits well with the data, with an F statistic of 1.

A 1-unit change in Polit Stab, Reg Qual, Rul Law, and Contr Crpt will cause an increase in GDP between 10% and 25%. A politically stable environment, supported by sound regulatory systems, adherence to the rule of law, and improvements in the control of corruption, as evidenced by the commissions of inquiry on accountability, positively affects the country's growth (GDP). These have a multiplier effect on other economic

sectors as investor confidence improves. Though positive, the contribution of VC Acnt and Gov Eff is low. The country has made significant efforts towards improving the governance initiatives necessary for growth. For example, the country joined the Open Governance Initiative in 2011, which is an international initiative of 75 countries, founded by Brazil, Mexico, Norway, the Philippines, Britain, and the USA, with a mandate to improve public sector governance and encourage civil society participation in making governments more accountable (Adeleke, 2017). South Africa's 2016 report highlights accountability challenges, especially implementing and mainstreaming public-service anti-corruption laws. Notable is a failure to provide major commitments, such as schools' connectivity, rights, and responsibilities campaign, a platform for citizen participation in government, service delivery improvement forums, and the accountability and consequences framework (Adeleke, 2017).

Table 5. Food Imports analysis Model 5: Food Imports (FI): Selected Model K=100 000 (R²⁼ 0,6213) F=3,2811

Variable	Correlation	VIF	Eigen Value	EV Condition	Standardised Coefficient
Vc Acnt	-0,549856	9,0971	3,339641	1,00	-0,0768
Polit Stab	0,252277	3,8193	1,266778	2,64	-0,0946
Gov Eff	-0822138	5,3501	0,919396	3,63	-0,3564
Reg Qual	-0,743319	2,4553	0,281147	11,88	-0,3638
Rul Law	-0,426675	1,3430	0,123281	27,09	-0,2231
Contr Crpt	-0,820426	6,1151	0,069759	47,87	-0,2250

Source: Author iterations from NCSS 2020

In model 5, k=1 000 000, Governance indicators explain 62% of the FI variance, which is a strong relationship. The correlation matrix explains the negative association between FI and all Governance indicators, except for Polit Stab. The VIF, EV of less than 10, and the EV condition less than 100 show an absence of multicollinearity in the model. The model fits well with the data, with a low F statistic of 3,2.

A negative relationship exists between FI and all governance indicators. Moderate contributions emanate from Gov-Eff and Reg Qual and similarly Rul Law and Contr Crpt. A unit change in Gov Eff, Reg Qual, Rul Law, and Contr Crpt will cause a decline in FI by between 22% to 36%. Low contributions are reported from Vc Acnt and Polit Stab. A 1-unit decline in Vc Acnt and Polit Stab will cause a less than 9% decline in FI.

The results are presented to reflect on the food security status of South Africa. The country is a net exporter of food, an indication of stability. For example, in the 2017/2018 season, the country imported about US\$7.7 billion in agriculture and food

products, against US\$11,1 billion exports during the same period (Export-Gov, 2019). In the form of tariffs and protectionist measures in key food industries, government regulatory measures promote the local food industry. For example, the government has implemented anti-dumping and safeguard measures through the International Trade and Administration Commission to protect the poultry industry from dumping and cheap poultry imports. The consequences can be traced back to the 2017 poultry trade clash between the USA and South Africa. The import duty on whole chickens was increased to 87% and that of chicken portions to 37%. (Department of Trade and Industry, 2019; Lowman, 2019).

6. Conclusions

The article addressed the question, how does good governance affect South Africa's food security? Consequently, the article addressed the sub-questions:

- What is the prevailing food policy framework in South Africa?
- What does the literature say about the relationship between food security and governance?

The article utilised the RRM technique to capture multiple latent FS and Governance indicator variables, a method not previously explored in studies governance. The literature supports the article findings on food security governance challenges in the country. (Koch, 2011, Nkwana, 2017). Thus, it justifies the appropriateness of the utilised method.

The main conclusion is that, despite the far-reaching goals of improving food security through good governance, elements of bad governance are still present within the country's food sector, affecting the country's food and nutrition security. The analysis shows that this is due to:

- Corporate corruption incidences, evidenced by the Zondo Commission of enquiry, among others. These have influenced the equitable distribution of food resources necessary to cushion the population against food insecurity.
- Poor food policy design and implementation.
- Government ineffectiveness (service delivery, quality of service) in the distribution of food resources, for example, the Basic Education Food distribution system.
- Less contribution on voice and accountability, as reflected in rights advocacy, lobbying, and exercise of rights in improving the functioning of government and the way decisions are made.
- Insufficient access to knowledge and resources to make the most appropriate decisions on nutrition and safe diets.

Although it will be challenging to address all the governance challenges affecting the South African food system, the South African government needs to consider the

following policy measures: First; Development of a compendious food security framework targeting agriculture productivity, societal inclusion, the emancipation of women in grassroots areas, and the overall improvement in dietary intake in poor communities. Second, formulate measures to increase the audience of lobbying groups and government-funded focus group discussions to learn of the food security and nutrition challenges facing poor households and the possible solutions. Finally; Reduce corruption by initiating transparency and accountability in all activities related to food security. If an individual is reported to be involved in corrupt activities or violates ethics and moral principles, they should account to the integrity committee or face prosecutorial processes, should they fail to offer an acceptable explanation.

Conflicts of interest: the author declares non-conflict of interest.

References

- Adeleke, F. (2017). South Africa has work to do to make government more accountable. Retrieved from https://mg.co.za/article/2017-01-11-south-africa-has-work-to-do-to-make-government-more-accountable
- Akanle, O., Adesina, J., & Adefolake, O. (2017). Gender Paradoxes and Agricultural Monopoly in Nigeria: Implications for Policy and Food (IN) Security in Africa. Gender & Behaviour, 15 (3), 9665-9677.
- Aliber, M & Cousins, B. (2013). Livelihoods after Land Reform in South Africa, *Journal of Agrarian Change* 13 (1), 140–165.
- Aurino, E. (2013). Measuring Food Security: A Structural Equation Approach. Sixth International Conference on Agricultural Statistics.
- Battersby, J & Peyton, S. (2014). The Geography of Supermarkets in Cape Town: Supermarket Expansion and Food Access, *Urban Forum*, 25(2), 153–164.
- Bollen, K. (1989). Structural Equations with Latent Variables [Hardcover]. John Wiley and Sons.
- Boyd, M & Wang, H. (2011). The role of public policy and agricultural risk management in food security Public policy: implications for food security. *China Agricultural Economic Review*, 3(4).44-59.
- Brinkman H, & Hendrix C. (2011). Food insecurity and violent conflict: causes, consequences, and addressing the challenges: World Food Programme. Occasional paper no 24. Retrieved from https://ucanr.edu/blogs/food2025/blogfiles/14415.pdf
- Candel, J. (2014). Food security governance: a systematic literature review. Food Security. 6(4), 585-601.
- Crouth, G. (2018). New food safety regulations imminent. Retrieved from https://www.iol.co.za/pretoria-news/new-food-safety-regulations-imminent-13904842.
- Department of Trade and Industry, (2019). Government intervenes to save the poultry industry Retrieved from http://www.thedti.gov.za/editmedia.jsp?id=5780
- Department of Social Development (DSD). (2019). Social Grant Fraud Syndicate Take down. Retrieved from http://www.sassa.gov.za/index.php/newsroom/204-social-grant-fraud-

