Economic Analysis and Policy 78 (2023) 718–729

Contents lists available at ScienceDirect

Economic Analysis and Policy

journal homepage: www.elsevier.com/locate/eap

Full length article

Risk and synergy of multinational enterprise mergers and acquisitions under the background of the COVID-19 pandemic

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ARTICLE INFO

Article history:
Received 20 December 2022
Received in revised form 17 March 2023
Accepted 31 March 2023
Available online 8 April 2023

Keywords:
ASIAN countries
Economic policy uncertainty
GDP
Inflation
Mergers and acquisitions
Tax

ABSTRACT

This study includes economic policy uncertainty measures and the magnitude and frequency of Asia pacific multinational business Mergers and acquisitions in 11 countries from 2009 to 2019 to evaluate the impact of uncertainty in economic policies (E.P.U) of global organizations mergers and acquisitions (M&A). To demonstrate that uncertainty in the home nation's economic policy significantly restricts multinational enterprise Mergers and acquisitions, uncertainty in the nation's economic policy significantly enhances Mergers and acquisitions, and that when the economy is in a pro-cyclical phase, these effects are reduced. Furthermore, the economic crisis has different effects of the country's uncertain economic policies on worldwide firm M&As. There is a significant negative correlation between the country's economic policy uncertainty and multinational firm Merger and acquisitions. Third, multinational firm Mergers and acquisitions are significantly impacted by economic policy uncertainties in the ASEAN (Association of Southeast Asian Nations) but not much in emerging countries. The size of M&A is considerably positively connected with foreign market expansion and variations in uncertainties.

1. Introduction

Foreign direct investment (FDI) in ASEAN mostly involves investment and acquisitions and mergers of international corporations (M&As). And over half of Asian's total OFDI in 2016 came from multinational firm M&A deals, exceeding financing strategy. Economic policies were in flux due to the European financial crisis, the American fiscal deficit, Political uncertainty, a tariff war between Asia pacific and the US, and other developments, which have increased economic and financial instability. The EPU Measure created by Khojasteh et al. (2018) shows that it was in a reasonably steady condition before the global economic crisis of 2008, and that it climbed significantly in the wake of the crisis. Many things happened during this period that significantly reduced the scope and intensity of international M&As globally, increasing dangers to the global economy and impeding foreign investment from other nations. Asian, which has the sec largest economy, also has been impacted, and its degree of general economic unpredictability is above the average for the globe. Hence, it is necessary and important to study on the risk and the synergy of multinational enterprise mergers and acquisitions under the background of the COVID-19 pandemic.

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https://doi.org/10.1016/j.eap.2023.03.025

In this study, we examine if there is a correlation between EPU within the nations and the transnational corporation M&A. Data used from the Asia pacific EPU and multinational enterprise M&As. Its contribution to the literature is as follows. Tian et al. (2022) determine if their impacts change depending on the situation, which will assist Asian's businesses in adjusting their investment philosophies in developing nation and has a rising economy. Therefore, it has many of the same problems with employment, economic growth, and sustainable growth as other developing nations. East Asia is becoming more interested in foreign investments, and Asian's (Nanayakkara and Colombage, 2019) worldwide firm Mergers and acquisitions (economic and financial uncertainties significantly impact m&a (Fang et al., 2020)). The majority findings of the current research is based on wealthy nations.

Furthermore, the unpredictability of domestic and foreign economic policies drives multinational firm mergers and acquisitions in the other direction. The actions and novelty of "thrust" and "drag" illustrate how the two EPU connect. The economic downturn, the nature of the host country, and bilateral disparities are other factors that affect the economic policy uncertainties, which result in a variety of consequences on multinational enterprise M&As and offer some empirical support for future study. The rest of this article is divided into the following sections. A literature review and theory formulation are presented in Section 2. Our data are presented in Section 3, along with some statistical analysis. We report our primary empirical findings in Section 4. Some robustness tests are conducted in Section 5. Section 6 comes to an end.

2. Literature review and theoretical background

The amount of foreign direct investment a firm attracts is influenced by factors including global collaboration, managerial advantage, internalization (Sulemana et al., 2019) advantage, and geographical advantage. The exponential rise of mergers and acquisitions (M&As) and foreign direct investments (FDI) from the perspectives of formal and informal entities was documented in the 1990s by institutional economics, which is a growth of international foreign direct idea. One may think of the economic strategy as a formal financial entity. Numerous scholars have lately been interested in economic policy uncertainty as an area of institutional structures that is expanding. Uncertainty is an unanticipated future condition of the economy that may be brought on by a variety of factors, such as changes in an economy's fundamentals, economic issues, long-term growth prospects, international political instability, and natural disasters (Kumar et al., 2021). It may also arise when businesses are unable to foresee outcomes or determine how likely they are to occur (Khan et al., 2020). A crucial company investment technique for allocating money is mergers and acquisitions (Nassani et al., 2019). Two opposing viewpoints have been presented by economists who have closely examined how firms choose to proceed with development in the face of uncertainty. The first is that more company spending is encouraged both locally and abroad when there is higher uncertainty. The other is that if more information regarding the project's profitability is sought, uncertainty will increase the option meaning value if an investment project is not totally recovered. Uncertainty may also affect business spending by increasing the risk of default or the premium for equity risks (SARI/EI, 2016). synchronous M&As involving international businesses. Therefore, while investigating the implications of EPU on global business mergers and acquisitions, it is crucial to do a literature study from an economic and trade perspective.

