The effect of democracy on the mutual fund recovery, Evidence from emerging countries

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ผลกระทบของประชาธิปไตย์ที่มีต่อกองทุนรวม กรณีศึกษาในกลุ่มตลาดใหม่

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ศุภิสรา ทรงเดชะ : ผลกระทบของประชาธิปไตย์ที่มีต่อกองทุนรวม กรณีศึกษาในกลุ่มตลาดใหม่. (The effect of democracy on the mutual fund recovery, Evidence from emerging countries) อ.ที่ปรึกษาหลัก : ผศ. ดร.พรพิชยา กุวลัยรัตน์

      งานวิจัยนี้ศึกษาระดับของประชาธิปไตยส่งผลต่อผลการดำเนินงานและการฟื้นตัวของกองทุนรวมในประเทศเกิดใหม่ ได้แก่ บราซิล ชิลี จีน อินเดีย เม็กซิโก แอฟริกาใต้ และไทย วิเคราะห์ข้อมูลตั้งแต่ปี 2010 ถึง 2021 โดยเน้นที่กองทุนรวมตราสารทุนในประเทศ งานวิจัยนี้ได้วัดระดับประชาธิปไตยโดยใช้ข้อมูล V-Dem มาคำนวณ และวัดผลตอบแทนที่เทียบกับความเสี่ยงของการลงทุนเป็นตัววัดผลการดำเนินงานของกองทุนรวม ในขณะที่ระยะเวลาการฟื้นตัวนั้นวัดจากระยะเวลาตั้งแต่ก่อนการขาดทุนสูงสุดจนถึงระยะเวลาที่ฟื้นกลับมาที่เงินทุนเริ่มต้นก่อนเกิดวิกฤต การค้นพบนี้แสดงให้เห็นว่าในชิลีซึ่งมีลักษณะเป็นประชาธิปไตยที่เข้มแข็ง แสดงให้เห็นถึงผลการดำเนินงานของกองทุนที่มากขึ้นตามระดับประชาธิปไตยที่สูงขึ้น ในทางตรงกันข้าม บราซิล แอฟริกาใต้ อินเดีย และเม็กซิโก กลับมีผลตอบแทนมาก กรณีที่มีระดับประชาธิปไตยที่ต่ำ ประเทศจีนซึ่งจัดอยู่ในประเทศที่ไม่เป็นประชาธิปไตยได้แสดงผลกระทบเชิงลบอย่างมาก ความสัมพันธ์เชิงลบเหล่านี้อาจเกิดจากการให้คำมั่นสัญญาที่น่าเชื่อถือต่ำของรัฐ การรับความเสี่ยงที่เพิ่มขึ้นจากความไม่แน่นอนระหว่างการเลือกตั้ง และกระบวนการตัดสินใจที่ยาวนานขึ้น ในขณะเดียวกัน ประเทศไทยถึงแม้จัดอยู่ในประเทศที่ไม่เป็นประชาธิปไตยก็แสดงความสัมพันธ์เชิงบวกซึ่งสอดคล้องกับสมมติฐานเริ่มต้น นอกจากนี้ การศึกษายังพบว่าระยะเวลาการฟื้นตัวของกองทุนรวมในช่วงวิกฤตการณ์ยังช้าลง ถ้าประเทศดังกล่าวมีระดับประชาธิปไตยที่สูงขึ้น งานวิจัยนี้ให้ข้อมูลเชิงลึกสำหรับผู้กำหนดนโยบายและนักลงทุนว่าประชาธิปไตยมีอิทธิพลต่อประสิทธิภาพของกองทุนรวมและการฟื้นตัวในประเทศเศรษฐกิจเกิดใหม่

สาขาวิชา	การเงิน	ลายมือชื่อนิสิต ....
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Supisara Songdecha : The effect of democracy on the mutual fund recovery, Evidence from emerging countries . Advisor: Asst. Prof. PORNPITCHAYA KUWALAIRAT, Ph.D.

This research examines how democracy affects mutual fund performance and recovery in emerging countries: Brazil, Chile, China, India, Mexico, South Africa, and Thailand. Data from 2010 to 2021 is analyzed, focusing on domestic equity mutual funds. Democracy levels are measured using the V-Dem dataset. Performance is evaluated using risk-adjusted returns, while recovery duration measures how long it takes for funds to return to pre-crisis levels. The findings show that in Chile, characterized as a strong democracy, demonstrates improved performance with higher levels of democracy. In contrast, Brazil, South Africa, India, and Mexico exhibit higher returns with lower levels of democracy. China, as a non-democratic country, exhibits a significantly negative impact. These negative relationships could be caused by struggles in making credible commitments, increased risk-taking, credit rating downgrades during elections, and longer decision-making processes. Meanwhile, Thailand, as a non-democratic country, exhibits a positive relationship, aligning with the initial hypothesis. The study also finds that higher democracy levels prolong the recovery period for mutual funds during crises. This research provides insights for policymakers and investors on how democracy influences mutual fund performance and recovery in emerging economies.

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INTRODUCTION
Background and significance of the problems

In the 5th century BC, power of the people is considered as *"Democracy"*, which comes from the Greek words: *"demos"* means people and *"kratos"* means power. However, there is no single specific definition of democracy in the world. For instance, *"Democracy is the government of the people, by the people and for the people"* from Abraham Lincoln, or *"Democracy is not the law of the majority, but the protection of the minority"* from *Albert Camus.* Therefore, different forms of democracy could lead to different democratic government.

In some countries such as the United States and Australia, there is "Federal System" that the power is shared by a central government and states or provinces. In some countries such as China and United Kingdom, there is only one central government called "Unitary System" that the power is not shared between states or provinces. Consequently, the power and process of making decision are various across countries leading to the different of economic freedom. The condition that people have rights of being able to do, say, or think about anything they want without being controlled or limited impacts on the decision in their daily routine. They could go out and elect their favorite politicians to be their spokesperson. They could plan for retirement by investing in mutual funds or spending less for the rest of their life depending on the welfare system in the countries.

From prior research, there is a significant link between the democracy and economic growth through the investment decision. Feld and Kirchgässner (2001) found that the elements of direct democracy are associated with public finances, economic performance, and citizens' satisfaction. Thereby, in order to increase economic performance and the satisfaction of citizens, the government should strengthen the structure of democracy in their own countries. Perotti and Van Oijen (2001) showed the countries with more democratic institutions tend to be politically stable, which is reflected in higher rates of investment and economic growth. The empirical research from Lehkonen and Heimonen (2015) also showed that there is a threshold of the level of democracy. Whenever the democracy increases over threshold, it could reduce the political risk and boost stock market return in emerging

countries. Moreover, Bechtel (2009) also found that the more democratic politics is, the more likely investors anticipate the decrease in systematic risk and then encourage capital investment.

There are several ways that people could invest in order to generate the return overtime. Mutual fund is an alternative way that investors can buy shares and each share represents the ownership of the mutual fund. In 2019, there was a major redemption in mutual fund industry, due to panic selling[1] caused by Coronavirus Disease pandemic (COVID-19). Clearly showing that this industry would get enormously disrupted in any circumstance of the investor decision sensitivity. Therefore, the fund performance could be considerably varied across time. However, if the investors could rest assured that the fund performance would be recovered in a short time in any circumstance, they would not panic and sell their mutual funds, which could lead to worse and worse scenario in overall mutual fund industry, especially in emerging economies.

The emerging market is an interesting scope in aspect of democracy and economic activity because it is consisting of the countries transitioning from low income or less developed into higher standard of living. Hence, Thailand is one of this market. According to Transparency International, corruption perceptions index of Thailand was placed 110th with a score of 35 out of 100 in the 2021 survey. Reflecting that Thailand is lack of all electoral, liberal, participatory, deliberative, and egalitarian democracy.

Most people would choose the policies supporting their living needs. The democracy could represent what people need through the votes from free and fair election of favorable economy policies. Thereby, most parties focus on improving the economic growth, especially in emerging markets, in order to stimulate the favorable environment for investing with having less political risk in their own countries. The liberal and participatory democracy could also provide minimum welfare that individual person should have. For instance, the minimum education requirement by Thailand law is nine years of compulsory basic education. Skilled labored could be

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[1] according to data from the Thai Bond Market Association

then increased, which create more favorable environment for investing with having high skilled managers.

Making efficient decision to develop the economic growth also involve with the deliberative democracy with more sophisticated people that ensure several perspectives to reach a decision on the policies; therefore, favorable government policies could create positive investment environment. Proving these perceptions on Lehkonen and Heimonen (2015) that the level of democracy after the political risk declines could increase stock market returns. This paper therefore builds on the aspect of the degree of democracy that consists of with high electoral, liberal, participatory, and deliberative democracy could affect the mutual fund performance and mutual fund recovery through the favorable investment environment with low political risk in investors' perceptions.

The paper examines the degree of democracy affecting the mutual fund performance in emerging countries, and also measures the recovering period of the mutual fund to see whether democracy could reduce the period of recovery in fund performance. Therefore, the regulators could realize the importance of democracy and improve the policy of the civil rights and democracy to strengthen mutual fund industry. Moreover, if the results show that high democracy could increase the mutual fund performance and decrease the period of mutual fund recovery, the emerging countries with high level of democracy could send a positive signal to the general investors that these mutual funds in their own countries could not be easily collapsed. There are less probability of panic selling in bad phenomenon, or need a short time period to recover. The results of the research can then be used to inform investment decisions and help investors determine whether the mutual fund is likely to meet their investment goals over the long term. It is hoped that this paper could be the fundamental of further study in the future.

Objectives
1. To investigate how degree of democracy affecting the mutual fund performance in emerging countries.
2. To investigate how degree of democracy could reduce the period of mutual fund recovery

Research Hypothesis

Hypothesis 1: The degree of democracy is positively associated with the mutual fund performance.

According to Chuang and Wang (2009), the markets would anticipate policies from different economic agendas when there is a time to elect new president. No matter which left or right democracy party that new president is from, it would affect stock market return. Thereby, it could assume that the degree of democracy in terms of electoral, liberal, participatory, deliberative, and egalitarian democracy from Coppedge, et al (2019) could impact the stock market returns. Also, Julio and Yook (2012) found that the difference of election characteristic effect on the different magnitude of investment cycles.