- syndicate-take-down.
- Drimie, S & Ruysenaar, S. (2010). The Integrated Food Security Strategy of South Africa: An Institutional Analysis, *Agrekon*, 49 (3), 316–337.
- Du Toit, A. (2009). Adverse Incorporation and Agrarian Policy in South Africa, Or, How Not to Connect the Rural Poor to Growth, Paper Presented at BASIS Conference Escaping Poverty Traps: Connecting the Chronically Poor to Economic Growth, Washington, DC (February 26–27).
- Duncan J. (2015). Global food security governance: Civil society engagement in the reformed Committee on World Food Security: Routledge.
- Economic Freedom Fighters (EFF). (2016). Election Manifesto 2014. Retrieved from http://effighters.org.za/election-mani festo/
- Export-Gov. (2019). South Africa-Agriculture Sector. Retrieved from https://www.export.gov/article?id=South-Africa-agricultural-equipment
- FAO, IFAD. (2015). The state of food insecurity in the world 2015—meeting the 2015 international hunger targets: taking stock of uneven progress. FAO, Rome, 56.
- Family Health International. (2018). Governance, Agriculture and Food Security: Catalysing Integration. Retrieved from www.fhi360.org/civil-society
- Field, A. (2005). Discovering statistics using SPSS: (and sex, drugs and rock 'n' roll). London: SAGE.
- Food and Agriculture Organization of the United Nations (FAO). 2016. Mobilizing resources to fight hunger. Rome, Italy: FAO; ND.
- Food and Agriculture Organisation, (FAO). (2019). Food regulations. Retrieved from http://www.fao.org/food/food-safety-quality/capacity-development/food-regulations/en/
- Food and Agriculture Organisation, (FAO). (2021). The State of Food Security and Nutrition in the World 2021. Retrieved from http://www.fao.org/documents/card/en/c/cb4474en
- Giménez, E. H. & Shattuck, A. (2011). Food Crises, Food Regimes and Food Movements: Rumblings of Re- form or Tides of Transformation? *Journal of Peasant Studies*, 38(1): 109–144.
- Gordhan, P. (2018). State Capture and corruption are the result of unleashing the worst of human instincts. Retrieved from https://www.dailymaverick.co.za/article/2018-11-19-state-capture-and-corruption-are-the-result-of-unleashing-the-worst-of-human-instincts-gordhan/
- Hamann, R. (2011). The Role of Business and Cross-Sector Collaboration in Addressing the 'Wicked Problem' of Food Insecurity, *Development Southern Africa*, 28, 579–594.
- Haysom, G. (2015). Food and the city: Urban scale food system governance. *Urban Forum*, 26(3), 263-281.
- Haysom, G. (2021). Integrating Food Sensitive Planning and Urban Design into Urban Governance Actions. Urban Forum 32, 289–310. https://doi.org/10.1007/s12132-021-09417-9
- Health Professional Councils of South Africa. (HPCSA) (2016). Dietetics & Nutrition News. Retrieved from https://www.hpcsa.co.za/uploads/editor/UserFiles/DnBnews.pdf
- Hendrix, C. & Brinkman H-J. (2013). Food insecurity and conflict dynamics: Causal linkages and complex feedbacks. *Stability: International Journal of Security and Development*. 2013; 2(2): 42-67.

Hoerl, A., Kannard, R. & Baldwin, K. (1975). Ridge regression: some simulations, Communications in Statistics, 4:2, 105-123, DOI: 10.1080/03610927508827232

- Jana, S. & Karmakar, A. K. (2015). Globalisation, governance and food security-the case of BRICS in R.C Das (Ed), Handbook of Research and Globalisation, Investment and Growth-Implications of Confidence and Governance. Doi:10.4018/978-1-4666-8274-0. cho14.
- Joreskog, K. (1973). A General Method for Estimating a Linear Structural Equation System. In A.S. Goldberger and O.D. Duncan (Eds), Structural Equation Models in the Social Sciences, Seminar Press, New York.
- Joreskog, K, & Goldberger, A. (1975). Estimation of a Model with Multiple Indicators and Multiple Causes of a Single Latent Variable, *Journal of the American Statistical Association*, 70(3), 631–639.
- Kaplan, D. (2009). Structural Equation Modelling: Foundations and Extensions (2nd ed.) Thousand Oaks, CA: SAGE.
- Koch, J. (2011). The Food Security Policy context in South Africa. Retrieved from http://www.ipc_undp.org/pub/IPCCountryStudy21.pdf
- Kirsten, J. (2012). The Political Economy of Food Price Policy in South Africa. Working Paper 2012/102 (Helsinki, Finland: United Nations University: UNU- WIDER.
- Kline, R. (2011). Principle and Practices of Structural Equation Modelling. Third Edition. New York: The Guilford Press.
- Krishnakumar, J. (2007). Going Beyond Functionings to Capabilities: An Econometric Model to Explain and Estimate Capabilities. *Journal of Human Development*, 8(1), 39-63.
- Kuklys, W. (2005). The Measurement of Functionings Achievement: Structural Equation Models as an Alternative. In W. Kuklys (ed.). Amartya Sen's Capability Approach: Theoretical Insights and Empirical Applications. Berlin: Springer.
- Ledger, T. (2016). Power and governance in agri-food systems: key issues for policymakers. Working Paper. Trade and Industrial Policy Strategies. file://Working_Paper_Power_and_governance in agri-food systems March 2016.pdf
- Lowman, S. (2019). Imported chicken tariffs: A boom for big business, bust for life-saving small Unati Speirs. Retrieved from https://www.biznews.com/sa-investing/2019/05/23/tariff-imported-chicken-business
- Makwela, M. (2018). Better governance can enhance an inclusive and just food system in South Africa. Retrieved from https://www.bizcommunity.com/Article/196/650/176665.html
- McCandless, E. (2011). Peace Dividends and Beyond: Contributions of administrative and social services to peacebuilding. United Nations Thematic Review for the Peacebuilding Support Office, New York.
- McKeon, N. (2011). Global governance for world food security: a score care four years after the eruption of the "food crisis." Berlin, Germany: 2011.
- Mupindu, W. (2015). The challenges of food security policy and food quality in Zimbabwe. *African Journal of Public Affairs*, 8(2), 90-102.
- Nahman, A., De Lange, W., Oelofse, S. & Godfrey, L. (2012). The Costs of Household Food Waste in South Africa, *Waste Management*, 32(11), 2147–2153.
- Nahman, A & De Lange, W. (2013). Costs of Food Waste Along the Value Chain: Evidence

- from South Africa, Waste Management, 33 (11): 2493-2500.
- Napoli, M. (2011). Towards a Food Insecurity Multidimensional Index. Universita Degli Studi, Unpublished Master's Thesis.
- National Planning Commission. (2012). National Development Plan 2012-2030. The Presidency, South Africa.
- NCSS. (2019). Chapter 335 Ridge Regression. Retrieved from https://ncss-wpengine.netdna-ssl.com/wp-content/themes/ncss/pdf/Procedures/NCSS/Ridge Regression.pdf
- Nkwana, H. M. (2017). A multisectoral public policy framework for food security in South Africa. Unpublished PhD Dissertation. University of Pretoria.
- O'Keefe, P., Crashaw, B., Forsythe, M. & Heider, C. (2009). Full report of the evaluation of the Liberia PRRO 10454.0. Rome: WFP.
- OECD, FAO, UNCDF. (2016). Adopting a Territorial Approach to Food Security and Nutrition Policy. Paris: 2016.
- Osabohien, U. M. & Osabuohien, (2020). Accountability in agricultural governance and food security in Nigeria. Brazilian Journal of Food Technology, 23, e2019089. https://doi.org/10.1590/1981-6723.08919
- Paes-Souza, R & Vaitsman, J. (2014). The Zero Hunger and Brazil without Extreme Poverty programs: a step forward in Brazilian social protection policy. Cien Saude Colet. Nov; 19(11), 4351-60.
- Pereira, L. & Drimie, S. 2016. Governance Arrangements for the Future Food System: Addressing Complexity in South Africa, Environment: Science and Policy for Sustainable Development, 58(4), 18-31.
- Pereira, L. & Ruysenaar, S. (2012). Moving from traditional government to new adaptive governance: The changing face of food security responses in South Africa. *Food Security*, 4(1), 41-58.
- Pereira, L. & Drimie, S. (2016). Mapping Domains of Food Access and Consumption: A Conceptual Tool for Appreciating Multiple Perspectives Within Food System Governance, Colloquium paper No. 33, Global governance/politics, climate justice & agrarian/social justice: linkages and challenges, 4-5 February 2016, International Institute of Social Studies (ISS), The Hague, The Netherlands.
- Pingali, P. (2002). Reducing Poverty and Hunger: The critical role of financing for rural development, food & agriculture. *International Conference on Financing for Development*.
- Rakotoarisoa, M., Lafrate, M. & Paschali, M. (2012). Why has Africa become a net food importer? Explaining Africa agricultural and food trade deficits. Retrieved from www.fao. org/3/a-i2497e.
- Ramphele, L. (2018). State Capture Inquiry. Zondo Commission: There's lack of corporation from government departments. Retrieved from http://www.capetalk.co.za/articles/316068/zondo-commission-there-s-lack-of-corporation-from-government-departments
- Rocha, C. (2009). Developments in national policies for food and nutrition security in Brazil. *Development Policy Review*, 27(1), 51-60.
- Ronquest-Ross, L-C., Vink, N. & Sigge, G. (2017). Application of science and technology by the South African food and beverage industry. *S Afr J Sci.* 2018;114(9/10), Art. #4757, 11 pages. https://doi. org/10.17159/sajs.2018/4757

Sayeed, C. M & Pillay, P. (2013). Assessing South Africa's Food Security Strategy through a good governance lens. Politeia. 32(2), 84-104