Research from Asia pacific and other regions has shown that uncertain economic policies may discourage local companies from investing and promoting M&A activity. Businesses are more prone to make significant expenditures under ambiguous environments (Charnes et al., 1978). According to, promotes vertical business integration and a wave more acquisitions. Their results align with the motive for merger risk management, which holds that a rise in volatility motivates management to integrate as a defense vertically. Volatility and Mergers and acquisitions activity have a favorable relationship, according to Gilbertson et al. (2012). They held the specific belief that merger and acquisition structure of the company uncertainty, which in turn encourages mergers driven by the construction of multinational enterprises. According to recent publications, uncertainty affects the economy. Since it might enhance the uncertainties of the target institution's independent worth or the value of the synergistic effect of transactions, political uncertainty may be a significant source significant risk in the setting of Mergers and acquisitions. Operators and the media make public speculation on the inverse link between uncertainties and Merger and acquisitions. According to Chandel et al. (2016), a lack of certainty enhances financial limitations, raises external funding costs, and heightens management and risk avoidance. Uncertain was shown to be negatively connected with M&As & significantly linked with the time needed to conclude an M&A transaction by Renault et al. (2017). Because of the unpredictability, the buyer chooses to pay with stocks at a reduced acquisition price. Menegaki and Tugcu (2017) concluded that while the level of national uncertainty regarding economic policies is discouraging businesses from investing domestically, it is also encouraging them to do so abroad to maximize their expected current value of returns. The especially true of developed nations, where money invested can produce a more predictable required return.

He et al. (2020) demonstrated that the Merger and acquisitions marketplace has improved due to the sustainability of the economy and political climate in the China The conclusion of the US national election, according to, "established the basis for greater M&A deals". According to He et al. (2020), risk concerns, including the unresolved debt limit issue, contributed to lower-than-anticipated Mergers and acquisitions in the previous year. Due to the unpredictability of global economic policy, major companies place a significant discount on the viability of their international investments. Their managers are unsure about their ability to operate in international markets, discouraging them from sending resources to their respective countries.

The financial industry has been affected by the rise of informational technology and is actively developing digital finance (Lee et al., 2022; Wang et al., 2022). When the EPU of M&A target nations grew, their M&A activity considerably decreased, according to research that examined the link between Economic policy uncertainty, exports, and economic investments in different countries (Batool et al., 2022). Additionally, political uncertainty drives up both external and internal finance costs, which lowers the rate of capital formation and exacerbates economic contraction (Aiginger and Rodrik, 2020). Particularly, instability risk slows the influx of FDI, and uncertainties can prevent Domestic investment globally demonstrates that a rise in EPU lowers enterprises' expectations of financial well-being, discouraging others from making investments because developments are irreparable, and a keep rising in EPU lowers the viability of capital projects and the possibility of corporate profits. In their 2016 study, examined how unpredictability shocks affected M&As between 1985 and 2014. The findings indicate that a 1% improvement in uncertainties causes a 6.6% decline in overall Mergers and acquisitions and a 3.9% reduction in the number of deals in the following year. Furthermore, there is no proof that Mergers afterward increased. According to Bertoldi and Mosconi (2020), OFDI from the Euro area is motivated by tax evasion. According to Zhang and Dilanchiev (2022), a larger tax impact on the host nation will discourage prospective international investors, limiting chances to attract money from elsewhere.

In conclusion, the study indicates that several academics have made significant contributions to examining EPU and international firm Mergers and acquisitions. Researchers have a general understanding of the EPU affects foreign direct investment. There is currently no agreement on the effects of international firm Mergers and acquisitions, and the field lacks developed theoretical perspectives.

2.1. Hypothesis development

2.1.1. General hypothesis

Organizations' financial position is impacted when domestic instability increases. The economic profit of predicted profits decreases as domestic instability increases. The "delay effect" describes how businesses put off choices like investing money & employing people when they are confronted with an insecure investment climate (Guo, 2020). According to the "discernment effect", as uncertainty grows, businesses become more sensitive, and slight changes in certain market variables, such as demand and availability needs and commodities prices, may also be felt. Entrepreneurs are hampered by internal and outside hurdles, and their optimism will decline, so they cannot properly forecast profits, which causes capital investments to stall whenever the economy experiences significant fluctuations and frequent policy changes. Making the right choices in very unclear circumstances might be aided by a study of actual possibilities from the organizational point of view (Fang et al., 2021). The macroeconomic climate of the foreign investor is crucial for businesses to consider when making international investments. The projected profits of multinational firms are impacted by unclear economic policies, which lowers the volume and scope of multinational enterprise Merger and acquisition. Increasing political economy uncertainties in the native country drive multinational enterprise M&A. In contrast, it is constrained by enhancing economic and financial market volatility in the nation.