Therefore, it is expected that the higher level of democracy, the more developed and transparent financial markets, which can lead to higher trust in mutual fund investment and a growth in the industry. On the other hand, Zouhaier and Karim (2012) argued that there was a negative relation with the political instability and investment Hence, political instability in less democratic countries can discourage investment in mutual funds. Moreover, Nguyen, Bui, and Vo (2019) found that political stability, economic growth and financial development are positively associated with the mutual fund performance.

Therefore, the level of democracy is likely to play a significant role in shaping the mutual fund performance. A democratic environment with strong electoral, liberal, participatory, and deliberative democracy could create a favorable mutual fund return, while political instability and corruption in less democratic countries can have the opposite effect.

Hypothesis 2: The recovering period of mutual fund is negatively associated with the level of democracy. High degree of democracy reduces the recovery period of mutual fund

From Zouhaier and Karim (2012) that mentioned in hypothesis one, less democratic countries are more likely to have less political stability and high corruption, which could impede the growth of mutual fund industry and slow down

the recovery process. Tsai (2015) found that after any crisis, the stock returns still adjust in order to response the crisis. Also, Dwyer and Lothian (2012) suggest that during 2007-2009 financial crisis, the recovery was slow since there was uncertainty about government policy. The stock price in the United States took longer time to increase back. Moreover, AM Al-Rjoub and Azzam (2012) found the stock return would be impacted before and after the crisis for an emerging market. Thereby, around the time both before and after crisis was happened, the stock return would continuously decrease and take more time than usual to get back and perform well as general situation.

Consequently, during the market recession or crisis, mutual funds would take more time to recover than it is in time of general market downturn. From this hypothesis, the countries with high democracy would have the presence of strong electoral, liberal, participatory, and deliberative democracy; thereby, the investors could feel assured that there is less political risk than the low democratic countries and create more favorable investment environment. Then the mutual fund in more democratic countries should able to recover in less time compared to the ones in low democratic countries. On the other hand, mutual funds in less democratic countries may take a longer time to recover due to political instability, which can undermine investor confidence and led to a slower recovery.

Therefore, it is expected that the countries in emerging markets with lower level of democracy would take longer time for the mutual funds to recover from negative returns to positive returns when the market is in the stage of downturn economy.

Conceptual framework

According to the characteristic of democracy, it could be measured by several ways. This paper focuses on Varieties of Democracy (V-Dem) by the V-Dem project from Coppedge et al. (2019)**,** which defined the properties of democracy are electoral, liberal, participatory, deliberative, and egalitarian democracy will be focused. However, there are four components that matter to the investment decision considered from Julio and Yook (2012) ; Celis and Shen (2015); Chuang and Wang (2009); Chan and Wei (1996); Cohen, Frazzini, and Malloy (2008); Marx and Nguyen (2018); Lukensmeyer and Brigham (2005); Perotti and Van Oijen (2001); Kim and Mei (2001); Sharpe (1966); (Ferreira, Keswani, Miguel, & Ramos, 2013); Elton, Gruber, and Blake (1996); Berk and Green (2004); and Chen, Hong, Huang, and Kubik (2004).

For the **electoral democracy** is considered from the core value of making rulers responsive to citizens. Whether they have clean election, freedom of expression, elected officials, and other electoral democracy relevance. Political power is transferred through the vote, in which citizens have the right to vote for their representatives. This can reduce political risk by providing stability to the government and the political system.

In general, political stability and a predictable regulatory environment as changes in favorable government policies could create a positive investment environment, leading to improved mutual fund performance.

The **liberal of democracy** is considered from whether the individual rights are considered and protect the minority rights. Moreover, the rule of laws, and effective checks and balances that might limit the executive power are also considered in order to cover all the factors reflecting the protection of minority rights. An independent judiciary and free press, could also create a favorable investment environment because liberal democracy emphasizes the importance of individual freedoms that could reduce conflict and peaceful transfer of power, which ultimately decrease political risk. Therefore, liberal democracy could also create the positive investment environment, leading to improved mutual fund performance.

The citizens are able to engage in political activities through voting or civil society participation or called **participatory democracy**. This would be considered from the participation in civil society organizations, direct voting, and local and/or regional elections to non-subordinate executive. They have rights to vote for the president, who is responsive to their needs and concerns. They would feel assurance that there is a stability of political system, and the sense of national unity and common purpose. Therefore, participation democracy could also create the positive investment environment, leading to improved mutual fund performance.

Deliberative democracy emphasizes the importance of making-decision process, which is considered from offering public justifications, aggregation of existing preference, and the range of consultations. The citizens could listen to and understand different political perspectives. Hence, deliberative democracy could increase the probability of cooperation and compromise. More responsive and effective policies lead to the low risk of political system. In general, political stability and a predictable regulatory environment as changes in favorable government policies could create a positive investment environment, leading to improved mutual fund performance.

Therefore, the level of democracy could be measured with the presence of electoral democracy, liberal democracy, participatory democracy, and deliberative democracy, which represent as a significant factor affecting the investment decision with low political risk under favorable investment environment.

Figure 1. the structure of democracy level on mutual fund performance
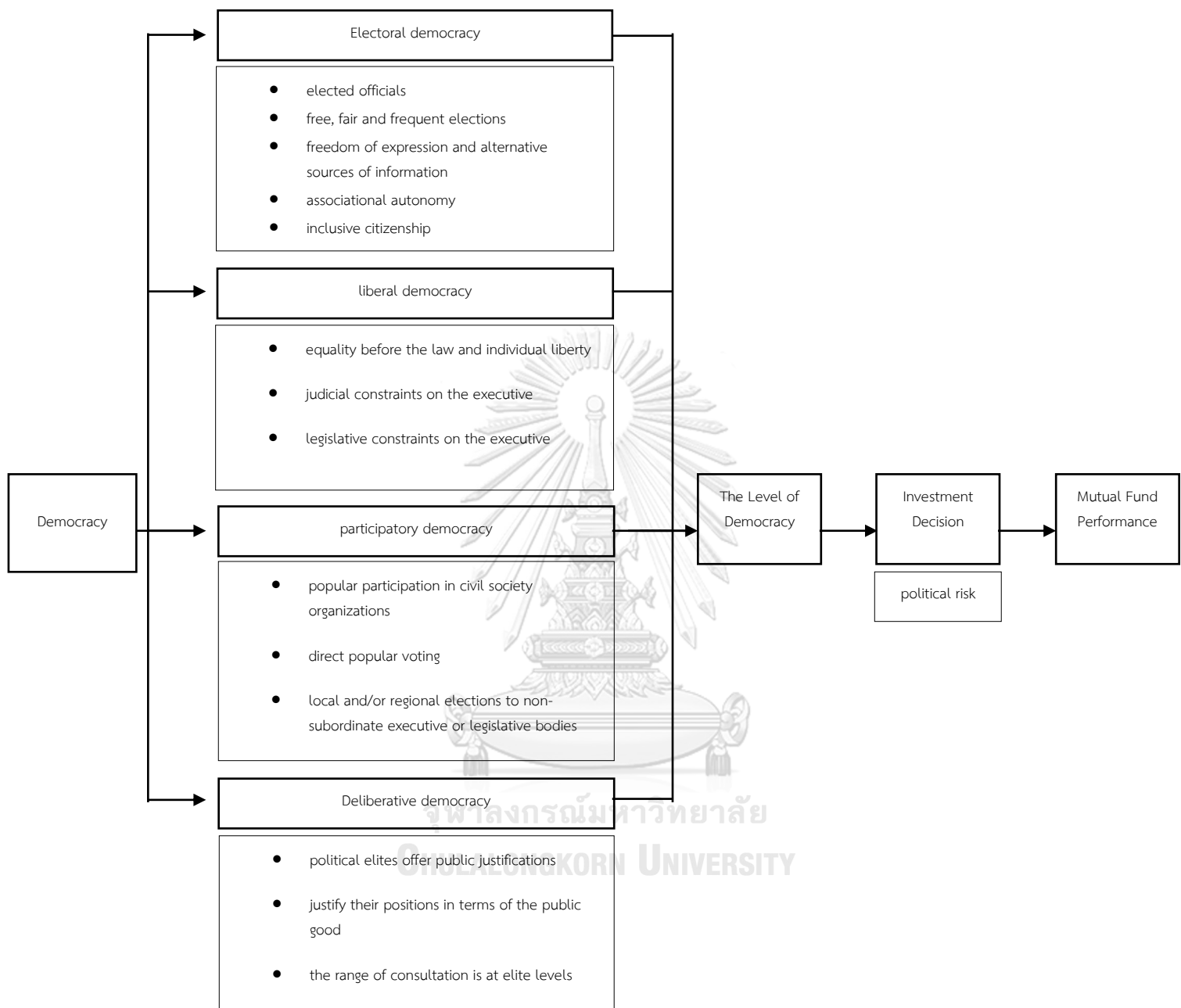
However, there are other factors that could affect the mutual fund performance, and therefore, the recovering period. According to Ferreira et al. (2013) that this paper intends to build on, fund characteristics: fund size, family fund size, and age could impact on the mutual fund performance. Moreover, country characteristic, which are the economic development, and investor protection and quality of legal institutions affect the mutual fund performance and its recovery period

as well. Then, these other factors could be considered as the control variables that are presented as follows:

Figure 2. The other variables effects on mutual fund performance
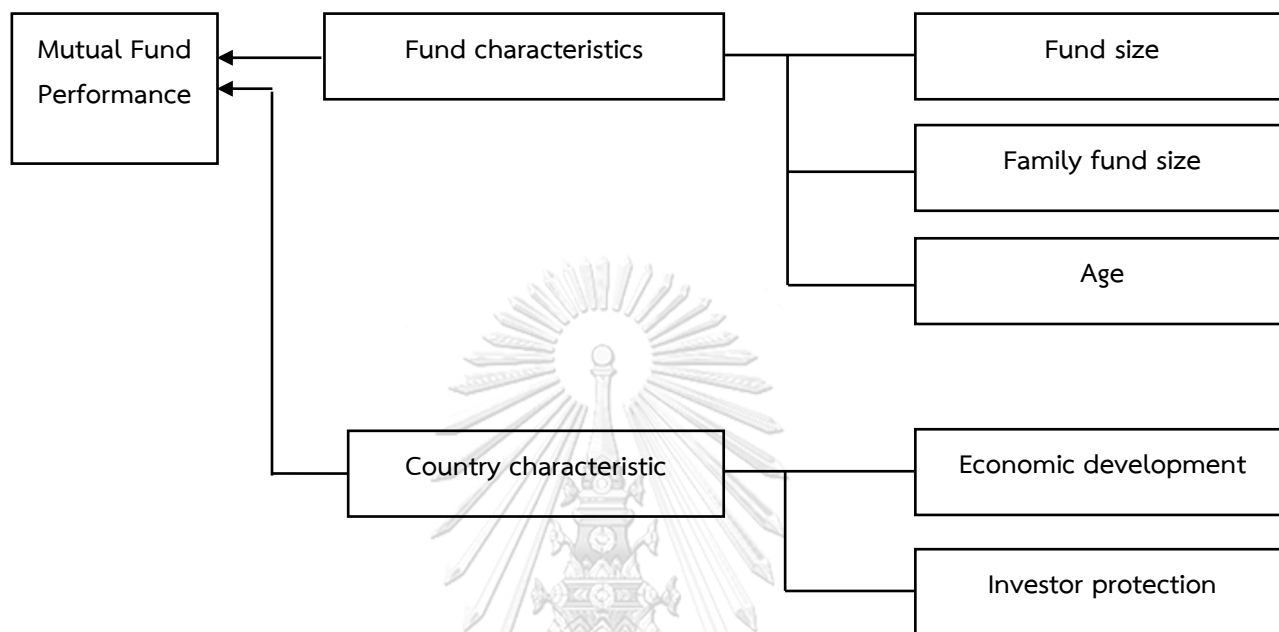
Including all factors that mentioned above, the conceptual framework could therefore be briefly presented as below:

Figure 3. Overall conceptual framework
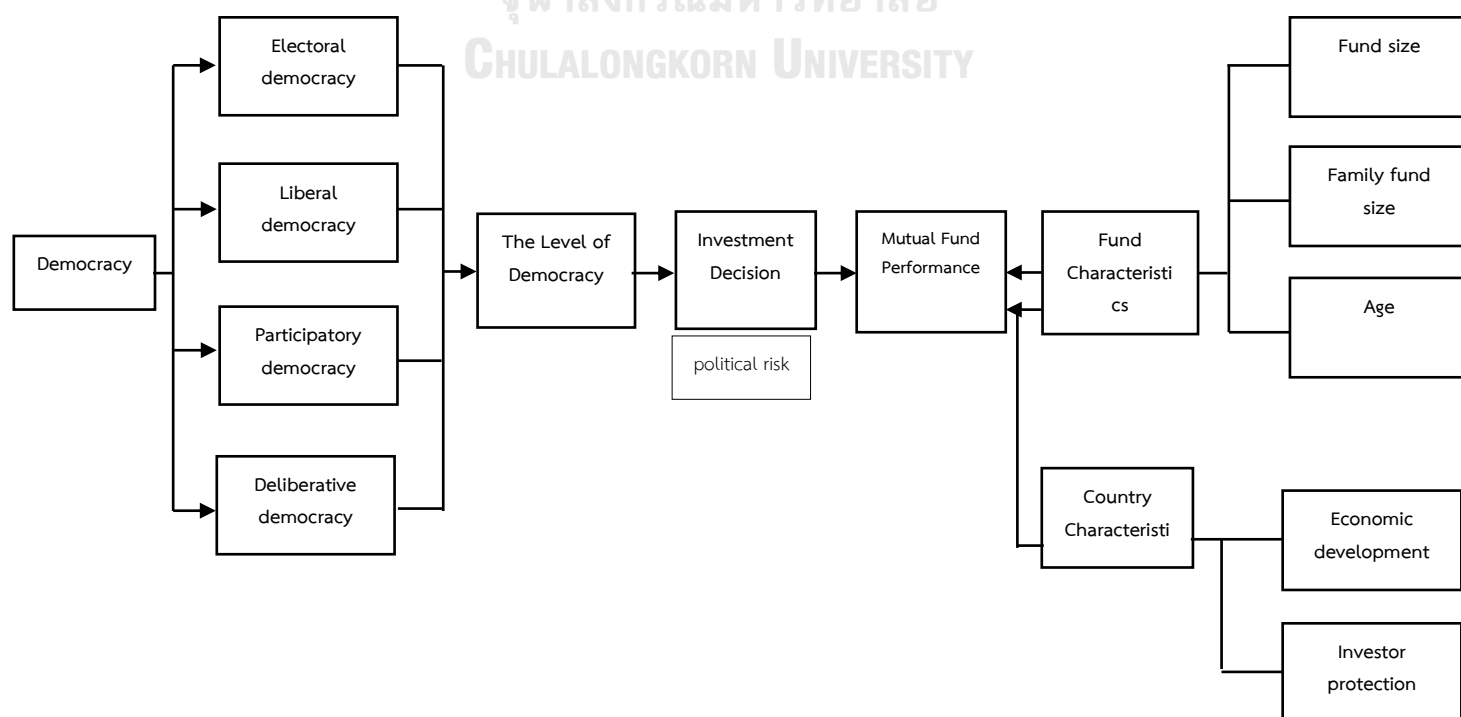
LITERATURE REVIEW

According to the characteristic of democracy from Coppedge et al. (2019), the properties of democracy are electoral, liberal, participatory, deliberative, and egalitarian democracy. For the **electoral democracy**, Julio and Yook (2012) found the electoral uncertainty could reduce the financial investment. The firms would increase an investment expenditure during the nonelection year compared with the ones in election year. Therefore, the political uncertainty would come from the election impacting on the economic outcomes. Also, Celis and Shen (2015) found that in the time of election, investors consider government policy to decide whether they would enter in the stock market including consider asymmetric information. The post-election 20 days period would then be fluctuated because people could adjust their investment expectation of portfolio. Chuang and Wang (2009) suggested democratic countries with political changes are negatively related to the stock return. And Chan and Wei (1996) found that captured favorable political news could lead to positive stock return in Hongkong.

The **liberal democracy** is to consider the individual rights, and minority's rights could not be ignored. The education is one of the factors that could be used to prove equality in society. Thereby, the government generally tries to provide the rights of getting education to their citizens. The more people have higher education, the wider education networks are. They could know each other from the school and the workplace as their classmate or teamwork respectively. Dewey (1903) suggested that the democracy could increase the free education, which people could be more intelligent. Also, from Cohen et al. (2008), portfolio managers use the information through the education networks and use that information to generate higher performance. Therefore, the country with more liberal democracy could help managers create more mutual fund returns.

Another component is **political engagement**. People with lower-skill family background tend to not understand the policies and less participation in any political activities by Marx and Nguyen (2018). So, if the country is well developed and citizens have high income, they would participate in policies stimulating the investment decision.

The next component is **deliberative democracy**. Lukensmeyer and Brigham (2005) has shown the citizens could access the information and would make the high-quality discussion from all voices. Hence, the managers could make the right decision in investing

From prior research, the democracy could reduce the political risk and increase economic growth; therefore, it could affect the investment decision Perotti and Van Oijen (2001) found changes in political risk have a strong effect on local stock market development and excess returns in emerging economies. Kim and Mei (2001) studied political developments in Hong Kong and found that political event affecting political risk management have a significant impact on market volatility and return.

Furthermore, according to International Country Risk Group (ICGR) with ICRG averaged over a maximum period of 1988 to 2010, more democratic countries have better private property protection and enforcement of laws and ultimately provide lower political risk. Also, there was evidence from Lehkonen and Heimonen (2015) that democracy level could reduce the political risk and directly impact the stock market performance during 2000-2012 in emerging markets.

The mutual fund industry then gets affected by the investor decision through the anticipating volatility and return of fund performance. The mutual fund performance is measured by risk-adjusted returns from Sharpe (1966). And according to Bailey, Heck, and Wilkens (2005), the average abnormal returns of equity mutual funds are significantly affected by the political risk since the political risk could form systematic risk and increase volatility that could reduce mutual funds return. For the recovery periods, according to the book "Practical Risk-Adjusted Performance Measurement", the recovery period is defined as the time taken to recover from the peak of returns and pass the maximum drawdown to the original level as same as the peak. Therefore, lower political risk could take less time for mutual funds to recover back.

However, there are other factors also affecting the performance from Sharpe (1966): expense and funds' size. And the recovery period of mutual fund is measured

by the time that the return significantly decreases to the time that return increases back to the same point.

Building on the prior research, Ferreira et al. (2013) found that fund characteristics and country characteristics could affect on mutual fund performance. The first fund characteristics is a fund size. The size has a positive correlation with fund performance since it leads to more diversification and opportunity of investments, implying that a larger fund size could improve the returns of a mutual fund. Elton et al. (1996), and Berk and Green (2004) also argued that the larger the mutual fund size is, the more management challenges are because the managers could not concentrate on each investment position. Their managerial skill becomes diluted, for instance, it would be more difficult to them to manage and generate the level of returns as same as before. Secondly, fund family size is another determinant affecting mutual fund performance. Chen et al. (2004) studied that fund family with larger family size could get the benefit from the economies of scale leading to lower trading commission and lending fees. Therefore, fund family size has a positive impact on fund performance. The third fund characteristics is the age. The results from Ferreira et al. (2013)'s study also suggests that longevity of the fund is negatively associated with fund performance. Newer funds may have new investment strategies that are better than the older ones.

Country characteristics also effects on fund performance. Firstly, economic development could increase the mutual fund performance. Christoffersen and Sarkissian (2009) found that the location that managers are in could impact on the performance. The return would be positive if the manages are near the financial centers. The second country characteristics is the investor protection that Ferreira et al. (2013) also argued that the country with the common law providing better legal protection could help domestic mutual funds perform well.