- Schönfeldt, H. (2015). Food composition in policies and programmes in South Africa to address food security. Retrieved from http://www.saafost.org.za/Events/BRANCH_All/2015/Sep69SAAFoST/presentations/SAAFoST%20%20Food%20composition%20 in%20policies%20and%20programmes%20in%20South%20Africa%20to%20address%20 food%20security%20Schonfeldt.pdf
- Stat Soft. (2019). Structural Equation modelling. Retrieved from http://www.statsoft.com/textbook/structural-equation-modeling
- Sunil, R. (2015). 7 Regression techniques you should know. Retrieved from www. analyticsvidhya.com. (04. 08. 2019).
- Suttie, D. & Hussein, K. (2015). Territorial approaches, rural-urban linkages, and inclusive rural transformation. Rome: IFAD.
- SWAC/OECD (2021), Food system transformations in the Sahel and West Africa: implications for people and policies, Maps & Facts, no. 4, April 2021.
- Tirivangasi, H. M. (2018). Regional disaster risk management strategies for food security: Probing Southern African Development Community channels for influencing national policy, *Jàmbá: Journal of Disaster Risk Studies*, 10(1), a468- a482.
- Van de Merwe, M. (2017). Analysis: Nutritional stunting and why SA is coming up short. Retrieved from https://www.dailymaverick.co.za/article/2017-05-02-analysis-nutritional-stunting-and-why-sa-is-coming-up-short/

The Relationship between SME's Organizational Culture and Training and Development as a Human Resource Management Practice

Kushtrim Gashi*

Abstract The organizational culture types, training and development as an HRM practice in organizations are relatively new in the Kosovo environment due to lack of data on the relationship between them. Hence, this research attempts to explore the relationship between organizational culture and training and development as HRM practice in Kosovo SMEs. As a developing country with a mix of challenges and opportunities, Kosovo needs creativity and flexibility to develop organizational culture and training and development of SMEs in a highly competitive global market economy. The research design was a quantitative correlational study. There were about 210 SME managers selected by using stratified sampling for data collection. The obtained data were recorded and analyzed by SPSS, version 25.0 (IBM Corp, Released, 2017).

The results showed that the preferred organizational culture, the Clan culture, had higher representation averages, followed by other OC types: Adhocracy, Hierarchy, and Market. The results show that high p-values of OC types, training and development, confirm the null sub-hypothesis H10, according to which there is no correlation between OC, training and development, whereas the sub-hypothesis H1a is rejected. While to test whether the training and development can statistically predict the OC of SMEs, standard linear regression was developed. The results show that high p-values of training and development confirm the null hypothesis H20, according to which training and development is not a predictor of the organizational culture of SMEs, whereas the sub-hypothesis H2a is rejected. Following the strong benefit of exploring this relationship and development of this research, it would be necessary for future studies that explore this field to select the method of qualitative research in order to understand the cause and effect of this relationship. The findings of this research will be of value to SMEs of developing countries, as through this study, efforts have been made to encourage investments in organizational culture and training development at SMEs.

Keywords: small and medium-sized enterprises (SMEs), organizational culture, training and development, human resources.

Email: kushtrimgashi84@outlook.com

Kushtrim Gashi*(⊠)

^{*} Teaching Assistant, University "HaxhiZeka", Pejë, Republic of Kosovo.

140 Kushtrim Gashi

1. Introduction

Exploring the relationship between organizational culture and training and development continues to be a challenge for researchers in entrepreneurship and human resource management. Economic development and especially the development of Kosovo's SMEs are the main strategic goals of the Republic of Kosovo. Thus, among the main factors influencing economic development growth is human capital, while the development of organizational culture is critical in achieving performance in small and medium enterprises (Gashi&Osmani, 2015). This research explores the adoption of ideas for entrepreneurship, human resource management, and organizational culture in general, and the relationship between organizational culture and training and development in Kosovo SMEs in particular.

Addressing this relationship will support researchers, SMEs, and HRM managers, as it provides them with in-depth information on the relationship between organizational culture and training and development as a human resource practice for developing countries. There are various obstacles in SME management and economic development in general, but most of them are mainly human-based, so organizational culture and training and development play essential roles in the success and development of SMEs (Osei, 2017). Developing countries face various human resource management problems; as a transition country, there are constant changes in the creation of institutions that promote SMEs (Ahmeti, 2015). Although Kosovo continues to have high unemployment rates, with 35.1% being unemployed, one of the priorities of Kosovo SMEs is young people in the country, as most of them are young and account for 55.3% of the total unemployment rate. The Kosovo Agency of Statistics data show that young people are ready and qualified for work, but few jobs are available (ASK, 2018). Thus, when human resources are interested in working, utilizing their potential efficiently increases sustainable economic development (Khan et al., 2013).

From the reviewed literature, no research has been carried out on the representation of organizational culture in Kosovo SMEs. Also, training and development as an HR practice are not sufficiently developed in Kosovo SMEs. Therefore, a strenuous effort is required to learn what representation has an organizational culture in Kosovo SMEs and effectively manage human resources potential in Kosovo's SMEs. Particular importance is given to SME development in developed countries' economies, as SMEs play a key role in economic development, especially in developing countries (Ahmeti, 2015). It is vital to investigate the relationship between organizational culture and training and development as such data clarifies HR practices and contributes to the development of organizational culture in general (Aycan, 2005). Measuring the relationship between organizational culture and training and development should be part of company practices to increase companies' competitive advantages (Porter, 2012). Although HR practices vary in importance and have their characteristics, it

is necessary to establish reasonable goals to continuously improve employee and SME performance (Shahani, 2015). Given the importance of small and medium-sized enterprises to developing countries' economies, researchers need to have more information on the relationship between organizational culture and training and development in developing countries SMEs to grow their businesses and survive in the market competition (Muse &Nur, 2016). The research problem statement begins by selecting the area possible for researching and studying it in-depth, then it turns into a research question (Burnett, 2009). According to Creswell (2008), a study is a process of collecting and analyzing data to understand better a particular field problem (Creswell, 2008, p. 8). Therefore, this research aims not to provide a new theory, but to integrate and consolidate various theories, into one practical integrated framework, by determining the correlation and degree of representation of organizational culture types and training and development as an HRM practice in Kosovo SMEs. This paper is structured as follows: Literature Review, Research Methodology, Analysis, and Presentation of Results, Conclusions, and Recommendations.

2. Literature review

2.1 The importance of training and development as a human resource management practice

The continued development of the private sector in developing countries is needed, as it is considered a key sector in the overall development of a country's economy (Massa &Calì, 2010). According to Arslan (2017), most SMEs lack an HR department and skills needed for HR. Thus, SMEs managers need to consider the strategic importance of training and development as an HRM practice for SME performance development (Arslan, 2017).

Like other human resource practices, training and development are considered a key factor in the organization, and their continuous development is of particular importance for creating SME strategic goals (Waheed et al., 2019). Furthermore, enterprises need to have proper human resource practices in order to create strategies and strategically position themselves in the competitive marketplace (Kianto, Sáenz&Aramburu, 2017) as there is a lack of studies on developing any framework for HR practices, respectively for training and development (Cook, Murphy & Thomas, 2018; Zoogah, 2018).

Training and development represent the key role of HRM, striving to continuously improve employee quality by providing training and employee development to overcome challenges in market competition (Salah, 2016). Training and development questions consist of five items created by Snell and Dean (1992), which provide data on how enterprises create employee training and development strategies and the policies and procedures that different organizations implement. This questionnaire was selected because, in comparison with other survey instruments, it emphasizes formal training opportunities targeted at specific individuals (which is more appropriate in the

142 Kushtrim Gashi

context of SMEs in Kosovo) in addition to capturing a general overview of the quality of staff development training program (Wan, Kook & Ong, 2003).

2.2 The importance of organizational culture and training and development for enterprises

In various organizations, there is a perception of employees that the enterprise values them and that the enterprise takes responsibility for the well-being of its employees. Suchenterpriseshaveincreased profitability as more and more consumers have valued these enterprises as they have considered acting responsibly (Hutnek, 2016). According to Ali Alsheikh (2017), it is necessary to improve the relationship between employee performance and knowledge management (Ali Alsheikh, 2017). According to Salehipour and Mand (2018), the organizational culture of an enterprise is of particular importance, as it plays a significant positive role in the overall progress of the enterprise's employees in general and affects their performance (Salehipour&Mand, 2018). In addition, OC is considered the most appropriate communication between managers and employees, and the development of human resources is considered to be of particular importance in OC and commitment to work (Inanlou&Ahn, 2017).