The influences on the operations and development of businesses. Economic growth is often represented in "pro-cyclical" traits; in other words, business managers are upbeat and want to boost investments during an economic upswing. Consumption is weak, investment costs are high and projected returns on investments decline during an economic downturn. Other researchers have shown countercyclical expenditure. Financial crises may also influence business development. Infrastructure spending increases during an economic depression because changing economic plans have a less political effect on the government. In anticipating the new measures' future economic consequences, they also raise their present investment during economic downturns. examined how the economic downturn affected businesses' asset allocation and concluded that various economic cycles resulted in varying levels of enterprise investment at the industrial scale. According to Huang et al. (2022), "promoting innovation via M&As" drives Asean's businesses to participate in the international economy. Based on this, we put up theories on the real-world attributes of Mergers and acquisitions in Asia pacific.

The first substantial financial economic shocks produced by the global economic downturn impacted the capital and currency markets hard in 2008. When the repercussions reached the expanding economy, they impeded economic expansion and caused a depression on a worldwide scale. The present EPU in the economy seems more likely to affect capital instruments, capital flows, and other things since the global economic crisis increased uncertainties. Due to the distinct levels of marketplace demand (Zhou et al., 2017) that businesses must examine when making investment choices, multinational corporation Mergers and acquisitions in Asia pacific also differ slightly. The effect of macroeconomic variables on multinational enterprise Mergers and acquisitions varied during and after the economic crisis. Before the economic crisis, the host economy policy uncertainties encouraged international enterprises to merge and acquire, and after the economic crisis, it hampered such acquisitions and mergers.

Asians' financial M&A activity in developed and developing economies is diverging. Scope acquisitions account for half of acquisitions in developed countries. These acquisitions help buyers launch new companies, goods, and distribution networks. In contrast, most transactions in developing countries are massive, which may help firms expand their operations (He et al., 2019). According to the National Bureau of Statistics of Asian's Outward Foreign Direct Investments, European and American industrialized nations have been Asian companies' top merger and acquisition destinations. Transactions are much higher than in developing countries. Rich countries are falling behind North America. This location has 105%

Table 1
Variables and symbols of (1).

Number	Variables	Description
1	EPU_{it}	Yearly units
2	EPU_{im}	Month-to-month database's average translation

more transactions. Mergers and acquisitions must be divided among established and developing countries. Economic policy uncertainty affects transnational firms in wealthy and poor nations. Asia-Pacific M&As vary. Investments' impact on globalization (Nasim and Fatima, 2020) depends more on international policy changes' environmental dynamism. The host country acts as the "push" and the world community as the "resistant" in multinational company M&As due to the investor's EPU's unpredictability. Multinational corporation M&As will increase when the "push" of the native country and (Atahau et al., 2021) the "barrier properties" of the receiving country communicate. This is true whether the home country is higher or lower than the host nation. Thus, we create variables to study bidirectional uncertainty disparities on international firm M&A transactions. Bilateral uncertainty drives cross-border M&As.

3. Data and economic model

3.1. Data

The quantity of Merger and acquisition, the characteristic of money transfers, the signature and part of the world of the Mergers and acquisition party and identify, the proportion of money transfers disclosed, an explanation of the marketplace, and the configuration of the transaction are all included in the sample, which consists of more than 100,000 international corporation money transfers by Zhu & Ren (2018) demonstrates the Asian enterprises from January 1, 2009, to December 31, 2019. by considering the number of observations and the reliability of the results. First, we used a representative of Asian multinational mergers and acquisitions in 11 countries by eliminating the duplicate data based on multinational M&A data and economic policy uncertainties. Calise et al. (2020), Cook et al. (2014) demonstrated the eastern seaboard Asian (excluding Hong Kong/Macao/Taiwan) as the certification region for the identified mergers and acquisition party to assure the study's distinct qualities. To establish that its target businesses had genuine or full control of the company before the merger and acquisition, they erase merger and acquisition information connected to suspicions and cancellations while keeping track of mergers that were "done" and "assumed completed". We verify the recordings of Mergers and acquisitions whose transactions status is "implied to be concluded" one by one employing business financial reports and sources, removing unsuccessful interactions, keeping effects, updating the transaction cost, and ensuring the correctness and validity of the data. Furthermore, the deal is finished and will be executed by November 31, 2019.

These parameters allowed us to find featuring polished nickel international M&A deals involving Asian (Gumashta and Gumashta, 2021) concluded that the companies in 11 different nations. Evaluating, They compared the business data to Asian's database of industrial businesses.