However, from Ferreira et al. (2013), the loads and past performance do not significantly influence on the mutual fund performance. Therefore, this paper' exclude these factors from the fund characteristics as a part of control variables in the models, which could affect the performance and the recovery period of mutual fund.

DATA
1. Sample selection

Since emerging markets are rapidly growing and expanding middle-class populations, these countries are important for the investment opportunities. Therefore, this paper collects the data in yearly basis during 2010-2021. According to the IMF Fiscal Monitor 2021, the countries in the emerging economies are Brazil, Chile, China, India, Mexico, South Africa, and Thailand. These countries have a large portion of world's population and consumption making them attractive for the investment. Integrated with global economy, these markets may have strong economic growth and increase in debt and equity markets. The investors might come in and seek for the high returns; therefore, it would come along with higher risk as well. The risk is included with political uncertainty and economic change impacting the investment returns.

According to Morningstar, this paper selects the equity mutual funds that only invest in its own country, and since the second hypothesis is to test during the crisis period in 2020, the number of mutual funds is less than the number of mutual funds of the first hypothesis included by newborn funds in 2021. Therefore, the number of these funds is varied across countries and is shown as below:

Table 1. Numbers of mutual funds

Country	Number of mutual funds	
	Hypothesis 1 (2010-2021)	Hypothesis 2 (2020)
Brazil	8,299	1,010
Chile	3,282	376
China	5,557	997
India	18,054	2,184
Mexico	885	136
South Africa	6,909	887
Thailand	3,295	404
Sum	46,281	5,994

2. Data source

The indexes that used to measure the level of democracy are from the development of the varieties of democracy (V-Dem) project that developed by global collaborators over 3,000 country experts. The V-Dem dataset is available in yearly data basis. This paper uses Welzel (2017) as a reference to consider only the index impacting the level of democracy; therefore, the electoral democracy index, liberal democracy index, participatory democracy index, and deliberative democracy index are four indexes measuring the degree of democracy.

Each index of the component of democracy is treated as a spectrum valued between 0 and 1. If the valued is equaled to 1, the index represents that the country performs perfectly in that type of democracy. If the valued is equaled to 0, the country has no democracy in aspects of that type. Hence, the more valued is closed to 1, the more that type of democracy is represented.

This paper chooses to study the active equity mutual funds that invest all in their own countries' assets (domestic mutual funds), which collect the data in yearly data basis during 2010-2021 from Morningstar in order to measure the effect of democracy on mutual fund performance in aspects of investing decision through the political stability in the countries that have different level of democracy. Building on Ferreira et al. (2013), the performance would be measured by its risk adjusted return in each year and have the fund and country characteristics as the control variables.

The recovery period of mutual fund is measured as the numbers of days that the returns is on peak and pass the lowest return during the crisis until the day that return could increase back to where it was as same level as peak from Bacon (2021). This paper measure specific situation on AM Al-Rjoub and Azzam (2012) and adopted by Patel and Sarker, which was defined the crisis when the stock market crashed 35 percent in emerging stock markets. Also, Pástor and Vorsatz (2020) found that the funds were underperformed in February 20 to April 30, 2020 and then could be considered as a crisis (the COVID-19 crisis). Therefore, this paper would measure democracy level effecting recovery of mutual funds in 2020 for each country and overall samples in order to see whether it could help the mutual funds during crisis period.

METHODOLOGY

1. Measuring the level of democracy

This research would apply the principal components to the V-Dem data, which is a panel data. According to Welzel (2017), this paper creates a single variable of level of democracy by combining electoral, liberal, participatory and deliberative democracy and excluded the egalitarian democracy because from the literature reviews, there is no valid evidence supporting that egalitarian democracy could impact on political risk. These data are yearly varying across the time. Since there is no evidence in which one is more prefer followed from Welzel (2017), their weights therefore are equally given.

Level of Demo$_{it}$=0.25(electoral$_{it}$) + 0.25(liberal$_{it}$) + 0.25(participatory$_{it}$) + 0.25(deliberative$_{it}$) (1)

Table 2. Variable definitions

Variables	Definitions
Level of Demo$_{it}$	Level of democracy in country i at time t
electoral$_{it}$	Level of electoral democracy in country i at time t
liberal$_{it}$	Level of liberal democracy in country i at time t
participatory$_{it}$	Level of participatory democracy in country i at time t
deliberative$_{it}$	Level of deliberative democracy in country i at time t

Adapted from Welzel (2013), there is the spectral typology of political regimes classified the democracy into 4 regimes. This paper would adjust the unitary democracy spectrum from Welzel (2013) in order to measure the level of democracy in terms of four aspects of democracy: electoral, liberal, participatory and deliberative democracy as shown in figure 4.

Figure 4. Adapted from Welzel (2013)
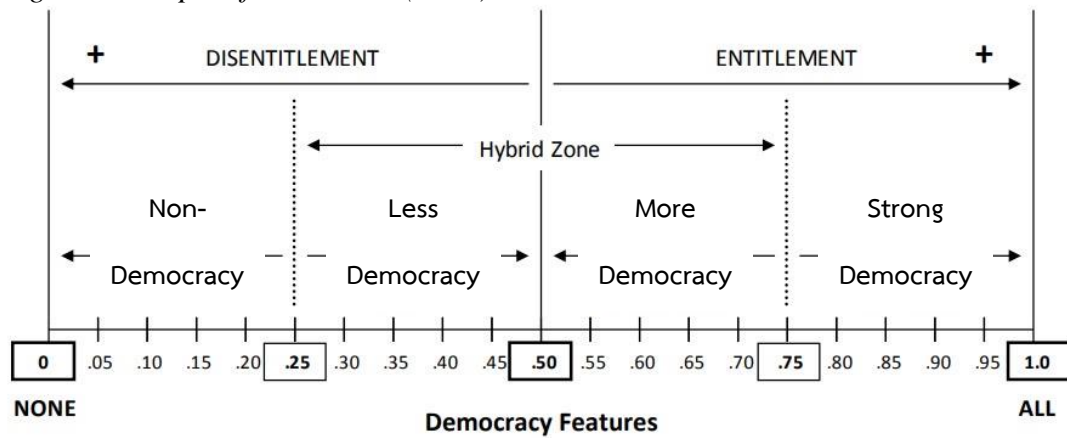
"**Non-Democracy**" is the lowest scaled between 0 to 0.24 points. The countries that have the score lying on this range could be considered as lack of electoral, liberal, participatory and deliberative democracy that people have almost no rights to do what they want to. Therefore, they would have more political risk and less likely to invest in the mutual funds. The countries that have the score between 0.25 to 0.50 would be considered as "**Less Democracy**". Reflecting that these countries have less political risk than non-democracy countries. However, the political uncertainty is still the big issue that the citizens have deficient democracy.

"**More Democracy**" is the area between 0.51 to 0.75, which has already come out far from the definition of autocracy. However, it is not enough to be called as full democracy. "**Strong democracy**" is in the range that more than 0.76. the countries would be full of electoral, liberal, participatory and deliberative democracy that people have rights to do what they want to. Therefore, this paper then would categorize the emerging markets into these four groups in order to measure whether the level of democracy could impact the performance and the recovery period of mutual funds.

2. Measuring mutual fund performance and recovery period

Table 3. Variable definitions

Variables	Definitions
$RETURN_{jit}$	The Shape ratio of mutual fund j in country i at time t
$RECOV2020_{ij}$	The recovery period of mutual fund j in country i in 2020

This paper building on Ferreira et al. (2013) measures the mutual fund performance as risk adjusted return, which is the Sharpe ratio collected by Morningstar. For the recovering period, according to Pástor and Vorsatz (2020) and AM Al-Rjoub and Azzam (2012), the mutual funds were underperformed when the stock market crashed more than 35 percent in 2020 and then could be considered as a crisis time. Therefore, this paper would measure democracy level effecting recovery of mutual funds in 2020. The recovery period is defined as the number of days it takes for the mutual fund's returns to return to their pre-crisis levels, starting from the point of minimum return to the point of complete recovery, which is built on Bacon (2021), during 2020.

Figure 5. Average recovering periods during 2020 from 5,994 mutual funds in Hypothesis 2
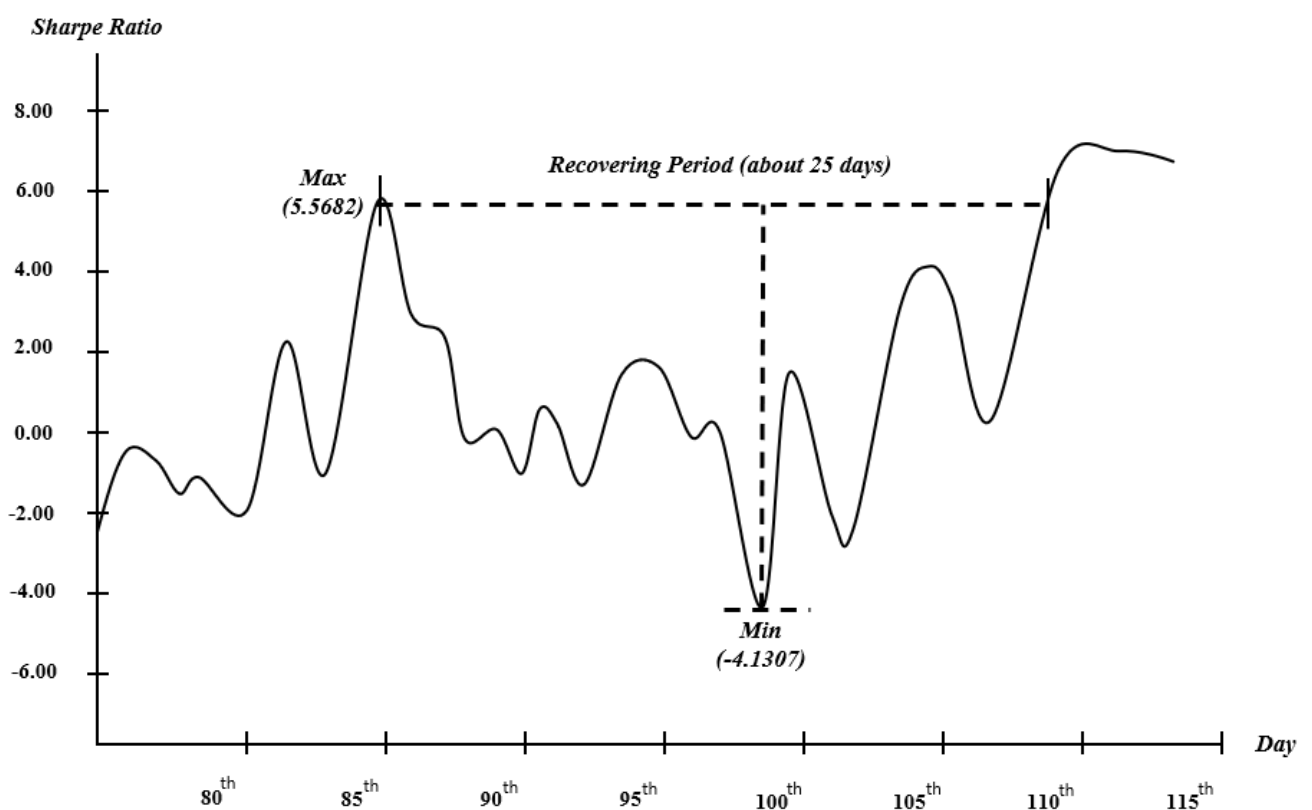
3. Control variables

