POSTGRADUATE RESEARCH COLLOQIUM 2022

FACULTY OF ENTREPRENEURSHIP AND BUSINESS

SUSTAINABLE FINANCE, ACCOUNTING AND THE ROLE OF ISLAMIC BANKING

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PREFACE

Entrepreneurship, as the mindset and process needed to create and develop economic activity, blending risk taking, creativity, and/or innovation within a new or existing organization, is very depending on the ecosystems to make it flourish in each organization, institutions, nations, and the world. It has been the ventures; yet the change is needed is not just what is thought but how it is taught in the right environment.

The FKP Postgraduate Colloquium 2022 was held in as virtual on 27 August 2022 at Campus Kota, Universiti Malaysia Kelantan. It was a delightful event with 75 participants, consists of students and lecturers, had many fruitful discussions and exchanges that contributed to the success of the colloquium. 23 papers have been successfully presented during the colloquium in field finance, Islamic banking and accounting. The main objective of the colloquium is to be a platform for students to present and publish their works as well as to share their research progress with their colleagues and experts.

All in all, the FKP Postgraduate Colloquium 2022 was very successful. The editors would like to express their gratitude to all participants and the committees that have helped in ensuring the smooth sailing of making the colloquium into a reality.

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The influence of warrants on positive shares

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ABSTRACT

At present, the research in the industry is mainly based on the impact of positive shares on warrants. This paper analyzes the counter effect of warrants on positive shares by studying the operation principle, constituent elements, risk measurement and other elements of warrants, and expounds the impact of derivatives on basic financial products through the cases of representative elements such as "Circulation", "hedging activities", "issuance density".

Warrants can affect the price of positive shares to a certain extent. From the current research, the impact of warrants on the price of positive shares has not attracted scholars' attention. Empirical research results show that the non efficiency characteristics of the securities market are relatively obvious (Cao Zhiguang, 2005), Li Hongquan, et al., 2005 Pierre (1998) examined the impact of stock call options listed on the Chicago Board of options (CBOE) from 1973 to 1900 on the price of the underlying stock. They found that the yield of the underlying stock changed significantly after the option was issued.

Key words: warrants; B-S Option Pricing Model; Extension amplitude; Hedging; Market maker

INTRODUCTION

Warrant is a kind of financial derivative with leverage characteristics, and the holder can exercise specific rights within a specific period of time. There is a simple positive and negative correlation between positive shares and warrants. The reaction of warrants to positive shares is based on the real trading market, which is less objectively affected. Therefore, subjective factors such as the total circulation, the hedging activities of issuers, and the activities of makers under moral hazard will have a huge or decisive impact on the price of positive shares.

RESEARCH METHOD

(1) Literature analysis method: This paper fully grasps the research status and development direction of this field by consulting relevant research books, journal documents and website materials, and uses the existing theoretical results and practical experience for reference to analyze and study this topic.

(2) Case study method: This paper selects the warrants of the stock exchange of Hong Kong as a case study, and makes an in-depth and thorough study on the influencing factors of representative financial products to reach a conclusion.

RESULTS AND DISCUSSION

Warrant is a right, not a responsibility, which gives the holder the right to purchase or sell relevant assets (such as shares, indexes, commodities, currencies, etc.) at a predetermined exercise price on the scheduled maturity date. It has the characteristics of derivatives and belongs to a leveraged investment tool. The market mainly includes equity warrants and covered warrants.Among them, equity warrants are the company's fund-raising activities. If the holder exercises his rights, the company will issue new shares, while covered warrants are usually issued by investment banks, which formulate the issuer's responsibilities and the terms of warrants, and a contract for delivery at maturity.

1. Theoretical price and market pricing of warrants

1.1 constituent factors of warrants

In terms of the rights of the holder, warrants are divided into subscription certificates and put certificates. The pricing of warrants is mainly affected by three factors: intrinsic value, time value and extended amplitude. Among them, theoretical price = intrinsic value + time value.