Organizational culture negatively moderates the relationship between innovation and training and development as an HRM practice (Aman, Noreen, Khan, Ali, and Yasin, 2018). According to Mirzapou, Toutian, Mehrara, and Khorrampour (2019), HRM practices correlate with OC, and enterprises to increase employee suitability need to provide incentives and create a shared vision for employees (Mirzapour et al., 2019). Furthermore, employees of different enterprises will show more performance if those enterprises have good human resource management (Zhang, 2016). Thus, HRM must find simple ways to train and develop employees to develop the enterprise's organizational culture (Wright, 2019). On the other hand, organizational culture and training and development cannot serve as mediators in the role of leadership (Thoyib, Noermijati& Rosita, 2016). In addition, According to Ratanjee (2018), employees who agree with the enterprise's organizational culture show more performance than employees who disagree (Ratanjee, 2018). Adapting of OC from employees plays an essential role in increasing performance between the enterprise and employees (Turhan, Köprülü&Helvacı, 2016). According to Scrima and Parry (2017), the types of OC of the enterprise play a significant role in the behavior of employees in the workplace (Scrima& Parry, 2017). In addition, OC types play an important role in enterprise innovation, while these OC types play a mediating role in the effectiveness of training and development (Botelho, 2020). According to Abdullah, Musa & Azis (2017), entrepreneurship is vital in organizational culture. Hence, a solid organizational culture improves performance among staff in the enterprise. Therefore, SME managers should create a work environment where employees will be able to express their ideas for possible improvements that need to

be made in the future. Then the employees will be more engaged in the enterprise, and as a result, the organizational culture of that enterprise will develop (Abdullah et al., 2017). According to Poernomo, Budiyanto&Suhermin (2019), training and development positively impact enterprise performance, while the hierarchical culture of the organization plays a mediating role between performance and training and development (Poernomo, Budiyanto&Suhermin, 2019). Moreover, focusing the enterprise on creating a collaborative organizational culture helps employees to develop and successfully manage their careers (Pratap, 2019).

2.3 Organizational culture types

The following are the types of organizational culture as they appear throughout the research.

- Clan culture (A)is related to family organizations and describes a job where employees share the same values and managers have an advisory, parental, and guidance role (Cameron & Quinn, 2006).
- Adhocracy culture (B)represents organizations that experiment through innovative roles in an energetic work environment where employees and managers are willing to accept risks (Cameron & Quinn, 2006).
- Market culture (C) focuses on the achievements of employees in the enterprise.
 Employees and managers have high ambitions in competition, and their goal is to achieve high results (Cameron & Quinn, 2006).
- Hierarchy culture (D) mainly focuses on well-structured work environments on formal matters, namely work regulations and procedures (Cameron & Quinn, 2006).

2.4 The role of training and development in the organizational culture of SMEs

The current structure of Kosovo's economy is characterized by more than 90% of SMEs. In order to achieve rapid economic impacts, it is planned to reduce bureaucratic barriers, ease of access to finance, ease of court proceedings, combat the informal economy, and fight against economic crimes and corruption (MIE, 2017). According to EU estimates, an critical obstacle to existing SMEs is the lack of data on SMEs and their constant updating, while support for start-ups is particularly underdeveloped (Ujkani, 2012). The relevant literature reviewed provides clarifications from the field of organizational culture and training and development in Kosovo SMEs.

The role of training and development as an HRM practice in organizational culture is essential because employees have and develop different cultures within the enterprise, so the potential changes in the enterprise are made by the employees (Bae & Lawler, 2000). Hiring employees with diverse cultures in the enterprise brings new social insights into the work and goals of the organization. Thus, these insights are also important in human resource decisions (Wilkins &Ouchi, 1983). Exploring the relationship between training and development and organizational culture in developing

144 Kushtrim Gashi

countries SMEs can contribute to organizational improvement by helping SME managers develop organizational culture and HRM policies and practices to increase the level of performance in SMEs (Waters, 2013). Furthermore, according to Su, Wright, and Ulrich (2018), in the last two decades, the importance of practices through which proper human resource management has been made has increased, and at the same time, the performance of enterprises has increased (Su, Wright & Ulrich, 2018).

Knowledge of the relationship between organizational culture and training and development are also expected to be useful for organizational culture development and to the managers planning and implementing new HRM policies, procedures, and practices, where extensive attention is given to their applications and implementation with a focus on the factors required for supporting the decision-making process, rather than just administratively introducing and implementing them (Channa, 2016).

2.5 The role of SMEs in developing countries

SMEs play a key role in the most developed economies and contribute to reducing unemployment and increasing the well-being of these countries (Rabie, Cant &Wiid, 2016). According to Hill (2016), SMEs are considered essential factors in the EU economy, as they reduce unemployment, create growth and change in general (Hill, 2016).

The Republic of Kosovo, as a developing country, constantly strives to meet the criteria set to be part of the EU. There are different definitions of SMEs, including sales and number of employees (Akkucuk, 2014). In this research, the definition of SMEs is based on EU standards, whereby SMEs are defined as enterprises with up to 250 employees and generating annual revenues of up to € 50 million (European Commission, 2016). Law no. 03 / L-031 on SME Support (2008) regulates government policies for SMEs' creation and continued development. This law is based on the number of employees and defines the following categories of enterprises: micro (1 - 9 employees), small (10 - 49 employees), and medium (50 - 249 employees) (Law 03 / L-031 on SME Support, 2008). However, according to the latest EU assessment, enterprise classification needs further improvement (Ujkani, 2012). Regarding the development of HR in SMEs, the Government of the Republic of Kosovo will institutionalize training programs and financially support interns entering the labor market after completing their education.

This objective is planned to provide training and support international certifications for sectors where the economy has competitive advantages (MIE, 2017). The Ministry of Innovation and Entrepreneurship of Kosovo has drafted its program for 2017-2021 for entrepreneurship development, which directly affects the strengthening of the role of the private sector (MIE, 2017). According to this draft, mechanisms will be established institutional coordination between science, the private sector and policy-making, entrepreneurship development through training programs, creation of funds to support development sectors focusing on women and

young people, and supporting SME development in dealing with regional, EU and other markets competition (MIE, 2017). In order to effectively provide support to SMEs and facilitate business in a non-competitive and burdensome environment with a bureaucracy, a proper balance between lawmaking and reorganizing current law in favor of facilitating enterprises' activities is of particular importance (Ujkani, 2012). In addition, proper objectives are needed to improve access to information on SMEs that contribute to their development and to the private sector in general (Ujkani, 2012). SMEs will be supported through special programs for developing the marketing concept in sectors with export potential. Other programs will focus on standardization, conformity, and other requirements arising from the process of EU membership and assisting enterprises to compete with concrete projects in the relevant European Commission funding for innovation and entrepreneurship (MIE, 2017). This objective will be implemented through the development of entrepreneurial skills and support to enable access to capital and training of graduates and women to deal with labor market requirements (MIE, 2017).

3. Research Methodology

The research methodology was selected to be a correlational quantitative to explore the relationship between SME's Organizational culture and Training and development as a human resource management practice. In order to address research questions, in quantitative studies, data are analyzed by different statistical procedures, comparing group results with individuals (Creswell, 2008). The quantitative correlational design explores the relationship between variables using statistical analyses (Creswell, 2013). Correlational researches use quantitative, commonly applied analytical methods, including multiple regression analysis (Thompson et al., 2005). Correlational research is only a descriptive approach, which consists of collecting data to determine whether and to what extent there is a relationship between components included in the study (Sun, 2011).

The research population consisted of 103,697 enterprises in the Republic of Kosovo (KBRA, 2019). There were about 210 SME managers selected by using stratified sampling for data collection. The data for the study were collected through questionnaires distributed to SME managers, which provided numerical results in the survey instrument. The obtained data were recorded and analyzed by Statistical Package for Social Sciences (SPSS), version 25.0 (IBM Corp, Released, 2017). Before analyzing the data, unnecessary values were removed, and missing values were treated. Calculation of various statistics, such as percentage of socio-demographic factors, averages, frequencies, and standard deviation, were performed by ordinal, nominal, or interval levels. A Pearson correlation and Multiple regression of inferential statistics were used to answer the research questions(IBM Corp, Released, 2017). The following table contains data on SMEs in the Republic of Kosovo, based on the number of employees.

			1 7
Size	No. of employees	No. of Enterprises	Percentage in total
Micro	1 - 9	102,070	98.43%
Small	10 - 49	1,406	1.36%
Medium	50 - 249	221	0.21%
In total		103,697	100.00%

Table 1. Data on SMEs registered in Kosovo based on the number of employees

Note. Data on SMEs registered in Kosovo based on the number of employees, by KBRA (2010). Retrieved March 25, 2019, from https://arbk.rks-gov.net/

Two valid instruments were used in this study to answer the research question. Organizational culture was measured by Organizational Culture Assessment Instrument (OCAI) (Cameron & Quinn, 1999; Berrio, 2003; Fralinger& Olson, 2007; Brooks, 2007; Fralinger, Olson, Pinto-Zipp&Dicorcia, 2010; Bremer &Lamers, 2012), which is commonly used to examine OC in various enterprises. Through the OCAI instrument can be identified the key elements of an organization's orientation. According to Cameron and Quinn (2006), there are four types of culture:

- Clan culture (A),
- Adhocracy culture (B),
- Market culture (C), and
- Hierarchy culture (D).