There are other factors affecting the mutual fund performance from Ferreira et al. (2013). In terms of fund characteristics, fund size is measured in dollars (one hundred million dollars), which expects to be negatively related to mutual fund performance because of management challenge from skilled dilution. The family size could impact on the returns since the larger family size of the mutual funds could get benefit from the economies of scale that could lower the trading commission and lending fees. Building on the prior research as already mentioned, the family size is measured as the sum of all equity funds under company management in the unit of dollars (one hundred million dollars).

The age of funds also influences on the performance because the newer funds tend to have new strategies, which is more appropriate to the present situations. It is measured as an average fund age in yearly basis. Moreover, in terms of country characteristics from Ferreira et al. (2013), the economic development measured as gross domestic product per capita (GDP per capita) from the World Development Indicators (WDI) database. This paper expects that the more economic development is in the country, the more returns that mutual fund could perform. For the investor protection, it could be considered with the type of laws could increase the performance and decrease the recovery period of mutual fund performance if the law is common law providing legal protection. Thereby, investor protection could be positively and negatively influenced on returns and recovery period respectively.

Also, this paper considers the financial crisis on AM Al-Rjoub and Azzam (2012) and adopted by Patel and Sarker, which was defined the crisis when the stock market crashed 35 percent in emerging stock markets. Therefore, the crisis dummy is equaled to 1 during the stock market crash as another control variable, denoted by the subscript "i" as the country, "j" as the mutual fund, and "t" as a specific time.

Table 4. Control variable definitions

Control variables	Definitions
$Size_{jit}$	Size of mutual fund j in country i at time t
$Family_{jit}$	Family size of mutual fund j in country i at time t
Age_{jit}	Age of mutual fund j in country i at time t
GDP_{it}	Economic development in country i at time t
$DINV_{it}$	The dummy variable of investor protection equals to 1 if the law is common law and 0 otherwise in country i at time t
$DCrisis_{it}$	The dummy variable of crisis situation equals to 1 if there is a crisis and 0 otherwise in country i at time t

This paper uses different econometric models, including fixed effect, random effect, and the Hausman test, in order to examine the relationship between democracy levels and mutual fund performance. The fixed effect model is used to capture for individual fund fixed effects and country-specific factors that remain constant over time, which could control for unobserved heterogeneity and isolate the impact of democracy on mutual fund performance within each country.

On the other hand, the random effects model assumes the uncorrelation between the unobserved factors and independent variables. Therefore, this could allow for time-varying effects, which provides an alternative perspective by estimating the average relationship between democracy levels and mutual fund performance across different countries.

In order to determine which model is more appropriate, this paper would conduct Hausman, which compares the estimates from the fixed effect and random effect models to assess whether the inclusion of individual-specific effects is justified.

4. Empirical models

To investigate the **Hypothesis 1:** the degree of democracy positively associated with the mutual fund performance.

The model could be shown as follows:

$$\textbf{RETURN}_{jit} = \boldsymbol{\alpha}_i + \boldsymbol{\alpha}_j + \boldsymbol{\alpha}_1(\textbf{Level of Demo}_{it}) + \boldsymbol{\alpha}'_2(\textbf{CONTROLS}_{jit}) + \boldsymbol{\varepsilon}_{jit} \qquad (2)$$

This paper expects that α_1 would be positively significant. Implying that the level of democracy in each regime would affect the mutual fund performance in different degree. The higher degree of democracy, which is reached to the strong democracy regime, the less political uncertainty could be. Therefore, it creates the favorable environment for investing leading to higher equity mutual fund returns. Also, the lower degree of democracy could decrease the returns through the political risk.

To investigate the **Hypothesis 2:** the recovering period of mutual fund is negatively associated with the level of democracy.

The model could be shown as follows:

$$\textbf{RECOV}_{ji} = \beta_i + \beta_j + \beta_1(\textbf{Level of Demo}_i) + \beta'_2(\textbf{CONTROLS}_{it}) + \eta_{ji} \qquad (3)$$

From the literature reviews, β_1 is expected to be negatively significant. High degree of democracy could reflect the political certainty in positive way, and then reduces the recovery period of mutual fund. Therefore, the countries with high level of democracy would take less time to recover. In contrast, the lower degree of democracy would take many days or years to recover back.

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RESULTS AND DISCUSSIONS
1. Descriptive of the data
   1.1 Descriptive of the democracy level
Table 5. The level of democracy in each country

Variable	Mean	Std.Dev.	Min	Max	Obs
Brazil	0.6682	0.1232	0.4995	0.7825	12
Chile	0.7730	0.0215	0.7368	0.7908	12
China	0.0814	0.0096	0.0645	0.0933	12
India	0.4670	0.1097	0.3175	0.6003	12
Mexico	0.4864	0.0226	0.4438	0.5170	12
South Africa	0.6264	0.0252	0.5823	0.6608	12
Thailand	0.1954	0.1253	0.0885	0.4080	12

The table above provides the data presenting the summary statistics of the democracy level variable for seven countries: Brazil, Chile, China, India, Mexico, South Africa, and Thailand. The higher values indicate a higher degree of democracy.

In terms of the mean values, Chile exhibits the highest democracy level with a mean of 0.773, followed by Brazil with a mean of 0.6682 and South Africa with a mean of 0.6264. These countries display relatively higher levels of democracy compared to the others in the dataset. On the other hand, China has the lowest mean democracy level at 0.081396, indicating a lower degree of democracy within the country. India, Mexico, and Thailand fall within the middle range of democracy levels, with means of 0.4670, 0.4864, and 0.1954 respectively.

The standard deviation values provide insights into the degree of variation in the democracy levels across the countries. China has the lowest standard deviation at 0.0096, indicating relatively low variation and greater homogeneity in democracy levels within the country. Meanwhile, Thailand has the highest standard deviation at 0.1253, suggesting a greater diversity in democracy levels among different regions or subgroups within the country. Other countries exhibit moderate levels of variation in democracy levels.

Table 6. The correlation of the democracy level

Correlation	Brazil	Chile	China	India	Mexico	South Africa	Thailand
Brazil	1.0000						
Chile	0.8741	1.0000					
China	0.9348	0.8590	1.0000				
India	0.9312	0.7520	0.9440	1.0000			
Mexico	0.5975	0.5974	0.8030	0.6586	1.0000		
South Africa	0.8868	0.7826	0.9584	0.9327	0.8279	1.0000	
Thailand	0.5886	0.2935	0.6912	0.7965	0.5631	0.7509	1.0000

The correlation matrix above reveals patterns in the relationships between democracy levels across these countries. Brazil, China, India, Chile, and South Africa exhibits strong positive correlations with each other's, which indicates that a consistent association between their democracy levels. For Mexico and Thailand, there are moderate positive correlations with Brazil, China, India, and South Africa. However, Thailand shows weaker correlations with Chile, which shows that the interconnectedness of democracy levels among these two countries are low that could indicate the different results of the mutual funds' performance and recovering time.

Figure 6. The Categorize of democracy
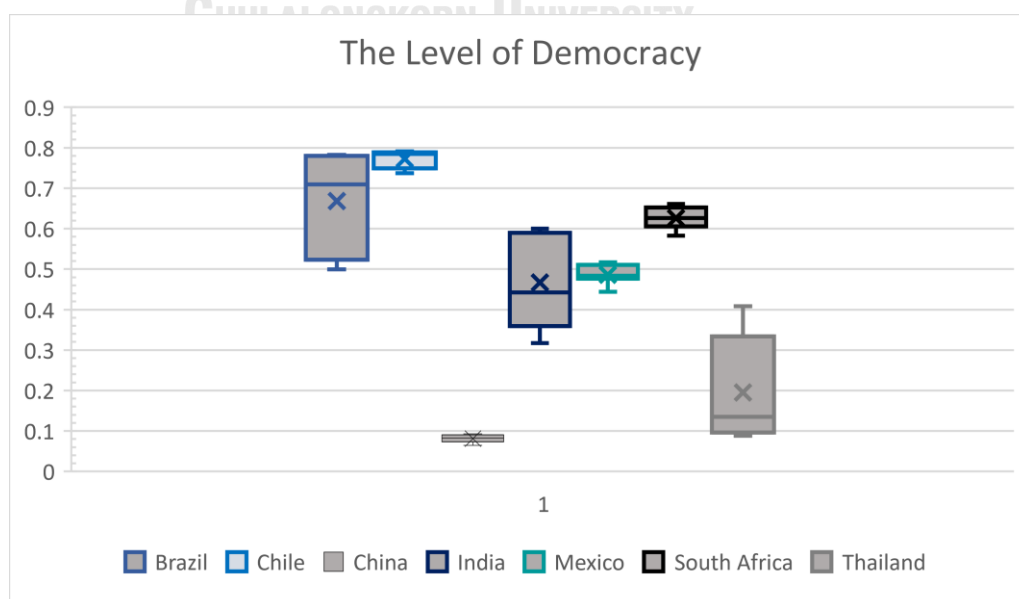
The categorization of the type of democracy allows for a clear classification of the selected countries based on their democracy levels. Using the provided threshold values adapted from Welzel (2013), there are four distinct categories: "Strong democracy," "More Democracy," "Less Democracy," and "Non-Democracy."