Example 1:
Asset price: 124 yuan
Exercise price: 118 yuan
Warrant price: 13.6 yuan
Intrinsic value: 6 yuan = 124 yuan – 118 yuan
Time value: 7.6 yuan = 13.6 yuan – 6 yuan

The shorter the time period of exercise, the lower the probability that the range of warrant volatility will exceed the exercise price k, and the lower the time value will be. This is because the opportunity for the price of relevant assets to rise above the exercise price (for subscription warrants) or fall below the exercise price (for put warrants) before the maturity date is gradually reduced.

According to the above data, "7.6" is the time value of the warrant. Due to the shortening of the period, the value of this part is affected. When the time value is zero on the warrant exercise date, the internal value will be settled with the current price change of the positive stock.

1.2 constituent factors of warrants

The pricing of warrants directly affects whether they can be traded fairly and efficiently in the fair market. There is a great difference between the theoretical price and the actual price of put warrants. The price traded in the market is priced through the fair market mechanism. This price is the actual price. The main principle is the price change caused by the equilibrium and deviation of the market supply and demand.

In the process of pricing, there is also a possibility of exercising rights, that is, the standard deviation. The standard deviation is a measure of risk. This risk is a risk in economics, that is, the possibility of income and the possibility of loss are the same. In such a positive and negative probability equilibrium distribution, the most important pricing factor extension amplitude is also produced.

In the classical B-S Option Pricing Model, we know that
$C=S \bullet N(D1)-Ke - \gamma\ T \bullet N(D2)$
Of which:
$D1=\ln(S/Ke-rtz)/\ \sigma \sqrt{t}+1/2\ \sigma \sqrt{t}$

$D2=D1- \sigma \cdot \sqrt{T}$
C - initial reasonable price of option
K - option delivery price
S - current price of financial assets traded
T - option validity period
R - risk free interest rate of continuous compound interest calculation H
σ 2 - annualized variance
N(..)— Cumulative probability distribution function of normally distributed variables (that is, the probability that the variable is less than x, that is, the area of the distribution curve under the normal distribution of x)

Formula Description:
Hypothesis 1 of the formula: continuous time market can be traded at any time, without any transaction costs and taxes, and short selling is not allowed
Hypothesis 2: there is no arbitrage opportunity
Hypothesis 3: there is a flat term structure of interest rates
Hypothesis 4: the underlying stock of the call option will not pay dividends within the validity period of the option

The first term of the formula is in the case of real value at maturity: s>k, and the stock price is in the remaining present value (using risk neutral probability). In this case, n (D1) is the risk correction probability of real value at the expiration of the call option. The second term is the present value of the expected execution cost, and its medium-term expected value is also obtained according to the risk correction probability of real value at the expiration of the option,If s is large enough relative to K, D1 and D2 tend to infinity, and n (D1) and n (D2) tend to 1.

2 How positive shares affect the price of warrants and the operation principle of warrants
Warrants are derivatives of positive shares, so warrants are directly linked to the corresponding positive shares. When holding warrants, the three most important factors that need to be paid attention to are: maturity, exercise price k, and option fee. Warrant has the characteristics of high leverage and high risk, which is mainly reflected in that it can use a small amount of funds to pry huge gains, but according to the risk matching principle, it must also bear the corresponding huge risks.

According to the expectation of the market, it can be divided into put (put) warrants and call (call) warrants. As follows, the fluctuation of positive shares will also affect these two warrants in different directions.

2.1 Put warrants
The so-called put warrants are also called put warrants. As the name suggests, it is the expectation of the holder of the market that the positive shares linked to the warrants will decline in the future. If investors hold such warrants, the price of the warrants will rise only when the positive shares fall. Investors spend a small option fee to buy the right to sell stocks at the K exercise price (within the T period). Due to the market decline, You can buy at a low price and sell at a high price in the market, and the profit generated is the bid ask price difference - option fee. Because the fluctuation of the positive stock price will have an impact on the most important price difference in the components of profits, thus affecting profits, the put option has a reverse relationship with the positive stock.

2.2 Call warrants
The so-called call warrant is also called call warrant. It is a kind of warrant that the holder purchases when the expected fluctuation of the positive stock linked to the warrant rises. The

investor purchases the right to buy the positive stock at the K exercise price (within the T period) through the option fee. If the positive stock rises, the investor has the right to buy the stock at the k-point price and sell the stock at the current market price. The profit is composed of the price difference between buying and selling - the option fee. Correspondingly, the price of the positive stock is the most important factor causing profits, so the call warrants have a positive change relationship with the positive stock.