The OCAI instrument consists of 6 questions, for which 100 points are allocated to the answer based on the degree of response that describes the enterprise (Cameron & Quinn, 2006). Respondents were asked to provide a value for the current organizational culture "Now" and another value for the organizational culture they prefer in the future, "Preferred." Then the answers for each type of organizational culture (A, B, C, and D) are collected and separated into six. Then, the results from the average show a kind of organizational culture: Clan, Adhocracy, Market, Hierarchy (Cameron & Quinn, 2006). Whereas, to measure HRM practice, respectively training and development, the questions have been taken from Snell and Dean (1992). Respondentswereaskedabout their organization's training and development with five items and responded through the Likert scale of 1 to 7 (Snell & Dean, 1992).

All information was considered confidential and anonymous (Sun, 2011), respecting the APA's ethical rules (APA, 2002). Thus, in the consent statement given to respondents for participation in the research, ethical principles of research were listed so that their participation would be voluntary. Based on the APA principles, subjects were informed in detail about the purpose of the study and their rights and responsibilities. In addition, they were informed about the information coding procedures, the time when the data will be destroyed, and the confidentiality (Smith,

2003). Secondary data were collected from studies with the same purpose or provided information about the topic of interest. The data collected from the studies, publications, reports from governmental and non-governmental institutions create a solid knowledge on enterprises or organizations about the importance of implementing strategies based on the development of organizational culture and Training and development (Balnaves&Caputi, 2001). In addition, the secondary data were collected from different information from previous experiences in other countries and by different authors, which were necessary to address the research problem and to answer the research questions (Blumberg et al., 2008).

3.1 Validity and reliability of the instrument

The data were obtained from the questionnaire, considered one of the most suitable means of collecting reliable and valid data in quantitative research (Taherdoost, 2016). Since the validity and reliability of the research instrument used to determine the appropriateness of the study are crucial for any research (Creswell, 2009). The survey instrument created was derived from a review of relevant studies and exploratory studies. In quantitative research, as is this research, generalization of the findings to an entire population depends on the sample size but is not crucial to a research finding (Taherdoost, 2016). In this study, pilot tests were also carried out to ensure that the construct and content of the survey instrument were valid (Creswell, 2009). Whereas the reliability of the research indicates the extent to which the measurement of the problem studied yields sustainable results and dealt with accuracy and the ability to replicate the study (Creswell, 2009; Taherdoost, 2016).

The Organizational Culture Assessment Instrument is considered a well-established instrument for measuring organizational culture (Berrio, 2003; Bremer & Lamers, 2012; Brooks, 2007; Cameron & Quinn, 1999; Fralinger& Olson, 2007 and Fralinger, Olson, Pinto-Zipp&Dicorcia, 2010). For all types of organizational culture the instrument consists of, it has been demonstrated to have sufficient reliability, with Cronbach Alpha ranging from 0.710 to 0.800 (Cameron and Quinn, 1999; Cameron and Quinn, 2000; IBM Corp, Released, 2017).

The Training and Development Measurement questionnaire of Snell and Dean (1992) is a well-established instrument for measuring Training and Development as HRM practices. Reliability with Cronbach Alpha rtt = 0.944 categorizes the Training and Development instrument into reliable instruments with considerable metric features (Snell &Dean, 1992; IBM Corp, Released, 2017).

3.2 ResearchQuestions and Hypotheses

Following the scientific character and complexity of the research problem, respectively, the inclusion of structural components within it, the research questions and related hypotheses are as follows:

R1: Is there a relationship between OC and training and development as HRM practice?

- $\mathrm{H1}_{\circ}$: There is no relationship between OC and training and development as HRM practice.
- H1_a: There is a relationship between OC and training and development as HRM practice.
- R2: Are training and development a predictor of the organizational culture of SMEs?
- H2: Training and development is not a predictor of the organizational culture of SMEs.
- H2: Training and development is a predictor of the organizational culture of SMEs.

4. Analysis and Presentation of Results

This section analyses data provided by the respondents' opinions about the relationship between organizational culture and training and development as HRM practice. It also presents the results and data analysis obtained from the Pearson Correlation and Multiple Regression of inferential statistics used for each hypothesis in the study. (SPSS, version 25.0, 2017).

In Table 2, the statistical indicators from the descriptive analysis are presented, respectively, distribution of the conducted interviews among the cities. In this way, the sample consisted of 210 subjects in 103,697 SMEs by the table of random numbers. In the empirical implementation phase, 210 questionnaires were distributed to SME managers. The results summarized in table 2 were processed with SPSS 25.0 and show the distribution of interviews conducted in the cities, respectively in the regions where operate SMEs, among which seven major cities were selected: Prishtina (92) respondents, Ferizaj (32), Prizren (26), Peja (20), Gjakova (14), Gjilan (13) and Mitrovica (13).

Table 2. Distribution of the conducted interviews among the cities (SME regions)

SME regions	Frequency	Percent	ValidPercent	Cumulative Percent
Prishtina	92	43.8	43.8	43.8
Mitrovica	13	6.2	6.2	50.0
Peja	20	9.5	9.5	59.5
Prizren	26	12.4	12.4	71.9
Ferizaj	32	15.2	15.2	87.1
Gjilan	13	6.2	6.2	93.3
Gjakovë	14	6.7	6.7	100.0
In total	210	100.0	100.0	

The results in table 3 show the number of subjects included in the research, based on

In total

the size of the enterprise, of which 121 were micro-enterprises, 66 were small, and 23 were medium enterprises.

		Frequency	Percent	ValidPercent	Cumulative Percent
Valid	Micro	121	57.6	57.6	57.6
	Small	66	31.4	31.4	89.0
	Medium	23	11.0	11.0	100.0

100.0

100.0

Table 3. Number of research subjects by the size of the enterprise

210

The results summarized in table 4 show descriptive statistics for the current organizational culture of the respondents included in the study. The mean value of 27.10 and a standard deviation of 9.18 show that the clan culture as a type of organizational culture has higher averages (27.10), followed by Hierarchy culture D (26.00) and the standard deviation of 8.53, Adhocracy B (23.80), and the standard deviation 5.68 and Market culture C (23.09) and the standard deviation 5.40.

Table 4. Descriptive statistics for current Organizational Culture of SMEs

	N	Minimum	Maximum	Mean	Std. Deviation
Clan culture (A)	210	8.00	55.00	27.1000	9.18103
Adhocracy culture (B)	210	7.00	38.00	23.8048	5.68764
Market culture (C)	210	8.00	38.00	23.0952	5.40516
Hierarchyculture (D)	210	5.00	52.00	26.0000	8.53924
Valid N (listwise)	210				

The results summarized below the responses of subjects involved in research for each of five training and development items. Respondentswereaskedabout HRM practices in their enterprise and, according to the relevant literature, where among the most important practices of HRM is considered "Training and Development" (Snell& Dean, 1992). For measuring Training and Development as HRM practice, research subjects were asked to respond to their opinion about five items. The results summarized in table 5 shows their responses to the item "There is extensive opportunity for training for members of my work unit," of which 1% of respondents strongly disagree, 7.6%

disagree, 27.1% somewhat disagree, 1.9% neither agree nor disagree, 35.2% somewhat agree, 19.5% agree and 7.6% strongly agree.

Table 5. Respondent responses to item 1 for Training and Development as an HRM practice

		Frequency	Percent	ValidPercent	Cumulative Percent
Valid	Stronglydisagree	2	1.0	1.0	1.0
	Disagree	17	8.1	8.1	9.0
	Somewhatdisagree	62	29.5	29.5	38.6
	Neitheragree or disagree	1	.5	.5	39.0
	Somewhatagree	86	41.0	41.0	80.0
	Agree	34	16.2	16.2	96.2
	Stronglyagree	8	3.8	3.8	100.0
	Total	210	100.0	100.0	

Note. The respondent responses to item 1 "There is extensive opportunity for training for members of my work unit" (Snell & Dean, 1992).

The results summarized in table 6 show the respondent responses to the item "A high priority is placed on training employees in my unit," of which 1% of respondents strongly disagree, 7.6% disagree, 27.1% somewhat disagree, 1.9% neither agree nor disagree, 35.2% somewhat agree, 19.5% agree and 7.6% strongly agree.

Table 6. Respondent responses to item 2 for Training and Development as an HRM practice

		Frequency	Percent	ValidPercent	Cumulative Percent
Valid	Stronglydisagree	3	1.4	1.4	1.4
	Disagree	21	10.0	10.0	11.4
	Somewhatdisagree	56	26.7	26.7	38.1
	Neitheragree or disagree	1	.5	.5	38.6

Somewhatagree	80	38.1	38.1	76.7
Agree	42	20.0	20.0	96.7
Stronglyagree	7	3.3	3.3	100.0
Total	210	100.0	100.0	

Note. The respondent responses to item 2"A high priority is placed on training employees in my unit" (Snell & Dean, 1992).