3.1.1. Explanatory variables: economic policy uncertainty (EPU)

The EPU Measure created by is utilized in this work because it measures fundamental economic circumstances and situations in particular sectors and records changes in financial regulations and the direction and extent of such developments. Many times, single assessment and measurement processes are used as other indications (Van Vuuren et al., 2017). The indicator is appropriate for this study because Asian's global Mergers and acquisitions (m&a are more vulnerable to shifts in the host state's financial policies than (El-Kassar and Singh, 2019) it is to changes in particular benefits and drawbacks. EPU is now analyzed by the indicator, accessible at http://www.policyuncertainty.com/index.html, in 23 significant industries. Additionally, the technique is used to determine monthly data. Hong Kong was removed since it has unique features and is not the intended destination of Asian's OFDI, leaving us with a sampling size of 11 nations. The analysis's sample time frame is from 2009 to 2019. Variables of Eq. (1) are as shown in Table 1.

This study addresses the following information: the month-to-month database's average translation to yearly units is as follows:

$$EPU_{it} = \sum_{m=1}^{12} XnEPU_{im} \tag{1}$$

Additionally, the study approach discusses the effects of uncertain economic policy on international firm Mergers and acquisitions from the perspectives of Asia pacific and the world community, accordingly, and considers the actual difference in the confidence world.

3.1.2. Regulating variables: economic growth (GDP)

And to determine when shifts in the business downturn may impact the link involving EPU & mergers and acquisitions, we examine the growth rate of a nation's GDP it is pro-cyclical; in all other cases, it takes a value of 1 or 0 (Cheng, 2007).

Table 2
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Variable	Symbol	Description of variables
Multinational enterprise mergers and acquisitions	M.A	Number of multinational enterprise mergers and acquisitions in Asean
Economic policy uncertainty	EPU	Index of economic, policy, and certain other dimensions of a country's instability
Economic Growth	Gdp	Growth rate per GDP
Cultural Distance (composite)	Distance	Inequalities in acquiring and acquired cultures
Inflation Diff	Inflation	Acquisition nation vs. target nation inflation for year
Difficulty Diff	Resource	Exports, mineral resources, and total exports
Investment environment	Investment	Level of economic liberty
Tax policy	Tax	Host country's tax share of GDP
Trade (bilateral growth)	Difepu	The amount of gap in uncertainty about economic policy between Asia pacific nations
Trade (market difference)	Difggdp	The absolute value of the gap between ASEAN country Economy growth

Table 3
Descriptive statistics of variables.

Variables	Mean	Std.D	Mini	Max
M.A	1,103,932	2,689,211	00	3.7800
E.P.U	117.937	48.258	26.00	246.480
MEpu	153.838	87.524	54.961	354.732
GGdp	0.48	0.4	0	11
CUL Dis	8305.714	4507.567	838.811	18,057.44
Inf. diff	46.507	40.409	8.037	221.194
RESOURCE	18.485	18.846	0.532	75.22507
INV	0.603	0.163	0.15	0.85
TAX	11.243	3.487	6.829	26.469
DIF.epu	54.616	57.204	0.057	313.124
DIF.ggdp	6.553	2.105	0.110	16.628

Note: Ayadi & Arnaboldi (2008) indicate that the transfer value of various M&As in 11 ASEAN nations is 0.

3.1.3. Control variables

Cultural difference is estimated between two possible values for such acquirer and target nations for each measurement utilizing the aggregation composites differential and the specific traditional influences given by GLOBE (Tolliver et al., 2020) They develop a there where that takes on a value of one if the transaction occurs after the financial year 2009 and zero to sometimes investigate changes in Mergers and acquisitions attitudes before and following 2009 (Pickl, 2019). In our subsequent testing, this variable acts as an interesting moderation.

We provided statistical information and variable descriptions for the items in Table 2 Investment: Based on information from yearly studies published by the Journal of Wall Street and the Research Foundation, particularly the comment thread evaluating the extent of the worldwide financial global ranking, the growth is associated (Basumatary et al., 2022). The sub-index has a value between 0 and 100, and the amount of economic flexibility is reflected in the value.

Tax: Using data provided by the Bank, we assess the host nation's economic tax income as a percentage of its GDP.

Difepu: Bilateral trade and investment policy uncertainty differential, expressed as the difference in absolute values of ASEAN and the host nation's economic policies.

The definitions of the variables are in Table 2.

3.2. Descriptive statistics of economic model

Table 3 provides a list of both the data's descriptive statistics. The study period, which includes fifteen years from 2009 to 2019, is ideal for showing the multinational firm M&As by Asean's businesses (Pham et al., 2020). Second, the median income EPU of the innate immune country's economic analysis of the impacts indicator is 118.937, the mean difference is 49.268, the lower limit is 27, and the highest is 346.490, demonstrating that the unpredictability of economic strategy has evolved dramatically during the same period. The estimated value of M&As is 120 billion dollars, and the mean difference is 27 billion dollars. The ratio of multinational mergers and acquisitions from Asia Pacific to the 11 nations varies. The study's predictive and explanatory factors differed significantly over the sample period, making it practical and applicable. The descriptive data show that EPU is higher in the home country than the destination country, both in standard and statistical significance.