2.3 risk limits

The optimality of warrants is reflected in that they leverage unlimited returns with limited losses. If there is an error in the expectation of the direction of future price changes in the market, that is, reverse changes, investors can choose not to exercise their rights, give up the right to buy or sell, and lose the option fee.

3 market maker

Although the classic B-S Option pricing model can accurately price warrants, the final price is usually determined by the relationship between supply and demand. In this way, as a financial product, the price of warrants is likely to be manipulated. Even if it is not manipulated, investor sentiment will dominate the price, eventually leading to the distortion of the pricing mechanism, and the transaction price may deviate greatly from the real price. How to solve this problem? Many countries and regions have thus produced the market maker system.

The responsibility of market makers is actually to provide liquidity and price adjustment for warrants. The price of the transaction shall be subject to the price calculated by the B-S Option pricing model. Of course, market makers also have the right to earn income from price differences, supply goods at a slightly higher price and receive goods at a slightly lower price. In this way, investors should buy warrants, and market makers are responsible for supply; The holder should sell the warrants, and the market maker should be responsible for receiving the goods. It effectively avoids the pricing distortion caused by market makers' manipulation and investors' out of control.

In 2001, the stock exchange of Hong Kong introduced the market maker system, which mainly includes: (1) the issuer must appoint a liquidity provider to quote. (2) The trading quotation must be provided for at least 10 warrants, and the issuer must specify the maximum price difference of the trading order. (3) During the period from 5 minutes after the opening of the market to the closing of the market, liquidity must be provided for warrants. (4) How to provide liquidity services must be provided by liquidity providers, and other trading transactions must not be carried out as liquidity providers.

Through the above analysis, we know that although the extension amplitude, time value, supply and demand and other factors are affecting the warrant price, in the above analysis, the performance of the positive stock price determines the warrant price. Then, as a derivative, will warrants affect the price of positive shares. Facts have proved that the impact of warrants on positive shares is positive, mainly in the following points:

1. Impact of discount warrants with huge circulation on positive shares

The related warrant of a positive share has a very high market circulation, is about to expire, and the exercise price is very close to the market price, so the warrant holder is highly likely to exercise. Therefore, the potential arbitrage selling pressure makes it difficult for the positive share price to break through the exercise price before the warrant settlement. This kind of situation is very likely to occur, that is, the so-called doomsday round. For example:

Table 1：HSBC Citibank warrants

name	Subject matter	circulation	Stock price	Exercise price
HSBC Citigroup 802 purchase	HSBC Holdings	500 million copies	$119	$120

The above table shows that the market circulation of the subscription certificate [HSBC Citigroup 802 purchase] associated with HSBC Holdings is very high, as high as 500 million copies, and the exercise price is $120, which is very close to the market price of $119. If the price of the positive stock reaches or is higher than the exercise price of $120 when the warrant is settled on February 16th, 2008, the warrant has an exercise value. Once the warrant holder begins to exercise his rights, he can obtain a large number of HSBC Holdings shares with a cost price of only $120 and sell them at the market price. Therefore, the selling pressure caused by arbitrage is bound to make it difficult for the stock to break through $120 before February 16, 2008.

2.The hedging activities of the issuer affect the performance of positive shares

After selling the warrants, the issuer needs to hedge the directional risk of the positive shares by means of high interest notes, over-the-counter and listed options, or trading the positive shares, so as to earn the remaining profits. Then, how to hedge the issuer? How many shares should be bought / sold before the risk can be completely transferred. In order to achieve this purpose, the international commonly used method is the dynamic delta hedging method, that is, to ensure that during the duration of the warrant, the proportion of positive shares held by the issuer is equal to the delta value of the warrant.