Chile is classified as a "Strong democracy" as its mean level falls within the range of countries with a democracy level above 0.76. This suggests that Chile has a robust and well-established democratic system. Both Brazil and South Africa fall into the category of "More Democracy" as their mean democracy levels are in range between 0.51 and 0.75. This indicates that these countries have relatively high levels of democracy but fall slightly below the threshold for being classified as "Strong democracy."

India and Mexico are categorized as "Less Democracy" as their mean democracy levels fall between 0.25 and 0.50. This suggests that while these countries have the limitations of electoral, liberal, participatory, and deliberative democracy. China and Thailand are classified as "Non-Democracy" as their mean democracy levels are below 0.24. This indicates that these countries have the lowest scores on the democracy scale, implying a lack of democratic practices or institutions.

1.2 Descriptive of variables for hypothesis 1: the degree of democracy positively associated with the mutual fund performance.

Table 7. The details of variables for hypothesis 1

Variable	Mean	Std.Dev.	Min	Max	Obs
Return	1.2182	1.2072	-4.1307	6.2352	46,281
Level of Demo	0.3712	0.2421	0.0645	0.7908	46,281
Size	0.2273	0.5155	0.0001	4.3873	46,281
Family	10.2932	19.2224	0.0011	99.8232	46,281
Age	6.9658	5.9550	1	55	46,281
GDP	3.3995	3.8213	-8.6546	10.5634	46,281
DInv	0.3850	0.4866	0	1	46,281
DCrisis	0.0831	0.2761	0	1	46,281

The summary statistics provide valuable insights into the key variables examined in the dataset. For the return variable, the overall mean of 1.2182 suggests a positive average Sharpe ratio. This information highlights the potential for varying performance levels among the observed data points. For the democracy level variable, the overall mean of 0.3712,   indicate a mean values representing the less democracy level across the dataset. The statistics suggest a moderate average level of democracy, with some variability observed.

Regarding firm-specific characteristics, the size variable exhibits an overall mean of 0.2273 (100 million dollars), indicating that the average mutual fund size is relatively small. The standard deviation of 0.5155 suggests a considerable range in sizes, highlighting the presence of both small and large firms in the dataset. For the family size variable, the overall mean of 10.2932 (100 million dollars) represents the average family size, while the standard deviation of 19.2224 indicates significant variability in family sizes. For the Age variable, the overall mean is about 7 years with a standard deviation of 5.9550. The minimum and maximum values are 1 and 55, respectively. Regarding the GDP per capita, the overall mean is 3.3995 (thousand dollars). Therefore, these statistics could comprehend the patterns and dynamics of the Hypothesis1

Table 8. The details of correlation for hypothesis 1

Correlation	Return	Level of Demo	Size	Family	Age	GDP	DInv	DCrisis
Return	1.0000							
Level of Demo	0.2298	1.0000						
Size	0.1719	0.0181	1.0000					
Family	0.3219	0.0596	0.5157	1.0000				
Age	0.0500	0.1529	0.0100	0.0379	1.0000			
GDP	0.1336	-0.2164	0.2052	0.2937	-0.1819	1.0000		
DInv	0.4072	0.4414	0.2616	0.4832	0.0657	0.3099	1.0000	
DCrisis	-0.0378	-0.2326	-0.0441	-0.0616	-0.0343	-0.4495	-0.1877	1.0000

The correlation matrix reveals the relationships between different variables for hypothesis 1 in the dataset. The return variable exhibits a weak positive correlation with the democracy level, size, family size, and GDP per capita variables. However, there is a stronger positive correlation is observed between return and investor protection of legal.

On the other hand, the crisis variable shows a weak negative correlation with other variables. Almost all of these correlations (except the fund size and age) are aligned with the hypothesis and previous literatures.

1.3 Descriptive of variables for hypothesis 2 : the recovering period of mutual fund is negatively associated with the level of democracy.

Table 9. The details of variables for hypothesis 2

Variable	Mean	Std.Dev.	Min	Max	Obs
Recov2020	24.3756	34.7051	3	490	5,994
Level of Demo	0.3569	0.2017	0.0688	0.7368	5,994
Size	0.1983	0.4517	0.0001	4.3873	5,994
Family	11.5018	18.7353	0.0011	91.0719	5,994
Age	7.8870	6.3184	1	54	5,994
GDP	-5.0680	3.5852	-8.6546	1.9966	5,994
DInv	0.4966	0.5000	0	1	5,994

The Recov2020 variable, representing the recovering day of the mutual funds in 2020, has an average of 24.3756 days with considerable standard deviation of 34.7051, which is more than a month. A moderate mean of 0.3569 indicates less democracy level across the dataset. The size variable reflects an average small mutual fund size, with a mean of 0.1983 (100 million dollars) The family size variable shows an average-sized family with a mean of 11.5018 and a standard deviation of 18.7353. The age variable indicates an average firm age of almost 8 years. The GDP per capita variable exhibits a negative average value of -5.0680, which indicates the downside of market during the crisis period.

Table 10. The details of correlation for hypothesis 2

Correlation	Recov2020	Level of Demo	Size	Family	Age	GDP	DInv
Recov2020	1.0000						
Level of Demo	-0.1102	1.0000					
Size	0.0169	-0.1079	1.0000				
Family	-0.0795	-0.1501	0.5259	1.0000			
Age	-0.0820	0.2103	0.065	0.0783	1.0000		
GDP	0.2703	-0.5731	-0.0471	-0.2167	-0.255	1.0000	
DInv	-0.2101	0.2488	0.2096	0.4396	0.0547	-0.569	1.0000

The correlation above reveals that the recovering day of mutual funds during the crisis in 2020 is negatively related with democracy level, which is consistent with the hypothesis that the higher of democracy level could decrease the recovering time of mutual fund performance. However, for the correlation of age and the recovering day is not aligned with the hypothesis 2. Also, the GDP per capita shows positive correlation of the recovering time, which is contrast with the previous literatures. Apart from that, these variables tend to have the same relationship as same as the hypothesis 2.

2. The results of the hypotheses

This paper conducts the Hausman test in order to determine the fixed effects model is the random effects model is more appropriate.

Table 11. The Hausman test for hypothesis 1

Chi-square	Df	P-value
119.43	5	0.000

For the variable "Level of Demo," the fixed effects estimate is -0.7254, while the random effects estimate is 0.7196. This difference in estimates -1.4450 is statistically significant, indicating that the fixed effects model provides a more

appropriate fit for the data. Similarly, for the variables "Family Size," "Age," "GDP," and "Crisis, these results suggest that the fixed effects model could capture the individual fund fixed effects and country fixed effects more effectively.

The test summary indicates that the probability (Prob>chi2) is 0.000, indicating that the difference between the fixed effects and random effects models is statistically significant. Therefore, the fixed effects model could be used over the random effects model for hypothesis 1.

2.1. The result of Hypothesis 1 for all countries

In order to analyze the hypothesis 1 in all country, the mutual fund's size ("Size") and the common law ("Investor Protection") were dropped because the collected data for these variables was not time-varying for each country. Since the study aims to examine the effect of democracy level on mutual fund performance over time, it is essential to have consistent and varying data for all variables across different time periods for each country. Although the size and investor protection could potentially impact its performance in each country, the collected data remains constant throughout the period. Therefore, it limits the ability to examine the potential impact of their changes on mutual fund performance over time.

Moreover, to analyze the effect of democracy level on mutual fund performance, there are two-step approaches. In the first step, both individual mutual fund fixed effects and country fixed effects are used to analyze for an overall assessment. Therefore, it could capture the individual heterogeneity and capture unobserved factors that are specific to each country, which could control for country-specific characteristics that may influence mutual fund returns with more robust and accurate analysis. (Table 10)

In the second step, individual fixed effects were estimated for each country in order to capture the individual-specific factors that may influence mutual fund performance. This step allows for isolating the effects of democracy level within each country, taking into account the unique characteristics and dynamics of their respective markets. (Table 11-17)

Table 12 The level of Democracy on mutual fund performance

Return	Model
Level of Demo	-0.9396***
	(0.1749)
Family	0.0283***
	(0.0020)
Age	-0.0141***
	(0.0044)
GDP	0.0265***
	(0.0044)
Dcrisis	-0.4639***
	(0.0432)
Con	1.2448***
	(0.0924)
Individual FE	YES
Country FE	YES
R^2	0.0397
Obs	46,218

Note: * Significance at 10% level, ** Significance at 5% level, ***Significance at 1% level. The number in parenthesis is p-value of coefficients.

The results reveal the effect of democracy on mutual fund performance, considering the both effects. The coefficient of democracy level variable is negatively significant, suggesting that a higher level of democracy decrease the mutual fund returns. If the democracy level decrease by 1%, it could allow the mutual funds to underperform by 0.9396% in overall emerging countries, which have a variety of different democracy level. Furthermore, this indicates that the relationship between democracy and mutual fund returns is still valid even when accounting for country-specific effects.

However, this result is reversely different from the hypothesis expecting that democracy could increase the mutual fund returns. According to Dhillon, Pickering, and Sjöström (2018), found that if democratically elected politicians struggle to make credible commitments, default rates may be higher, potentially leading to a credit market disadvantage for democracies. From Bernhard and Leblang (2002), The democratic process encourages a greater variation of expectations and allows for higher risk-taking, due to the diverse perspectives and opinions. Therefore, the

increase in high democracy level could lower the mutual fund performance in emerging countries.