The results summarized in table 7 show the respondent responses to the item "The training process is formally managed and professional," of which 5% of respondents strongly disagree, 7.6% disagree, 31% somewhat disagree, 38.6% somewhat agree, 20.5% agree and 1.9% strongly agree.

Table 7. Respondent responses to item 3 for Training and Development as an HRM practice

		Frequency	Percent	ValidPercent	Cumulative Percent
Valid	Stronglydisagree	1	.5	.5	.5
	Disagree	16	7.6	7.6	8.1
	Somewhatdisagree	65	31.0	31.0	39.0
	Somewhatagree	81	38.6	38.6	77.6
	Agree	43	20.5	20.5	98.1
	Stronglyagree	4	1.9	1.9	100.0
	Total	210	100.0	100.0	

Note. The respondent responses to item 3"The training process is formally managed and professional" (Snell & Dean, 1992).

The results summarized in table 8 show the respondent responses to the item "Sufficient money is spent on training programs in your work unit," of which 1.4% of respondents strongly disagree, 9% disagree, 27.1% somewhat disagree, 5% neither agree nor disagree, 43.8% somewhat agree, 12.9% agree and 5.2% strongly agree.

Table 8. Respondent responses to item 4 for Training and Development as an HRM practice

		Frequency	Percent	ValidPercent	Cumulative Percent
Valid	Stronglydisagree	3	1.4	1.4	1.4
	Disagree	19	9.0	9.0	10.5
	Somewhatdisagree	57	27.1	27.1	37.6
	Neitheragree or disagree	1	.5	.5	38.1
	Somewhatagree	92	43.8	43.8	81.9
	Agree	27	12.9	12.9	94.8
	Stronglyagree	11	5.2	5.2	100.0
	Total	210	100.0	100.0	

Note. The respondent responses to item 4, "Sufficient money is spent on training programs in your work unit" (Snell & Dean, 1992).

The results summarized in table 9 show the respondent responses to the item "I am provided with sufficient time to undertake formal training in my work unit," of which 1.4% of respondents strongly disagree, 9% disagree, 27.1% somewhat disagree, 5% neither agree nor disagree, 43.8% somewhat agree, 12.9% agree and 5.2% strongly agree.

Table 9. Respondent responses to item 5 for Training and Development as an HRM practices

		Frequency	Percent	ValidPercent	Cumulative Percent
Valid	Stronglydisagree	1	.5	.5	.5
	Disagree	19	9.0	9.0	9.5
	Somewhatdisagree	59	28.1	28.1	37.6
	Neitheragree or disagree	4	1.9	1.9	39.5
	Somewhatagree	81	38.6	38.6	78.1
	Agree	38	18.1	18.1	96.2

Stronglyagree	8	3.8	3.8	100.0
Total	210	100.0	100.0	

Note. The respondent responses to item 5 "I am provided with sufficient time to undertake formal training in my work unit" (Snell & Dean, 1992).

The results summarized in table 10 show the relationship between OC types: Clan, Adhocracy, Market and Hierarchy, and Training and development as HRM practices in Kosovo SMEs. The results show that high p-values of Organizational Culture types and Training and development as HRM practice confirm the null sub-hypothesis H1_o, according to which there is no correlation between OC and training and development as HRM practice, whereas the sub-hypothesis H1_o is rejected.

Table 10.Correlational analysis of the relationship between organizational culture and training and development as an HRM practice

Organizational culture types		Training and development
Clan culture (A)	Pearson Correlation	036
Clan culture (A)	Sig. (2-tailed)	.601
A 41- a ann ann an 14-ma (D)	Pearson Correlation	104
Adhocracyculture (B)	Sig. (2-tailed)	.135
Madat sulture (C)	Pearson Correlation	.081
Market culture (C)	Sig. (2-tailed)	.244
Historial (D)	Pearson Correlation	.057
Hierarchyculture (D)	Sig. (2-tailed)	.412
	N	210

Note. **. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).

To test whether training and development, as HRM practice, can statistically predict organizational culture, standard linear regression was applied. The results summarized in tables 11 and 12 show the predictive value of training and development for organizational culture. The results show that high p-values of training and development confirm the null hypothesis H2₀, according to which Training and development is not a predictor of the organizational culture of SMEs, whereas the sub-hypothesis H2_a is rejected.

Table 11. Model Summary of the predictive value of training and development for organizational culture

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.170ª	.029	.005	7.17490

Note. Predictor: (Constant), Training and development as HRM practice

Table 12. Coefficients (Training and development predictor) of organizational culture

Model		Unstandardized Coefficients		Standardized Coefficients	f	Sig.
		В	Std. Error	Beta	•	~
1	(Constant)	24.992	2.56		10.207	.000
	Training and development	0.206	0.910	0.021	0.140	0.474

Note. Dependent Variable: Organizational culture

The results in Figure 1 show the graphical summary of Residual Plots for the predictive value of training and development for Organizational Culture.

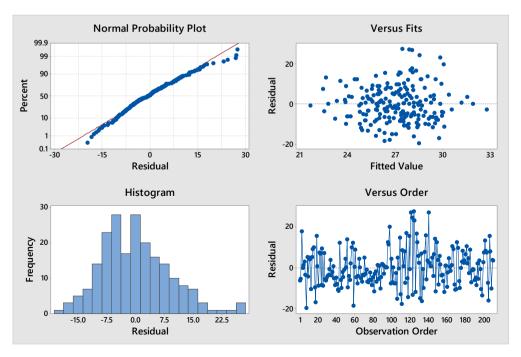


Figure 1. Graphical summary of Residual Plots for the predictive value of training and development for Organizational Culture (Minitab, 2019).

5. Conclusions

In the last two decades, the importance of practices through which proper human resource management has been made has increased, and at the same time, the performance of enterprises has increased (Su, Wright & Ulrich, 2018). Hence, the importance of organizational culture and Most of the barriers to SME management and economic development, in general, are largely human-based, so OC and HRM play important roles in the success and development of SMEs (Osei, 2017).

Through the organizational culture research instrument, respondents had to evaluate the current and preferred organizational culture. So, the results showed that the current and preferred organizational culture Clan culture had higher representation averages, followed by other OC types: Adhocracy, Hierarchy, and Market. According to Bremer (2018), Clan culture focuses on encouraging employees' and clients' participation, empowering them, and welcoming feedbacks by creating a cohesive environment, improving human resource management, and focusing on their well-being. However, since Clan culture has so many shared values, staff may feel uncomfortable exchanging opposing views, and as a result, over time, this may limit the organization's innovative ability. Adhocracy culture means that the organization should encourage adaptability to adapt quickly to changing market conditions as they arise, facilitate innovation, and investigate when new circumstances arise. In addition, routines change rapidly due to promote dynamism since the organization wants to experiment with new opportunities. Whereas Market culture means a work environment that is based on results and staff are focused on goals by emphasizing the objectives, deadlines, and work completion. In addition, market dominance and achievement of goals are considered a success in market culture, while leadership style is based mainly on the competition. Their Hierarchy culture means governance, safety, and quality manuals, where mainly procedures direct what people do. In addition, in hierarchical culture, the work organization must be done efficiently by doing continuous planning and at a low cost (Bremer, 2018).

The purpose of the central R1 research question was to reveal the relationship between organizational and training and development as HRM practice in Kosovo SMEs. The results show that high p-values of Organizational Culture types and Training and development as HRM practice confirm the null sub-hypothesis H1_o, according to which there is no correlation between OC and training and development as HRM practice, whereas the sub-hypothesis H1_a is rejected. According to Wizniuk and Kumar (2018), although the role of HRM for the company is very important since, among other things, contributes to the development of enterprise culture, it still remains a financial challenge and organizational ability of SMEs to keep small HRM department (Wizniuk& Kumar, 2018). According to Kosiorek&Szczepańska (2016), it is necessary

for HRM practices to be standardized in the enterprise. As a result, a standardized model of HRM practices would be helpful in adequately designing enterprise strategies and developing the enterprise's organizational culture, which is considered the most important factor in the functioning of HRM (Kosiorek&Szczepańska, 2016).