Assuming that the delta value of the warrant at the time of issuance is about 0.5, the issuer of the warrant is required to hold about 50% of the positive shares at the time of issuance. For example, if an issuer issues warrants equivalent to 100 million shares of HSBC Holdings, the issuer needs to hold about 50million shares of HSBC holdings when the warrants are issued. Delta value, as a counter value, reflects the opportunity rate of investors to exercise warrants on the maturity date. The issuer uses the relevant pricing procedures to calculate the counter value, purchases shares equal to the percentage of the counter value in the market, and will adjust the counter value daily according to the fluctuation of the market price of the relevant shares. In the actual hedging process, if the positive share price rises, the issuer needs to buy positive shares; If the positive share price falls, the issuer needs to sell the positive shares. It can be seen that the issuer's hedging operation is actually a process of buying high and selling low. When the positive stock fluctuates greatly, the issuer's risk hedging operation usually plays a role in helping the positive stock rise and kill the fall. In general, if the volatility of the positive stock is small, the risk hedging operation of the warrant issuer has little impact on the positive stock.

Table 2：changes in positive shares held by hedges under different delta coefficients

	Initial information of the issuer	Spot price	Offset value	Hedging behavior of the issuer
The first day	The issuer sold 100 million warrants	$5	60%	
The next day		$5.5	70%	The issuer bought 60 million shares at $5
The third day		$6	75%	The issuer purchased an additional 5 million shares, holding a total of 75 million

				shares
The fourth day	The issuer repurchases 50 million warrants	$5.5	70%	When the issuer repurchases 50 million warrants, it needs to hold 35 million shares and sell 40 million shares
The fifth day		$5.3	65%	Maintain appropriate hedging, hold 32.5 million shares and sell 2.5 million shares

It can be seen from the above table that the price fluctuation of the positive shares will lead to the change of the exercise probability and the constant change of the counter value. Therefore, the issuer needs to buy and sell the positive shares according to the counter value every day. If the market circulation of the issued warrants changes sharply (for example, on the fourth day, the issuer repurchases 50 million warrants), the hedging activities of the issuer will also increase (40 million shares will be sold on the fourth day), which will seriously affect the positive share price.

3．The intensive issuance of warrants of hot shares and the issuer's position building activities affect the stock price performance

As the issuer of the warrant needs to buy a certain amount of positive shares for hedging before issuance, the issuance of the warrant has a certain supporting effect on the positive shares. If the share is a hot spot in the market, the demand for relevant warrants is very strong, and many issuers compete to issue subscription certificates in a short time, they are bound to buy a large number of positive shares. In this way, it will inevitably affect the relationship between supply and demand, and a large number of stock demand will eventually push up the stock price. For example, as one of the first four major commercial banks to complete the share reform and listing, China Construction Bank [00939], after its listing in Hong Kong in 2005, has become a hot spot in the market. The transaction of shares is very active, and the demand for relevant warrants is also very large.

Usually, after these hot shares are listed, the price of positive shares begins to rise soon, and the demander is mainly the warrant issuer. For example, on the first day of being approved to issue CCB warrants, 13 of the 18 issuers in Hong Kong launched 22 CCB subscription certificates and 2 put certificates at the same time, a total of 24. Similar examples include China CITIC Bank [00998], industrial and Commercial Bank of China [01398], China Railway [00390], China Merchants Bank [3968], etc.

Table 3：Comparison of the number of warrants first promoted by major banks

China Construction Bank	24 warrants were launched on the same day
China CITIC Bank	32 warrants were launched on the same day
ICBC	21 warrants were launched on the same day
China Railway	46 warrants were launched on the same day, increasing to 54 within a week
China Merchants Bank	38 warrants were launched on the same day

Source: stock exchange of Hong Kong

4．Under moral hazard, the issuer interferes with the price of positive shares

The settlement price of the warrant is usually the average closing price of the positive shares five trading days before the maturity date. Generally speaking, the issuer will not reduce the exercise opportunity of warrant holders by operating the stock price. After all, it is very difficult to control the stock price for five consecutive days, and there must be very strong financial support. However, in the face of commercial interests, moral hazard makes the occurrence of events inevitable!

Table 4: common methods of market makers to manipulate the market

Technique	Purpose
Push up the price of positive shares	With the issuance of subscription certificates, the internal price of warrants can be increased, the future performance of positive shares can be overdrawn in advance, and the probability of exercise can be reduced.
Lower the price of positive shares	With the issuance of put warrants, the internal price of warrants can be increased, the future performance of positive shares can be overdrawn in advance, and the probability of exercise can be reduced.
Push up the price of positive shares	Invest to buy shares, increase the share price and reduce the probability of exercise, so as to cooperate with the settlement of subscription certificates.
Lower the price of positive shares	Short selling is used to suppress the stock price and reduce the probability of exercise, so as to cooperate with the settlement of put certificates.