The increase in family size by about 100 million dollars or 1,000 dollars for GDP per person could help mutual fund returns increase by 2.83%. and 2.65% respectively. It could imply that larger family sizes are associated with higher mutual fund returns, aligning with Ferreira et al. (2013). On the other hand, the fund age is statistically significant and negatively related to mutual fund returns. A 1-year increase in fund age corresponds to a decrease of approximately 1.41% in mutual fund performance. This implies that older funds tend to have lower returns, considering the country-specific effects. Furthermore, during the crisis period, the mutual funds in emerging markets could decrease performance following Maheen (2021)'s study.

The results of these control variables align with existing the literatures. Fund family size, age of the fund, and GDP per capita exhibit consistent relationships with mutual fund performance. Larger fund family sizes and younger funds are associated with higher returns, while higher GDP per capita is linked to improved mutual fund performance. The R^2 values suggest that the model explains a small proportion of the variation in mutual fund performance.

Regarding the impact of democracy level on the mutual fund returns above after considering country fixed effect, as democracy level increases, mutual fund returns tend to decrease. However, building on Ferreira, et al (2012), the different performance of mutual funds is varied depending on the individual fund and country characteristics. Also, according to Perotti and Van Oijen (2001) the impact of democracy on mutual fund performance could vary depending on the level of democracy with different political risk.

With specific individual country characteristics, various democratic institutions, market structures, investor protection, and economic conditions could explicitly influence the relationship between democracy and mutual fund returns. Therefore, this paper would investigate more about the impact of democracy on mutual fund performance by conducting regression analyses for hypothesis 1 in each country individually in order to examine deeper understanding of this impact.

2.2 The result of Hypothesis 1 for each country

Taking into account specific country characteristics, this study therefore measures the impact of democracy level on mutual fund returns as a second approach as follows.

2.2.1 The result of Hypothesis 1 for Chile: Strong democracy level

Table 13. The level of Democracy on mutual fund performance in Chile

Return	Model
Level of Demo	9.4760***
	(1.7526)
Family	0.2553
	(0.1827)
Age	-0.0076
	(0.0138)
GDP	0.0414***
	(0.0079)
Dcrisis	-1.0436***
	(0.1199)
Con	-5.9577***
	(1.4169)
Individual FE	YES
R^2	0.0988
Obs	3,282

Note: * Significance at 10% level, ** Significance at 5% level, ***Significance at 1% level. The number in parenthesis is p-value of coefficients.

The results indicate that the strong democracy level has a significant positive impact on mutual fund returns in Chile. The increase in 1% of democracy level could improve mutual fund performance by about 9.5%. Also, the impact of a financial crisis demonstrates that the mutual fund performance in Chile could be decreased about 1% during the time of distress. However, the variables of family size and fund age show insignificant relationships with mutual fund returns, as their coefficients have p-values greater than 0.1. The R^2 values are low, which could show the effectiveness of the model

2.2.2 The result of Hypothesis 1 for Brazil: More democracy level

Table 14. The level of Democracy on mutual fund performance in Brazil

Return	Model
Level of Demo	-1.0069**
	(0.3933)
Family	0.1059**
	(0.0482)
Age	-0.0356**
	(0.0151)
GDP	0.0388***
	(0.0038)
Dcrisis	-0.9721***
	(0.0760)
Con	2.0542***
	(0.3529)
Individual FE	YES
R^2	0.0521
Obs	8,299

Note: * Significance at 10% level, ** Significance at 5% level, ***Significance at 1% level. The number in parenthesis is p-value of coefficients.

In Brazil, the results show that the level of democracy has a significant negative impact on mutual fund returns. A 1% increase in democracy level is associated with a decrease of approximately 1% in mutual fund performance. Therefore, this democracy result is inversely aligned with the hypothesis. The studies of Dhillon et al. (2018) and Bernhard and Leblang (2002) could support this main finding of the study. Since there are difficulties for elected politicians to make trustworthy commitments, which may lead to higher default rates. Furthermore, the democratic process could encourage different opinions and perspectives, leading to longer time making decision to improve the returns.

The variable of family size shows a significant positive relationship with mutual fund returns, where an increase in family size is associated with higher returns. Similarly, fund age has a significant negative impact on returns, indicating that older funds tend to perform worse. GDP per capita has a significant positive relationship with mutual fund returns. Meanwhile, the presence of a financial crisis has a significant negative impact on mutual fund returns in Brazil. The R^2 values are

relatively low, indicating that the model could explains the variation in mutual fund performance.

2.2.3 The result of Hypothesis 1 for South Africa: More democracy level

Table 15. The level of Democracy on mutual fund performance in South Africa

Return	Model
Level of Demo	-20.6892***
	(1.8419)
Family	0.0142
	(0.0112)
Age	0.0064
	(0.0106)
GDP	0.2742***
	(0.0101)
Dcrisis	-1.1635***
	(0.1171)
Con	13.0561***
	(1.2015)
Individual FE	YES
R^2	0.1886
Obs	6,909

Note: * Significance at 10% level, ** Significance at 5% level, ***Significance at 1% level. The number in parenthesis is p-value of coefficients.

The impact of the increase in 1% of democracy level could decrease mutual fund performance about 20.7% in South Africa. According to Dhillon et al. (2018) and Bernhard and Leblang (2002), there can be challenges for elected politicians in making reliable commitments, leading to higher default rates. Moreover, it could take longer time to make any decision since the democratic process take notice of public opinions and perspectives, leading to longer time making decision to improve the returns.

However, the variables of family size and fund age show insignificant relationships with mutual fund returns, as their coefficients have p-values greater than 0.1. On the other hand, GDP per capita demonstrates a significant positive impact on mutual fund returns, suggesting that economic factors play a good role in fund performance. Furthermore, the presence of a financial crisis has a significant negative

effect on mutual fund returns in South Africa. The R^2 values indicate that the model explains a moderate proportion of the variation in mutual fund performance.

2.2.4 The result of Hypothesis 1 for India: Less democracy level

Table 16. The level of Democracy on mutual fund performance in India

Return	Model
Level of Demo	-14.2545***
	(0.3964)
Family	0.0256***
	(0.0014)
Age	-0.3487***
	(0.0120)
GDP	0.0037
	(0.0106)
Dcrisis	-1.6700***
	(0.1658)
Con	10.3103***
	(0.2378)
Individual FE	YES
R^2	0.0551
Obs	18,054

Note: * Significance at 10% level, ** Significance at 5% level, ***Significance at 1% level. The number in parenthesis is p-value of coefficients.

The results presented that there is a significant negative impact of the level of democracy on mutual fund returns. Specifically, a 1% increase in the democracy level is associated with a substantial decrease of approximately 14.3% in mutual fund performance in India. The research conducted by Dhillon et al. (2018) and Bernhard and Leblang (2002) found the challenges of faced by elected politicians in making reliable commitments. Therefore, it could increase the default rate. Furthermore, the democratic process takes into account various public opinions and perspectives, which can lead to longer decision-making times in order to improve returns. Additionally, variables such as family size and fund age demonstrate significant positive relationships with mutual fund returns, suggesting the bigger or older mutual funds could generate higher returns.

However, the coefficient for GDP per capita is insignificant, indicating that it does not have a significant impact on mutual fund returns. Furthermore, the presence of a financial crisis is found to have a significant negative impact on mutual fund returns in India. The R^2 values indicate that the model explains a moderate proportion of the variation in mutual fund performance.

2.2.5 The result of Hypothesis 1 for Mexico: Less democracy level

Table 17. The level of Democracy on mutual fund performance in Mexico

Return	Model
Level of Demo	-16.6312***
	(2.4649)
Family	0.1018
	(0.0627)
Age	0.0057
	(0.0173)
GDP	0.0491***
	(0.0244)
Dcrisis	-1.2026***
	(0.2775)
Con	8.4969***
	(1.2955)
Individual FE	YES
R^2	0.2107
Obs	885

Note: * Significance at 10% level, ** Significance at 5% level, ***Significance at 1% level. The number in parenthesis is p-value of coefficients.

The finding reveals a significant negative impact of the level of democracy on mutual fund returns. Specifically, a 1% increase in the democracy level is associated with a considerable decrease of approximately 16.6% in mutual fund performance in Mexico. Since most people do not believe pre-given commitments by the elected politicians. Therefore, it could increase the uncertainty in default rate. Also, the democratic process takes into account various public opinions and perspectives, leading to longer period of decision-making followed on Dhillon et al. (2018) and Bernhard and Leblang (2002). However, the family size and age are not statistically significant, suggesting that they do not have a significant influence on mutual fund returns in Mexico. The GDP per capita are positively significant, indicating more

GDP could increase the return of mutual funds. On the other hand, crisis is negatively significant Thereby, during crisis could increase in mutual fund performance. The R^2 values indicate that the model explains a moderate proportion of the variation in mutual fund performance.

2.2.6 The result of Hypothesis 1 for China: Non democracy level

Table 18. The level of Democracy on mutual fund performance in China

Return	Model
Level of Demo	-136.9092***
	(6.3944)
Family	-0.0238***
	(0.0076)
Age	-0.3493***
	(0.0230)
GDP	-0.5056***
	(0.0224)
Dcrisis	-0.9997***
	(0.1052)
Con	15.3477***
	(0.6471)
Individual FE	YES
R^2	0.0972
Obs	5,557

Note: * Significance at 10% level, ** Significance at 5% level, ***Significance at 1% level. The number in parenthesis is p-value of coefficients.

The result shows that there is a significant negative relationship between the level of democracy and mutual fund returns. A 1% increase in the democracy level is associated with a substantial decrease of approximately 136.9% in mutual fund performance in China. This suggests that low democracy level in China could be attractive to the investors due to generating substantial highly return. According to Dhillon et al. (2018) and Bernhard and Leblang (2002), a low level of democracy can actually lead to higher returns. This is because with fewer decision-making challenges and less consideration of diverse perspectives, there is a greater likelihood of making reliable commitments and achieving better performance.

For the family size, the results reveal an inverse relationship with performance. According to Yan (2008), smaller funds have the flexibility to take advantage of investment opportunities in less liquid assets, leading to easily adjust the positions to optimize returns. For the mutual fund age, it is statistically significant and negatively related to mutual fund returns. Since the newer funds tend to have new strategies, the younger age of funds could increase the returns following Ferreira et al. (2013)'s study.