3.3. Empirical specifications

The data shows that the uncertainties of the economic policies of the nations impact multinational firms' M&As in Asia pacific. Uncertainty about the impact's size and direction leads to varying outcomes in rich and emerging economies,

Table 4
Variance expansion factor for variables.

Variables	V.I.F	**1/V.I.F**
E.P.U	2.45	0.44
Mepu	2.56	0.40
ggdp	2.25	0.67
CUL Dis	2.33	0.50
INF Diff	2.34	0.49
DIFF Diff	2.33	0.49
INVE	2.77	0.43
Tax	2.21	0.32

various economic cycles, and both before and after the financial crisis. The following models are built major all-around problems in this research in this work, which is based on Qu et al. (2020) methodologies, to test the method:

$$Ln\left(M\&A_{itj}\right) = \alpha_0 + \alpha_1 LnHepu_{jt} + \alpha_2 LnMepu_{it} + X_{i,j,t} + \delta_{i,j,t} \tag{2}$$

Mepu denotes unpredictability in the monetary strategy of the home nation, and Hepu denotes unpredictability in the economic strategy of the guest country.

The size of multinational firm Mergers and acquisitions increased quickly after Asian enrolled in the World Trade Organization (WTO) in 2009, but it has since been on the decline for the last two years. Research interest has also been drawn to whether mergers and acquisitions (Heinlein et al., 2021) by multinational corporations are consistent with economic growth and the relationship between economic trends and such transactions. As a result, we build the subsequent models to analyze the association with Mergers and acquisitions by multinationals and economic expansion throughout several economic trends and test the uncertainties in economic strategy in the destination country.

$$Ln\left(MA_{itj}\right) = \alpha_0 + \alpha_1 Ln\left(Hepu_{jt}\right) + \alpha_2 Ln\left(Hepu_{jt}\right) * Ggdp_{jt} + \alpha_3 Ggdp_{jt} + \alpha_4 Mepu_{it} + X_{i,j,t} + \delta_{i,j,t} \tag{3}$$

developed the concept of "system advancing choice". examined the effect of cooperation system differences among countries of origin and native populations on Asian's (Acheampong et al., 2020) OFDI. They used the absolute error in the government-to-government system based on the notion of "system connectivity selection". Cousins et al. (2011) concluded that the cooperation disparities of unpredictability and market growth prospects, in addition to the advancement of this difference preference, to determine whether international company Merger and acquisitions under bilateral distinctions have a "relative disadvantage". The preferences test is run concurrently on the bidirectional discrepancies involving ambiguous bidirectional characteristics and market development opportunities.

$$Ln\left(M\&A_{ij,t}\right) = \beta_0 + \beta_1 Difepu_{ij,t} + \beta_2 Difggdp_{ij,t} + Z_{ij,t} + \delta_{I,j,t} \tag{4}$$

4. Results and economic analysis

4.1. Regression results

Stata 14.0 was used to conduct this article's multiple regression and calculation process. First, we assess the variables using the variable inflation factor (VIF) to ensure that the analysis findings do not result in an increase in the confidence interval of coefficients due to numerous cointegration among some of the (Ikram et al., 2019) variables and decrease the reliability of the regression results. There is no need to be concerned about multiple cointegrations since Table 4's data indicate that the maximum VIF is 1.87, which is much less than 5, which refers to the number of collinearities.

4.2. Baseline results

The first findings of multiple regression analysis used to examine the connection between EPU and Mergers and acquisitions are shown in Table 5. The unpredictability index of economic strategy in the native country is markedly significant in column 1, indicating that as an economic strategy in Asia pacific becomes more uncertain, businesses are more likely to invest in world markets and to merge and acquire other businesses. Pro-cyclical economies reduce the uncertainty of the state's economic policies, making Mergers and acquisitions straightforward (Mukanjari and Sterner, 2020). This is shown by the effective interpersonal coefficient between economic variables and the host state's financial cycle (column 3). Effects of the Mergers and acquisition uncertainty risk reduced. Investors are more upbeat about the economy now, spending more. Throughout economic downturns, enterprise cash flow is constrained, and consumption is weak. The investment is relatively costly to eliminate loss-making, and the expectations of investment earnings are decreased as a result (Jia et al., 2018).

The investment's environmental parameter is considerably significant, which indicates that it has a substantial beneficial influence on major corporation M&As, according to the coefficients and signs of the dependent variables. Location decisions made by transnational corporations are more overtly motivated by market requirements. Expanding global

Table 5
Shows the results of the baseline test.