There are many cases in Hong Kong that we can learn from: because Hong Kong allows short selling, issuers can borrow stocks if they have enough strength, and then sell them to the market to suppress the stock price. If the settlement profit after the purpose is achieved is much higher than the implementation cost, and there is no opposition from competitors, the probability of moral hazard will be greatly increased.

CONCLUSIONS

Through the above analysis, we know that usually the price of the positive stock finally determines the price of the warrant, but at some moments, the warrant will have various effects on the positive stock: the issuer's hedging operations are often: the positive stock rises, and more purchases are needed; The decline of positive shares requires more sales, which contributes to the fluctuation of positive share price. Especially when the circulation of warrants changes sharply, the price fluctuation caused by the increase of issuer hedging is more significant; And the discount warrants with huge circulation and potential arbitrage pressure also have a great impact on the trend of the positive stock price; The strong demand for hot stock warrants leads to the strong demand for positive shares by issuers, which also has a positive impact on the price trend of positive shares in the short term; As for the behavior that issuers interfere with the price of positive shares under moral hazard, it often happens. Even in Hong Kong, where the supervision is extremely strict, the system is very perfect, and the warrant market is the most active, these phenomena will still occur frequently.

The root of the problem is actually very simple. Positive shares are basic financial products, while warrants are derivatives of positive shares. The two are the main and auxiliary relationship, and the market position should also be different. If the cart is upside down, there will be various problems. The above situations are all caused by the excessive proportion of warrant issuance: 1. The discount warrants with huge circulation affect the price of positive shares in the settlement period; 2. The excessive issuance of warrants and the hedging activities of issuers also seriously affect the supply and demand relationship of positive shares; 3. The centralized issuance of warrants, huge hedging demand, and the purchase of a large number of positive shares also significantly affect the supply and demand relationship in the stock spot market; 4. The huge circulation of warrants and the huge benefits generated far exceed the cost that the issuer needs to pay to interfere with the positive shares, which has become a necessity.

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Financial Mismatch, Default Risk and Enterprises' Shift from Real to Virtual: A Study from the Perspective of Debt Structure

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ABSTRACT

Based on the data of non-financial listed companies from 2010 to 2020, this paper examines the impact mechanism of financial mismatches on enterprises' shift from real to virtual. The results shows that financial mismatch will aggravate the enterprises' shift from real to virtual, which is reflected in the reduction of physical investment and the increase of willingness to financial investment. Financial mismatch changes the debt structure of enterprises and increases the default risk of enterprises, thus affecting the motivation of enterprise financialization. After the robustness tests, the conclusion is still valid. Further research shows that in areas with high bank competition, the impact of financial mismatch on enterprise financialization is relatively small. Financial mismatch worsens the debt situation of high-risk, highly indebted enterprises and private enterprises, resulting in a higher level of financialization. This paper shows that the solution of financial mismatch and the improvement of credit resource allocation efficiency are of great significance to reduce enterprise debt risk, prevent systemic financial risk and promote the healthy development of real economy.

Keywords: Financial Mismatch, Default Risk, Debt structure, Enterprises' Shift, from Real to Virtual

INTRODUCTION

Since the reform and opening up, China's financial system has been continuously improved and the allocation of financial resources has been continuously optimized, but financial mismatch is still an important problem facing China's financial market. Due to asymmetric information between banks and enterprises, imperfect financial markets, banking monopoly and policy factors (Shao 2010; Zhang Qingjun et al.2016), financial resources are difficult to flow freely to efficient departments and enterprises, but have been occupied by inefficient enterprises for a long time, resulting in high efficiency, strong innovation ability and great development potential of small and medium-sized enterprises and private enterprises are difficult to obtain sufficient financial support, The separation of high-quality capital and good investment opportunities causes waste of financial resources and economic losses, hinders macroeconomic growth, and affects the sustainable development of China's economy. Wind data shows that the leverage ratio of China's state-owned enterprises rose from 56% to 62% between 2005 and 2015, while the leverage ratio of private enterprises fell from 61% to 51% over the same period. Financial resources are concentrated in large-scale state-owned enterprises. Wu (2018) pointed out that the loss caused by China's financial mismatch economy was as high as 10.3%.