While to test whether the training and development can statistically predict the organizational culture of SMEs, standard linear regression was developed. The results show that high p-values of training and development confirm the null hypothesis H2₀ according to which Training and development is not a predictor of the organizational culture of SMEs, whereas the sub-hypothesis H2, is rejected. Among other important factors for HRM is employee training and development (Salah, 2016). Creating quality training and development programs is very important as they identify employees' skills and abilities that serve the enterprise's development and success in general (Osei, 2017). Proper planning of the training and development program helps enterprises improve the quality of their employees, enables them to select the staff needed to perform specific tasks, and helps them to cope with different challenges in the enterprise (Osei, 2017). Information on cultural dimensions serves to SME representatives to understand the cultural differences of different employees; as such, differences can be an obstacle to the enterprise's success and can play an important role in making decisions (Wang & Liu, 2007). According to Wang & Liu (2007), training as an HRM practice is essential to overcome these cultural barriers. Today's SME managers have to establish cross-functional teams and communicate with people of different cultural backgrounds, so it is vital to know the role of cultural barriers on these tasks (Wang & Liu, 2007).

5.1 Assumptions and Limitations

The organizational culture types and training and development as an HRM practice in organizations are relatively new in the Kosovo environment. Most employees were not familiar with the concepts of organizational culture due to the lack of data on the relationship between OC and training and development in Kosovo SMEs. The data were interpreted very carefully to avoid many limitations, as the questionnaire consisted of 11 items. Other limiting factors refer to the lack of relevant preliminary research conducted in Kosovo to serve and enable a proper research design. In addition, another limitation is the issue of social desirability bias, whereby the respondents may respond to what they perceive as desirable because employees may fear exposing too much information about the institution. However, the researcher has tried to minimize the limitation by creating anonymous instruments and assuring respondents of their confidentiality. Future studies can include other variables to test the moderating or mediating effects to add new research insights that focus on the organizational culture and training and development.

References

- Abdullah. S., Musa, Ch. I., & Azis, M. (2017). The Effect of Organizational Culture on Entrepreneurship Characteristics and Competitive Advantage of Small and Medium Catering Enterprises in Makassar. *International Review of Management and Marketing, Econ journals*, 7(2), pages 409-414.
- Ahmeti, F. (2015). Human Resource Management and practices in SMEs in Developing Countries: Practices in Kosovo. *European Scientific Journal*, 11(7), 415-428.
- Akkucuk, U. (2014). Handbook of Research on Developing Sustainable Value in Economics, Finance. Hershey: IGI Global.
- Ali Alsheikh, G. A. (2017). The Impact of Human Resource Management Practices, Organizational Culture, Motivation and Knowledge Management on Job Performance with Leadership Style as Moderating Variable in the Jordanian Commercial Banks Sector. *Journal of Reviews on Global Economics*, 6, 477–488.
- Aman, Q., Noreen, T., Khan, I., Ali, R., &Yasin, A. (2018). The Impact of Human Resource Management Practices on Innovative Ability of Employees Moderated by Organizational Culture. *International Journal of Organizational Leadership*, 7, 426-439.
- APA, (2002). *APA ethical principles of psychologists and code of conduct*. Retrieved on January 28, 2019 from http://www.apa.org/ethics/code/principles.pdf
- Arslan, S. (2017). HRM and Firma Performance: An investigation of Turkish Mid-size IT Firms(Doctoral dissertation, Aston University, 2016) (pp. 1-251). Birmingham, UK: Aston University. doi:http://publications.aston.ac.uk/id/eprint/31753/
- ASK. (2018, Dec). Kosovo Agency of Statistics. Retrieved March 2019, from ask.rksgov.net/: https://ask.rks-gov.net/eng/
- Aycan, Z. (2005). The interplay between cultural and institutional/structural contingencies in human resource management practices. *International Journal of Human Resource Management*, 16(7), 1083-1119.
- Bae, J., & Lawler, J. J. (2000). Organizational and HRM Strategies in Korea: Impact on Firm Performance in an Emerging Economy. *Academy of Management Journal*, 43, 502-517. http://dx.doi.org/10.2307/1556407
- Balnaves, M., & Caputi, P. (2001). *Introduction to Quantitative Research Methods: An Investigative Approach*. London, UK: SAGE Publications.
- Berrio, A. A. (2003). An organizational cultural assessment using the competing values framework: A profile of Ohio State University extension. *Journal of Extension*, 41(2).
- Blumberg, B., Cooper, D.R. and Schindler, P.S. (2008) *Business Research Methods*. Maidenhead: McGraw-Hill Education.
- Botelho, C. (2020). The influence of organizational culture and HRM on building innovative capability. *International Journal of Productivity and Performance Management*. doi: https://doi.org/10.1108/IJPPM-05-2019-0228
- Bremer, M. (2018). *Developing a positive culture where people and performance thrive* (Vol. 1). Motivational Press, Inc. Melbourne, Florida. ISBN: 978-1-62865-440-0
- Bremer, M., &Lamers, M. (2012). Organizational Culture Change: Unleash your organization's potential in circles of 10 (Vol. 1). Zwolle, Netherlands: KikkerGroep. ISBN: 978-90-819825-1-1

Brooks, M. G. (2007). Organizational leadership in academic libraries: Identifying culture types and leadership roles. *Theses, Dissertations and Capstones*. Paper 15.

- Burnett, J. (2009). Defining the Research Question. In *Doing your social science dissertation* (1st ed., pp. 50-61). London: SAGE.
- Cameron, K. S., Quinn, R. E. (1999). Diagnosing and Changing Organizational Culture Based on the Competing Values Framework. Reading, Addison - Wesley, 221. ISBN 0201338718. 1999.
- Cameron, K., Quinn, R. E. (2006). *Diagnosing and Changing Organizational Culture*. Based on the Competing Values Framework. San Francisco: Jossey-Bass.
- Channa, K. A. (2016). *An Exploration of the Influence of Social Position on HRM Adoption: A Case of HRM in Pakistan* (Doctoral dissertation, The University of Edinburgh, 2016) (pp. 1-349). Edinburgh, Scotland: The University of Edinburgh. doi:https://www.era.lib.ed.ac.uk/handle/1842/22022
- Cook, C., Murphy, L., & Thomas, B. (2018). An evolutionary framework exploring the role of periodisations in the modern development of a Baltic state: The case of HRM in the Latvian public sector. *Economic and Industrial Democracy*. https://doi.org/10.1177/0143831X18769383
- Creswell, J. (2008). The Steps in the Process of Research. In *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (3rd ed., pp. 57-265). Upper Saddle River, N.J.: Pearson/Merrill Prentice Hall.
- Creswell, J. (2009). Research Design. Qualitative, Quantitative and Mixed Methods Approaches. Third Edition. Sage Publications, California, U.S.A.
- Creswell, J. W. (2013). Research design: Qualitative, quantitative, and mixed methods approaches. Sage publications.
- European Commission. (2016). User guide to the SME Definition. Retrieved March 20, 2019, from https://ec.europa.eu/regional_policy/sources/conferences/state-aid/sme/smedefinitionguide_en.pdf. Ref. Ares(2016)956541
- Fralinger, B., Olson, V. (2007). Organizational Culture At The University Level: A Study Using The OCAI Instrument. *Journal of College Teaching & Learning*, 4(11).
- Fralinger, B., Olson, V., Pinto-Zipp, G., Dicorcia, M. (2010). Organizational Culture at the University Level: A Follow-Up Study Using the OCAI Instrument. *EABR & ETLC Conference Proceedings*, Dublin, Ireland.
- Gashi, K., &Osmani, Q. (2015). The Predictive Value of Job Satisfaction and Relevant Factors in Predicting of Commitment in the Workplace, Job Involvement and Job Opportunity of Bank Employees. *Academic Journal of Interdisciplinary Studies*, 4(2), 1st ser., 168-175. doi:10.5901/ajis.2015.v4n2s1p168 MCSER Publishing, Rome-Italy
- Hill, K. (2016). Small and Medium-sized Enterprises (SMEs) in Public Procurement (pp. 1-13, Rep. No. Brief 33). Boulogne, France: SIGMA (Support for Improvement in Governance and Management). doi:http://www.sigmaweb.org/publications/Public-Procurement-Policy-Brief-33-200117
- Hutnek, S. M. (2016). The Impact of Cultural Differences on Human Resources Policies of Multinational Companies. *Senior Theses*, 60, 1-34. Retrieved from https://scholarcommons.sc.edu/senior theses/60
- Inanlou, Z., &Ahn, J.-Y. (2017). The Effect Of Organizational Culture On Employee