Variable	(1)	(2)	(3)
LnEpu	2.2766**		−1.5315**
	(0.5702)		(0.6122)
LnMepu		0.2430**	0.1685**
		(0.0852)	(0.5591)
Ggdp			0.1904**
			(0.0759)
LnEpu*Ggdp			0.1956*
			(0.1124)
LnCul Dis	−1.009***	−1.0661***	−1.0355***
	(0.3758)	(0.4060)	(0.4031)
Inf Diff port	3.7086***	3.7932***	3.7074***
	(0.4617)	(0.4509)	(0.4393)
Ln Difficulty Diff * Post 2009	3.2967***	3.2907***	3.3381***
	(0.2366)	(0.11 82)	(0.11 67)
LnInvestment	3.2887***	2.9367***	3.3761***
	(0.9606)	(0.9351)	(0.9323)
LnTax	−1.3456*	−1.2400*	−1.2486*
	(0.7522)	(0.7466)	(0.7292)
Constant	−62.7540***	−57.6939***	−60.8899***
	(8.3424)	(9.1520)	(8.9280)
R^2	0.5563	0.5494	0.5572

Note: *, **, *** shows the significant at 1%, 5%, and 10%.

trade networks promotes M&A in countries' export dependence and benefits global business Mergers and acquisitions. The length parameter between two nations is notably negative; the greater the distance, the more expensive (Liu and Song, 2020). Merger and acquisitions are, and the more expensive communications and interchange amongst countries must be. The resource investment fund coefficient of the destination country is considerable. Compared to Mergers and acquisitions, it demonstrates that bot drives these transactions the acquisitions of resources and the acquisition of critical infrastructure. As a result, Asean's businesses tend to concentrate their foreign M&A activity in areas with established fuel and ore resource bases. The government income of the destination country has a detrimental effect on international firms' mergers and acquisitions (M&A). The tax revenue as a percentage of the GDP of the receiving country is significantly greater, more taxes are levied on domestic industries, and the cost of Merger and acquisition is higher, which inhibits the Merger and acquisition of multinational businesses.

4.3. Effects of the financial crisis

The effect corresponds to the risk, and the synergy effect refers to an ideal state of matching between the merged enterprise and the merged enterprise after the merger and acquisition; Risk represents an uncertainty. Financial risk, liquidity risk, payment risk and financing risk are all risks that may arise after merger and acquisition. Among them, financial risk refers to the risk that financing and borrowing in the process of M&A restrict the daily operation of M&A enterprises' financing and borrowing ability, and is the financial crisis caused by changes in financing and capital structure. Liquidity risk refers to the risk that the acquirer cannot obtain sufficient cash flow in time to pay for the merger and acquisition funds or cannot obtain the merger and acquisition funds in time at a reasonable price to cope with the possible future asset growth or pay the debt due. Payment risk refers to the use risk of merger funds related to capital liquidity and equity dilution in mergers and acquisitions, which is closely related to the value evaluation risk and financing risk of the merged enterprise. Financing risk is the risk of income change caused by financing planning in the process of capital raising, which is mainly affected by daily operation risk and financial risk. This paper split the data set into two subperiods depending on the global recession to test the Hypothesis that an economic crisis restricts M&As. Table 6 displays the outcomes. Even before the crises, column 1 shows a positive correlation between Asean's multinational company M&As &the destination state's financial and political risks. Although it is similar to the overall analysis findings, column 2 demonstrates that after the global recession, the presenter state's financial policy instability is inversely connected with Asean's multinational company M&As.

These might be the precise reasons. Initially, from 2009 to 2019, due to Asean's sluggish economic growth, foreign investment firms' industry expertise, capacity for mergers and acquisitions, & investment activity decreased. Lesser uncertainties, reduced M&A size, and significant sample test findings are the end outcomes. Secondly, there is much room for market expansion now that ASEAN joined the WTO in 2009 (Tyagi et al., 2021). The administration aggressively implemented several initiatives that encouraged the outflow of foreign investments. The unpredictability of the host state's financial policies provides a chance for Asean's businesses to adapt & advance in the marketplace. Asean's businesses are motivated to take advantage of investments &international M&As.

Table 6
Shows the before and after effects of the financial crisis.

Variables	Before effects	After effects
lnE.P.U	2.3544*	−2.2295***
	(1.4236)	(0.6774)
LnMEpu	8.1807***	0.9127*
	(1.9988)	(0.5803)
LnCUL Dis	−0.9612	−0.1804
	(0.6651)	(0.5244)
Inf DIFF	2.9406***	2.9747***
	(0.6468)	(0.5556)
DIFF * Post 2009	2.8471***	2.5804***
	(0.3692)	(0.3680)
LnINV	8.5136***	1.5303*
	(1.7985)	(0.9729)
LnTax	−1.9740*	−1.9980**
	(1.1359)	(0.8546)
Constant	−25.9810*	−73.9403***
	(3.5961)	(11.6763)
R^2	0.6161	0.5033

Note; *, **, *** shows the significance level of 1%, 5% and 10%.

Table 7
Results of underdeveloped and developing countries of AseanTesting of Developed and Developing Countries.