China has been facing a serious financial mismatch problem for a long time, and the financial mismatch phenomenon is very significant in different regions, different industries and different types of enterprises (Liang & Yang 2019). In addition to common factors such as information asymmetry, China's financial mismatch also stems from three reasons: first, the financial market is immature. China's financial system is dominated by banks, and state-owned banks occupy a dominant position. The financing channels of enterprises rely heavily on bank loans, which seriously hinders the rational allocation of financial resources. The second is the administrative intervention of the government in the financial system. Local governments' intervention in the scale and direction of commercial banks' credit issuance, and local industrial policies and investment promotion policies will tilt credit resources to specific types of enterprises. Third, the ownership structure differences of Chinese enterprises (zhang et al. 2016). Due to the implicit national credit guarantee, the financing capacity and market position of state-owned enterprises are higher than those of private enterprises. State owned enterprises occupy a large number of low interest bank loans, while private enterprises and small and medium-sized enterprises are difficult to obtain loans.

For the industrial sector, the difficult and expensive financing of enterprises has always been the focus of attention. With the increase of macroeconomic uncertainty, due to the requirements of risk control, the financial restrictions of banks on enterprises are increasingly tightened (Wang & Yu 2013), resulting in a significant increase in the financing cost and difficulty of enterprises, and aggravating the financial mismatch faced by enterprises. Financial mismatches not only cause inefficient investment by enterprises (Zhang & Li 2018), but also reduce the investment level of enterprise entities, improve the scale of enterprise shadow banking, and lead to economic "disenchantment to emptiness" (Han & Li 2020). In recent years, the industrial investment rate of China's non-financial enterprises has continued to decline, and enterprise funds continue to flow into financial channels.This paper empirically studies the impact ways and mechanisms of financial mismatches on enterprises' "from real to virtual", which has important theoretical and practical significance for promoting the development of small and medium-sized enterprises, enhancing financial support for the real economy, and preventing systemic financial risks.

RESEARCH METHOD

Ⅰ. Data Source

This paper selects the A-share listed companies in Shanghai and Shenzhen stock exchanges from 2010 to 2020 as the research sample. The data are mainly from guotai'an database, choice database and the data of commercial bank branches published by the CBRC, and the following screening is carried out: (1)special treatment stocks (ST), particular transfer stocks (PT) and financial industry enterprises are excluded; (2) eliminate missing values; (3) in order to eliminate the influence of outliers, continuous variables are truncated at the upper and lower 1% level.

Ⅱ. Model Design

In order to study whether financial mismatches increase the degree and possibility of "disengaging from reality to emptiness" of real enterprises by pushing up the debt risk of enterprises, this paper constructs the following intermediary effect model.

$$\mathrm{Fin}_{i,t} = \alpha_0 + \alpha_1 \mathrm{FM}_{i,t-1} + \alpha_3 \mathrm{Control}_{i,t-1} + \varphi_i + \gamma_t + \varepsilon_{i,t} \qquad (1)$$

$$Z_{i,t-1} = \beta_0 + \beta_1 FM_{i,t-1} + \beta_3 Control_{i,t-1} + \varphi_i + \gamma_t + \varepsilon_{i,t} \quad (2)$$
$$Fin_{i,t} = \tau_0 + \tau_1 Z_{i,t-1} + \tau_3 FM_{i,t-1} + \tau_4 Control_{i,t-1} + \varphi_i + \gamma_t + \varepsilon_{i,t} \quad (3)$$

Among them, $Fin_{i,t}$represents the degree of "disenchantment from reality to emptiness" of enterprises, which is measured by the level of enterprise financialization. We refer to the practice of Zhang et al. (2019), and take the lag value of all independent variables in the main model. The endogeneity problem will be further dealt with in the robustness test. $FM_{i,t}$ refers to the financial mismatch degree of the enterprise i in the year t, and $Z_{i,t}$ represents the debt risk of the enterprise. The smaller the value, the higher the debt risk of the enterprise. $Control_{i,t}$ is a control variable at the enterprise level, , and $\varphi_i$represents the fixed effect of the enterprise, $\gamma_t$the fixed effect of the year, and $\varepsilon_{i,t}$ the unobserved residual.