- Commitment: A Mediating Role Of Human Resource Development In Korean Firms. *The Journal of Applied Business Research*, 33(1), 87-94.
- KBRA. (2019). Kosovo Business Registration Agency. Registered Enterprises in Kosovo Types of businesses in Kosovo. Retrieved July 2, 2019, from https://arbk.rks-gov.net/Page.aspx?id=1,32
- Khan, N. R., Awang, M., &Zulkifli, C. M. (2013). Enhancing HR outcomes through best HR practices and organizational commitment: A conceptual schema for SMEs. *Indian Journal of Commerce & Management Studies*, 4(1), 24-32.
- Kianto, A., Sáenz, J., Aramburu, N. (2017). Knowledge-based human resource management practices, intellectual capital and innovation. *Journal of Business Research*, 81, 11-20. https://doi.org/10.1016/j.jbusres.2017.07.018
- Kosiorek, D., & Szczepan ska, K. (2016). Relationships between organizational culture and human resource management. *Jagiellonian Journal of Management*, 2(3), 205-215.
- Law 03/L-031 on SME Support. (2008). *Law on Amending and Supplementing Law 02 / L-5 on Support to Small and Medium Enterprises* (pp. 1-8, Rep. No. 03/L-031). Pristina, R. of Kosovo: Assembly of the Republic of Kosovo. doi:https://www.kuvendikosoves.org/common/docs/ligjet/2008 03-L-031 al.pdf
- Massa, I., &Calì, M. (2010). Supporting Investment and Private Sector Development in Times of Crisis: Strategies for Small States. London: Commonwealth Secretariat
- Ministry of Innovation and Entrepreneurship. (2017). 100-day work report of the Ministry of Innovation and Entrepreneurship (Vol. 1, pp. 1-3, Rep.). Pristina, R. of Kosovo: Government of the Republic of Kosovo. doi:https://www.min-rks.net/repository/docs/raporti_100_ditore_i_punes_se_min
- Ministry of Innovation and Entrepreneurship. (2017). *Program of the Government of the Republic of Kosovo 2017-2021* (Vol. 1, pp. 1-5, Rep.). Pristina, R. of Kosovo: Government of the Republic of Kosovo. doi:https://www.min-rks.net/2/department-of-entrepreneurship
- Minitab (2019). Computer statistical software (v.19). State College, PA: Minitab, Inc. (www. minitab.com)
- Mirzapour, M., Toutian, S. S., Mehrara, A., &Khorrampour, S. (2019). The strategic role of human resource management in crisis management considering the mediating role of organizational culture. *International Journal of Human Capital in Urban Management*, 4(1), 43-50. doi: 10.22034/IJHCUM.2019.01.05
- Muse, S. H., & Nur, Y. H. (2016). Human resource management and success of small business in Hargeisa Somaliland (Doctoral dissertation, Gollis University, 2016) (pp. 1-48). Hargeisa, Somaliland: Gollis University.
- Osei, V. R. (2017). Human resource management practices by SME owners in Ghana: Factors constraining success and how they could be addressed (Doctoral dissertation, University of Canberra Faculty of Business, Government and Law, 2017) (pp. 1-275). Canberra, Australia: University of Canberra.
- Poernomo, W., Budiyanto, &Suhermin (2019). Corporate Culture Mediates Human Resource Management Practices of Company Performance (Study of Subsidiaries and Affiliates of PT. Semen Indonesia Group). SSRG *International Journal of Economics and Management Studies* 6(10), 34-40.
- Porter, M. E. (2012). Competitive Advantage: Enduring Ideas and New Opportunities. In 14th

Annual Rotman School Conference for Leaders(pp. 1-27). Toronto, Canada: Harvard Business School - Institute for Strategy and Competitiveness.

- Pratap, A. (2019, March 5). HRM & Organizational Culture at Adidas. Retrieved April 9, 2020, from https://notesmatic.com/hrm-organizational-culture-at-adidas/
- Rabie, C., Cant, M. C., &Wiid, J. A. (2016). Training And Development In SMEs: South Africa's Key To Survival And Success? *The Journal of Applied Business Research*, 32(4), 1009-1024.
- Ratanjee, V. (2018, February 27). Why HR Leaders Are Vital for Culture Change. Retrieved April 9, 2020, from https://www.gallup.com/workplace/234908/why-leaders-vital-culture-change.aspx
- Salah, M. A. (2016). The Impact of Training and Development on Employees Performance and Productivity. *International Journal of Management Sciences and Business Research*, 5(7), 36-70. ISSN (2226-8235)
- Salehipour, A., &Mand, A. A. (2018). The Impact of Organizational Culture and Performance Work System on Employees' Performance. *International Business Research*, 11(6), 199–212. doi: https://doi.org/10.5539/ibr.v11n6p199
- Scrima, F., & Parry, E. (2017). The effect of organizational culture on deviant behaviors in the workplace. The *International Journal of Human Resource Management*, 30(17), 2482–2503. doi: https://doi.org/10.1080/09585192.2017.1326393
- Shahani, N. K. (2015). Human Resource Management Practices and their Impact on Organisational Citizenship Behavior in the Public Sector Universities of Pakistan(Master's thesis, Charles Sturt University, Australia, 2015) (pp. 1-466). Australia: School of Managemt and Marketing - Charles Sturt University.
- Smith, D. (2003). Five principles for research ethics. *American Psychological Association*, 34(1), 56-56.
- Snell, S. A., & Dean, J. W. (1992). Integrate manufacturing and human resource management: A human capital perspective, *Academy of Management Journal*, *35*(3):467-504.
- SPSS. Version 25.0 (2017). IBM SPSS Statistics for Windows, Version 25.0. Armonk, NY: IBM Corp.
- Su, Z.X., Wright, P.M., & Ulrich, M.D. (2018). Going Beyond the SHRM Paradigm: Examining Four Approaches to Governing Employees. *Journal of Management*, 44(4), 1598-1619.
- Sun, T. (2011). Understanding the natione of relationship between self-constructs and leadership behaviors as a function of generation. *Harold Abel School of Social and Behavioral Sciences*, 1-116.
- Taherdoost, H. (2016). Validity and Reliability of the Research Instrument; How to Test the Validation of a Questionnaire/Survey in a Research. *International Journal of Academic Research in Management (IJARM)*, 5(3), 28-36. ISSN: 2296-1747, Helvetic Editions LTD, Switzerland
- Thompson, B., Diamond, K., McWilliam, R., Snyder, P., & Snyder, S. (2005). Evaluating the Quality of Evidence from Correlational Research for Evidence-Based Practice. Council Fir Exceptional Children, 71(2), 181-194.
- Thoyib, A., Noermijati, & Rosita, N. H. (2016). The Role of Organizational Culture and Human Resource Management Practices in Strengthening the Effect of Leadership on Knowledge Sharing (A Study at NgudiWaluyo General Hospital, Wlingi, Blitar, East Java, Indonesia).

- *Journal of Management and Marketing Review, 1*(1), 72-80.
- Turhan, M., Köprülü, O., &Helvacı, I. (2016). The Relationship Between Organizational Culture and Human Resources Management: A Case Study of Silifke. *International Journal of Current Advanced Research*, 5(11), 1486–1488.
- Ujkani, E. (2012). Discussion material for the field of industry and SMEs (pp. 1-70, Rep. No. 4). Pristina, R. of Kosovo: Task Force for European Integration. Thematic Table Nr. 4 on Trade, Industry, Customs, Taxes, Internal Market, Competition, Consumer Protection and Health Care.
- Waheed, A., Miao, X., Waheed, S., Ahmad, N., & Majeed, A. (2019). How New HRM Practices, Organizational Innovation, and Innovative Climate Affect the Innovation Performance in the IT Industry: A Moderated-Mediation Analysis. *Sustainability Open Access Journal*, 11(3), 621. doi:https://doi.org/10.3390/su11030621
- Wan, D. Kok, V. Ong C. (2003). Strategic Human Resource Management & Organisational Performance in Singapore. *HR Management* July/August pp.261-268.
- Wang &, X. & Liu, J. (2007). Cultural barriers to the use of western project management in Chinese enterprises: Some empirical evidence from Yunnan Province. *Project Management Journal*, 38(3), pp. 61-73.
- Waters, K. K. (2013). The relationship between principals' leadership styles and job satisfaction as perceived by primary school teachers across NSW independent schools (Doctoral dissertation). Retrieved from University of Wollongong Thesis Collection. (Accession Order No. 4074).
- Wilkins, A. L., &Ouchi, W. G. (1983). Efficient cultures: Exploring the relationship between culture and organizational performance. *Administrative Science Quarterly*, 28(3), 468-481.
- Wizniuk, N. M., & Kumar, S. M. (2018). The Levers of HR and How It Influences Corporate Culture. *Advances in Civil Engineering and Science Technology, AIP Conference Proceedings* 2020, 1-7. doi: https://doi.org/10.1063/1.5062677.
- Wright, J. (2019, May 14). The Role of Human Resources in Organizational Transformation. Retrieved April 9, 2020, from https://www.eaglesflight.com/blog/the-role-of-human-resources-in-organizational-transformation
- Zhang, L. (2016). The Impact of Human Resource Management on Organizational Effectiveness. *Chemical Engineering Transactions*, 51, 895-900. doi: 10.3303/CET1651150
- Zoogah, D.B. (2018). High-performance organizing, environmental management and organizational performance: An evolutionary economics perspective. *Human Resource Management*, 57, 159-175.