Variable	Debeloped	Underdeveloped
LnEpu	−1.9357**	−1.1050
	(0.9634)	(1.6991)
LnMepu	1.1949*	0.4473
	(0.7246)	(1.3938)
LnCul Dis	−1.5467***	5.7100*
	(0.4309)	(3.11 80)
Ln Inf diff	4.2774***	7.8365***
	(0.4804)	(1.9658)
Ln Difficulty Diff * Post 2009	2.8718***	5.6370***
	(0.2544)	(1.0567)
LnInvestment	4.7520***	−6.6764
	(1.2692)	(4.4616)
LnTax	−3.5679***	2.1179
	(0.7380)	(4.0069)
Constant	−63.9269***	−150.3741***
	(9.3295)	(37.9223)
R^2	0.6037	0.5495

Note: *, **, *** shows the significant at 1%, 5%, and 10%.

4.4. Underdeveloped and developing countries of ASEAN countries

We separated the sample nations into developed & emerging nations to see whether various kinds of nations had distinct effects on multinational firm M&As shown in the table above. The results are in Table 7.

For established countries2, column 1's unpredictability factor for the host nation's economic strategy is considered negative. Still, it is strongly positive for the home country, nearly equivalent to the total econometric findings. The sample size is tiny (the experimental value of emerging economies is just 6), making it ineffective, &the unpredictability of the selected sample by Kemenkes (2019) emerging regions did not vary much over the research period. Since the adverse impact was not large, it could not demonstrate the effect very well. Moreover, the representative sample is rather large &the unknown factor fluctuates greatly in industrialized nations, which has a considerable inhibitory influence on foreign direct investment.

4.5. Economic analysis

Following table illustrates that absolute mistakes in bilateral economic growth drive Asean enterprises. Regardless of the home nation's uncertainties, the "push" and "resistance" of the host country increase Asean's M&A operations (Nieuwenhuijsen, 2021). This study advances the unpredictability bias by separating the measures according to whether the host nation or the home country has greater uncertainty, independent of whether M&As involving Asia pacific businesses appeared less or more uncertain in the host country.

The addition of column (2)'s bilateral industry growth opportunities disparities based on column (1) has a very beneficial effect on ASEAN companies' M&A deals with international corporations. The data analysis reveals that Asean's

Table 8
Shows the trade effects.

Variables	(1)	(2)
DifEPU	0.0241*	0.0235*
	(0.0142)	(0.0137)
DifGGdp		0.4399***
		(0.1359)
LnCULDis	−0.5389	−0.4789
	(0.4730)	(0.4699)
Ln INF diff	2.1120***	1.9288**
	(0.7451)	(0.7593)
Ln Difficulty Diff * Post 2009	3.3087***	3.1159***
	(0.4838)	(0.4671)
investment	9.1998***	8.7361***
	(1.2968)	(1.311 0)
index	−2.2063	−1.7609
	(1.5088)	(1.4412)
Constant	−53.6911 ***	−52.8165***
	(9.7681)	(9.7285)
R^2	0.3432	0.3603

Note: *, **, *** shows the significance level of 1%, 5%and 10%.

Table 9
The results of the Uncertainty Deviation Test.

Variables	(1) uncertainty < Asean	(2) uncertainty > Asean
DIFepu	0.0338**	0.0122
	(0.0147)	(0.0168)
LnCul Dis	−0.3128	0.1293
	(0.7862)	(0.5120)
Ln Inf diff	3.0584***	1.3447
	(1.0069)	(0.8972)
Ln Difficulty Diff * Post 2009	3.1998***	3.8515***
	(0.6070)	(0.9562)
LnInvestment	9.7955***	9.3738***
	(1.6769)	(2.6004)
LnTax	−2.6052	−0.4423
	(1.9168)	(2.0883)
Constant	−76.4722***	−45.2715***
	(17.1911)	(12.9248)
R^2	0.3632	0.4567

Note: *, **, *** shows the significance level of 1%, 5% and 10%.

industry has more growth opportunities than the sampling host nations, indicating that Asean's industry has certain benefits. When ASEAN businesses "go out", these "home country advantages" takes the place of their "foreign barrier", allowing Asian businesses to achieve well. The ASEAN market's development potential offers clear benefits. When Asean's businesses "go globally", this "home advantage" eliminates their "outsider disadvantages", which gives them a high level of confidence & aspirations (Pei and Zheng, 2011). Accordingly, Table 8's results demonstrate that the variation correlation of bilateral unpredictability is positively significant when the host state's financial strategy is less uncertain compared to the home country, however, when the host country's higher volatility is greater compared to the home country, the outcome is not considered while the orientation of influences is stable. It demonstrates that firms find M&As (Popkova and Sergi, 2021) more appealing when the host country's uncertainty level is lower. In other words, ASEAN companies choose to acquire in nations with lower uncertainty levels. In a way, it is widely accepted that, given the present economic climate, businesses prefer to do M&A transactions in nations that provide more "stability". Businesses confront greater risk-free interest rates as their projected returns and predictability levels increase, making it easier for them to diversify & expand their investing routes & lower investment risk (see Table 9).