Ⅲ. Variable Description

1. Financial mismatch

This paper refers to the research of Shao (2010) and Han (2020). The financial mismatch index (FM) is expressed by the deviation degree between the capital cost of the enterprise and the average capital cost of the industry, which is equal to the difference between the capital cost of the enterprise and the capital cost of the industry. This paper uses the ratio of interest expenditure to total liabilities minus accounts payable to measure the capital cost of enterprises.

2. The degree of "disenchantment from reality to emptiness" of the enterprise

This paper uses the level of enterprise financialization to measure the degree of "disenchantment from reality to emptiness". Using the method of Gu et al. (2020), this paper uses the proportion of financial investment assets in the total assets of non-financial enterprises to measure based on the perspective of assets. The higher the proportion, the higher the level of enterprise financialization, and the more serious the degree of "disenchantment from reality to emptiness" of enterprises.

3. Enterprise debt risk

Based on the research of Liu et al. (2018), Zhang and Zeng (2004), the modified Z value is used to characterize the risk characteristics of enterprises. The Z value is calculated as follows:

$$Z = -8.751 + 6.3 \times ROA + 0.761 \times CFO + 1.295 \times LnFixAsset + 0.412 \times Growth + 0.015 \times \mathrm{Re}arning$$
$$+ 0.105 \times Outs\tan ding - 21.164 \times Stockratio$$

Among them, CFO is the operating cash flow per share, $LnFixAsset$ is the logarithm of fixed assets, $Growth$ is the growth rate of main business income, *Rearning* is the retained interest rate ratio, *outstanding* is the current stock market value liability ratio, and $Stockratio$ is the book to market value ratio of equity. The smaller the Z value, the higher the debt risk of the enterprise.

4. Banking competition

Based on the practice of Zhang et al. (2019), the calculation formula is as follows:

$$HHI = \sum_{i=1}^{N_m} \left(Branch_{im} \Big/ \sum_{i=1}^{N_m} Branch_{im} \right)^2 \quad (4)$$

Among them, $Branch_{im}$ represents the number of branches of bank i in the city m , N_m is the number of all bank types in the city m. The closer the index is to 1, the higher the concentration of commercial banks in the region and the lower the degree of competition.

5. Indicators of excessive debt

This paper uses the asset liability ratio regression model established by Harford et al. (2009) and Denis and McKeon (2012) to predict the target liability ratio of enterprises. Use e= actual debt ratio target debt ratio to measure the debt deviation of enterprises (Lu et al.2015). When e>0, enterprises have excessive debt; When e<0, the enterprise has insufficient liabilities. The debt situation of an enterprise will not only affect the operation and development of the enterprise, but also affect the credit level of the enterprise.

6. Other control variables

This paper controls the factors at the enterprise level in the regression. See Table 1 for the descriptive statistics of main variables.

Table 1: Descriptive Statistics of Main Variables

Variable symbol	Variable name	Ave	SD	Min.	*M*	Max.
Z	Debt risk	0.131	0.137	0.015	0.090	0.995
Fin	Financialization level	0.056	0.092	0	0.019	0.507
Inv	Physical investment	0.054	0.051	0.003	0.039	0.238
FM	Degree of financial mismatch	0	0.018	-0.044	-0.001	0.079
ROA	Net profit rate of total assets	0.042	0.056	-0.197	0.040	0.207
Duality	Two jobs in one	0.246	0.431	0	0	1
Govern	Proportion of independent directors	0.372	0.055	0.091	0.333	0.800
Top1	Equity concentration	0.358	0.153	0.003	0.340	0.900
Lev	Asset liability ratio	0.430	0.214	0.048	0.420	0.949
Size	Natural logarithm of total assets	21.52	1.530	10.84	21.41	28.52
Cash	Cash flow level	0.045	0.047	-0.184	0.044	0.253
Tobinq	Total market value / total assets	2.040	1.291	0.904	1.618	8.587

Note. Ave= Average Value, *SD* = Standard Deviation, *M*=Median.