Furthermore, the coefficient for GDP per capita and crisis are also statistically significant and negatively related to mutual fund returns. A 1,000 dollars decrease in GDP per capita could decrease of approximately 50.56% in mutual fund performance. Also, mutual fund performance is adversely affected during times of crisis about 99.97%. The R^2 values indicate that the model explains a low proportion of the variation in mutual fund performance.

2.2.7 The result of Hypothesis 1 for Thailand: Non democracy level

Table 19. The level of Democracy on mutual fund performance in Thailand

Return	Model
Level of Demo	2.2795***
	(0.4347)
Family	-0.0960*
	(0.0495)
Age	-0.1159***
	(0.0157)
GDP	0.1373***
	(0.0233)
Dcrisis	-0.5931***
	(0.2290)
Con	2.2571***
	(0.1870)
Individual FE	YES
R^2	0.0007
Obs	3,295

Note: * Significance at 10% level, ** Significance at 5% level, ***Significance at 1% level. The number in parenthesis is p-value of coefficients.

The findings indicate that the level of democracy has a significant positive effect on mutual fund returns. A 1% increase in the democracy level is associated with an increase of approximately 2.2795% in mutual fund performance in Thailand. This suggests that a higher level of democracy is beneficial to mutual fund returns in the Thai market. According to Zouhaier and Karim (2012), more democratic countries are more likely to have more political stability and lower corruption rate, which could stimulate the growth of mutual fund. Furthermore, from the study of Coppedge et al. (2019), the degree of democracy in terms of electoral, liberal, participatory, deliberative, and egalitarian democracy from could impact the stock market returns.

The family size is not statistically significant, indicating no impact on mutual fund returns in Thailand. However, the coefficient for fund age is statistically significant and negatively related to fund returns. A 1 year increase in fund age leads to a decrease of approximately 11.59% in mutual fund performance. This suggests that older funds tend to have lower returns in Thailand. For GDP per capita, it is statistically significant and positively related to mutual fund returns. A 1,000 dollars increase in GDP per capita corresponds to an increase of approximately 13.73% in mutual fund performance. For financial crisis, it is found that there is a negative effect on mutual fund returns about 59.3% in Thailand.

The R^2 values indicate that the model explains a small proportion of the variation in mutual fund performance.

2.2.8 The overall result for each country

Overall, the coefficient values representing the impact of democracy level on mutual fund performance vary across countries. In Chile, characterized as a strong democracy, the coefficient is positive, indicating that an increase in democracy level is associated with an improvement in mutual fund returns followed the study's hypothesis. However, in Brazil and South Africa, categorized as having more democracy, the coefficients are negative, suggesting that higher levels of democracy have a detrimental effect on mutual fund performance. The coefficient values for India and Mexico, considered to have less democracy, are also negative, implying that

increased democracy level is associated with lower mutual fund returns in these countries.

Regarding In China, the non-democratic country, the higher level of democracy has substantial negative impact of democracy level on mutual fund performance. In contrast, Thailand demonstrates a positive relationship, indicating that a higher level of democracy positively affects mutual fund performance. According to Li, He, and Lin (2018), China-US trade war negatively impacts China's financial market since it could limit the investment choices, particularly from democratic countries in developed zone. China experiences significant negative effects, while countries like Thailand offer a wider range of investment opportunities for mutual funds. These findings emphasize the disruption to China's financial market and the advantages of other democratic nations in terms of investment diversification.

However, most results are negative relation, which is contrast with the hypothesis for not strong democracy level country (except Thailand). According to Dhillon et al. (2018), found that if democratically elected politicians struggle to make credible commitments, default rates may be higher, potentially leading to a credit market disadvantage for democracies. From Bernhard and Leblang (2002), The democratic process encourages a greater variation of expectations and allows for higher risk-taking, due to the diverse perspectives and opinions.

Therefore, democracy level could increase volatility in economic and financial markets with unpredictability of risk. Furthermore, Block and Vaaler (2004) found that credit rating agencies tend to downgrade developing country with more frequently rating during election years, leading to increased capital costs for developing democracies. Thereby, since the democracy process could take longer time to make any decision and high expectation variation, and downgrade credit ratings, the increase in high democracy level could lower the mutual fund performance in emerging countries. In contrast, since more democratic countries are more likely to have more political stability and lower corruption rate, which could stimulate the growth of mutual fund from Zouhaier and Karim (2012), and could impact the stock market returns from Coppedge et al. (2019). Thailand, another non-

democratic country, has a positive coefficient, suggesting that democracy level has a modest positive influence on mutual fund returns followed the hypothesis.

For the impact of family fund size, it is not statistically significant in Chile, South Africa, and Mexico. In Brazil and India, which are classified above non-democracy level, a larger family fund size has a positive effect on mutual fund performance, consisting with Chen et al. (2004). In non-democracy level countries (China and Thailand), a larger family fund size has a negative impact on mutual fund performance. According to Yan (2008), discovers that there is an inverse relationship between family fund size and the performance, specifically with less liquid portfolios. For the effect of fund age, it is not statistically significant in Chile, South Africa, and Mexico. In Brazil, India, China, and China, a higher fund age could generate less return than the newer mutual funds, consisting with Ferreira et al. (2013)'s study.

For the impact of GDP per capita, the higher country development could lower mutual fund returns in Chile, Brazil, and Mexico. Furthermore, high GDP per head has a strong negative impact on mutual fund performance in a non-democratic country. According to Li et al. (2018), in the short run, an increase in GDP with fiscal expansion could allow higher public debt, potentially benefiting mutual fund performance. However, the long-term economic consequences could be worse when paying back the debts and lower mutual fund performance. On the other hand, it could help to generate more returns in South Africa and Thailand followed by Ferreira et al. (2013)'s study. Overall, the relationship between GDP per head and mutual fund performance differs across countries. During the crisis period, the mutual funds negatively perform in the all-emerging markets but different magnitudes rage of 59.3% to106.7%, consisting with Maheen (2021)'s study that found a lack of superior alpha and inadequate beating capacity during the COVID-19 pandemic.

2.3. The result of Hypothesis 2

The study examines the effect of democracy level on the mutual fund recovery period during the crisis by conducting an Ordinary Least Squares (OLS) analysis in 2020 for all countries. The crisis period is defined as a time when the stock prices have decreased by more than 35%. In addition to democracy level, two additional variables are included in the analysis: mutual fund size and investor protection measured by the legal system (common law) from Ferreira et al. (2013)'s study.

Table 20. The level of Democracy on mutual fund recovery

Recov	Coef.
Level of Demo	12.0036***
	(2.9809)
Size	4.5244***
	(1.2043)
Family	-0.0029
	(0.0330)
Age	-0.1715**
	(0.0765)
GDP	-2.4287***
	(0.1916)
DInv	-6.5666***
	(1.2306)
Cons	36.1506***
	(1.0927)
R^2	0.0826
Obs	5,994

Note: * Significance at 10% level, ** Significance at 5% level, ***Significance at 1% level. The number in parenthesis is p-value of coefficients.

The results indicate that several variables have a significant impact on the mutual fund recovery period during the crisis. The coefficient for the level of democracy is about 12, suggesting that higher democracy levels could lead to a longer recovery period for mutual funds. The increase in 1% democracy level would allow the mutual funds to take more 12 days to recover back to where it was. This result is

inversely different from the hypothesis expecting that democracy level could lower the recovering days. According to Dhillon et al. (2018), Bernhard and Leblang (2002), and Block and Vaaler (2004), the democracy process could take longer time to make any decision and high expectation variation, and downgrade credit ratings, the increase in high democracy level could increase the recovering days during the crisis in emerging countries.

From Ferreira et al. (2013)'s study, the mutual fund size variable also has a significant positive effect, with a coefficient of 4.524, indicating that larger funds tend to recover more slowly. The age of the fund has a negative impact, as indicated that the 1-year older fund would take less time to recover about 18 days, implying that younger funds take longer to recover, following Yan (2008) that the larger one would take less time to improve liquidity and improve the performance. GDP has a negative influence on the recovery period, with a coefficient of 2.4287, indicating that countries with higher GDP experience faster mutual fund recovery. Finally, investor protection has a negative effect, with a coefficient of -6.5666, suggesting that stronger investor protection is associated with shorter recovery periods consisting with Ferreira, et al (2012)'s study. The R^2 value of 0.0826 indicates that the variables included in the model explain of the variation in the mutual fund recovery period.

Therefore, the relationship between democracy level and mutual fund performance varies depending on the level of democracy and political risk. Also, the factors such as democratic institutions, market structures, investor protection, and economic conditions in individual countries could also affect on mutual fund performance, supporting that the impact of democracy on mutual fund performance and recovery period is possibly depended on the degree of democracy.

CONCLUSION

This research examines the effect of democracy on mutual fund performance and recovery in emerging countries, specifically Brazil, Chile, China, India, Mexico, South Africa, and Thailand. The results show that based on the categorization of democracy types, Chile is classified as a strong democracy, high democracy level could improve mutual fund returns. Surprisingly, for the more democracy-level country (Brazil and South Africa) and less democracy level-country (India and Mexico) could generate higher returns when democracy level is low. China, as a non-democratic country, exhibits a significant negative impact, in contrast with Thailand, which shows positive relationship.

These findings contradict the initial hypothesis and can be attributed to factors such as struggles in making credible commitments, increased risk-taking, credit rating downgrades during elections, and the longer decision-making process in democracies. Additionally, family fund size, fund age, and GDP per capita also influence mutual fund performance differently in each country. Moreover, this research also examines the effect with considering country-fixed effect for all countries. the results indicate that increased democracy is associated with lower returns for mutual funds.

The research findings demonstrate that the level of democracy has a significant impact on the mutual fund recovery period during a crisis. Higher democracy levels could take longer recovering periods, contrary to the initial hypothesis due to delayed decision-making processes during crisis time

These findings contribute to a better understanding that democracy level could have a negative impact on mutual fund returns and prolong the recovery period during crises in emerging economies. Therefore, policymakers and investors could use this analysis to democratic systems and make decisions regarding their own preference.

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