4.6. Robust analysis

Initially, the experiment for random effects: since the core regression coefficient is the macroeconomic volatility of the host state & the home country, which is part of the microeconomic information, & the exogenous variables are the total amount of multinational M&As by companies, that are an aspect of the statistical information of micro-enterprises, the opposite research of the uncertain economic policies of multinational mergers &purchases can be disregarded. Secondly, to Naderipour et al. (2020) evaluate the stability of our research evidence &to minimize exogenous variables issues brought on by reverse causality, we use lagging control factors. However, certain M&As recorded in the Zephyr database lack exact quantities, which might lead to an underestimation of the total number of M&As. To solve this issue & assure the reliability

Table 10
Shows the results of Robustness Test.

Variables	(1)	(2)
LnE.P.U	-1.1432^{**}	
	(0.5526)	
LnMEPU	0.4562	
	(0.5062)	
DIFepu		0.0339^{*}
		(0.0200)
DifGGdp		0.6498^{**}
		(0.2780)
LnCULDis_1	-1.0391^{***}	−0.11 31
	(0.3896)	(0.7701)
LnInf diff_{t-1}	3.6652^{***}	−0.4551
	(0.4463)	(1.4275)
Ln Difficulty Diff * Post 2009_{t-1}	3.0379^{***}	5.3622^{***}
	(0.11 53)	(1.9109)
$\text{LnInvestment}_{t-1}$	3.5384^{***}	14.7412^{***}
	(0.9150)	(5.3970)
LnTax_{t-1}	-1.4911^{**}	6.6359
	(0.6840)	(4.5149)
Constant	-55.3799^{***}	-71.4437^{***}
	(8.6938)	(24.5289)
R^2	0.5328	0.5643

Note: *, **, *** shows the significance level of 1%, 5% and 10%.

of our empirical findings, we substitute the number of M&As for the transactional volume of M&A. Table 10's findings demonstrate the reliability of the findings by demonstrating that the signals for economic policy relevance & uncertainties are consistent with past research evidence &that the values of the dependent variables are mostly unaltered.

In the process of M&A of multinational enterprises, we should use the payment method of M&A comprehensively to disperse risks. At present, the commonly used payment methods for mergers and acquisitions include cash payment, equity payment and comprehensive payment. When a merger occurs, the merged enterprise needs to make a comprehensive payment based on the financial statements of the current year, changes in share prices and changes in the international exchange rate, while taking into account the equity capital and debt capital. In addition, Chinese enterprises can consider the combination of Chinese and Western payment methods when merging with foreign enterprises: flexibly choose the payment methods suitable for themselves, and reduce the payment risk in the process of mergers and acquisitions.

5. Conclusion and policy implications

5.1. Conclusion

EPU's influence on Asean enterprises' multinational company M&As was statistically analyzed using cross-sectional data from 11 countries from 2009 to 2019. Asean's EPU promotes firms to buy multinationals since the home country's economic policy is uncertain. ASEAN firms may not be able to engage in cross-border mergers and acquisitions owing to the host country's unclear economic policies and low EPU factor. ASEAN enterprises' overseas M&A is driven by rising home country EPU and dropping host country EPU, which lowers the host country's EPU in a pro-cyclical sector. It implies macroeconomic policies and internal organizational factors effect international corporate mergers and acquisitions. The purpose of M&As should be to enhance public understanding of a country's fiscal policies, comprehend the dynamic character of its economic strategy, and alter foreign direct investment and financing choices in response to evolving economic priorities. Second, unlike the overall regression, the time-divided subsample suggests that the host country's economic plan was unpredictably good before the global crisis. The overall decline supports the host nation's less unpredictable economic approach since the global crisis. The relevance of each variable matches the overall regression in rich nations after segmenting the data by country type. The home country's economic strategy's uncertainty is positive, whereas the host country's uncertainty is negative.

5.2. Policy implications

Starting from the general background of M&A, this paper discusses the motivation of M&A of multinational enterprises and the synergy effects closely related to M&A. At the same time, this paper emphasizes various risks generated in the process of M&A corresponding to synergy, and puts forward corresponding solutions to avoid M&A risks. Only by preventing the possible risks of mergers and acquisitions can we maximize the synergy effect and achieve the success of cross-border mergers and acquisitions. The sample size cannot fully capture the influence of volatility in the economic policies of the home nation and the host country on multinational business M&As in developing nations since predictability does not change throughout the sample during the research. The economic position and physical distance appear to symbolize contradictory concepts. OFDI enterprises should improve the business insurance model and strengthen risk warning protocols for overseas investments to counter the expected cost of erratic economic and social policies. There is a considerable association between multinational company M&As and the degree of uncertainty in bilateral economic plans and GDP rates, indicating that the existence of such variations is a key driver pushing Asean's enterprises to expand internationally. The bias study reveals that when a state's financial strategy is less unpredictable than Asean's economic strategy, it promotes faster economic development and mergers and acquisitions. This suggests that Asean chooses a more safe economic and legal environment for its company and investments when it engages in cross-border mergers and acquisitions, at least in part. The difference in GDP growth between Asean and the host country gives it a major competitive advantage in the global economy. Businesses may then acquire the necessary institutional guarantees & financial support, & they might also feel more secure about conducting business globally due to the relative advantages of their own economic development.

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