RESULTS AND DISCUSSION

Ⅰ. Analysis of benchmark regression results

This paper first tests the impact of financial mismatches on enterprises' "from real to virtual". The results in Table 2 show that when no control variables are added, the regression coefficients of financialization and physical investment of financial mismatch are 0.1795 and -0.4649 respectively, which are significant at the statistical level of 1%, which preliminarily shows that financial mismatch will increase financial investment and reduce the level of physical investment. When different control variables are added to the model, the coefficients of financial mismatch (FM) are 0.1559 and -0.4374 respectively, which are significant at the statistical level of 1%, indicating that the higher the degree of financial mismatch, the enterprise will reduce physical investment and instead increase more financial investment, resulting in the phenomenon of "the reality to virtual" of entity enterprises, which verifies hypothesis 1 of this paper. At the same time, most of the control variables are statistically significant, indicating that the model has good explanatory effect.

Table 2: Benchmark Regression Results: Financial Mismatches And Enterprises "From Real To Virtual"

	(1) Fin	(2) Fin	(3) Inv	(4) Inv
FM	0.1795*** (4.8316)	0.1559*** (4.0492)	-0.4649*** (-20.6677)	-0.4374*** (-18.4198)
ROA		-0.0288** (-2.2231)		0.0624*** (7.2866)
Duality		-0.0021 (-1.1423)		0.0029** (2.4178)
Govern		0.0337** (2.4566)		-0.0078 (-0.8519)
Top1		-0.0104 (-1.2330)		0.0226*** (4.1289)
Lev		-0.0159*** (-3.0767)		-0.0100*** (-2.9822)
Size		-0.0167*** (-12.3786)		0.0052*** (6.0467)
Cash		-0.0258*** (-2.8981)		0.0081 (1.4960)
Tobinq		0.0013** (2.0806)		0.0007* (1.7355)
Cons	0.0630*** (31.8135)	0.4187*** (14.2507)	0.0756*** (59.1835)	-0.0393** (-2.1175)
Enterprise and Year	Yes	Yes	Yes	Yes
N	18416	18380	18416	18380
R^2	0.030	0.089	0.090	0.094

*Note.***, * * and * represent the significance levels of 1%, 5% and 10% respectively. The robust standard error is clustered to the enterprise level. The T value in brackets is the same below.*

Ⅱ. Mechanism identification: mediation effect test

This paper further tests the intermediary mechanism, and the empirical results are shown in Table 3. The results in columns (1) and (2) show that the regression coefficient of corporate debt risk of financial mismatch is negative, indicating that financial mismatch improves the debt risk faced by enterprises, which is due to the low efficiency of financial resource allocation, more difficult financing and higher financing cost, which greatly affects the solvency of enterprises. The results in columns (3) and (4) show that the regression coefficient of financial mismatch and debt risk on financialization is significantly positive, and the regression coefficient decreases from 0.1559 to 0.1374, indicating that debt risk plays a part of the intermediary role. Financial mismatch will increase the debt risk of enterprises, and then cause enterprises to carry out more risk arbitrage behaviors, leading to enterprises' "from real to virtual".

Table 3: Intermediary Effect Test: Debt Risk

	(1) Z	(2) Z	(3) Fin	(4) Fin
FM	-0.7898*** (-14.9807)	-0.8181*** (-17.0109)	0.1556*** (5.0019)	0.1374*** (4.6108)
Z			-0.0298*** (-4.9123)	-0.0555*** (-7.9026)
ROA		0.1596*** (9.1892)		-0.0249* (-1.9200)
Duality		0.0052** (2.1423)		-0.0020 (-1.1027)
Govern		-0.0366** (-1.9755)		0.0319** (2.3379)
Top1		0.0269** (2.4271)		-0.0114 (-1.3503)
Lev		-0.4141*** (-61.1156)		-0.0357*** (-6.2164)
Size		-0.0040** (-2.3093)		-0.0170*** (-12.6457)
Cash		0.0115 (1.0411)		-0.0249*** (-2.8124)
Tobinq		-0.0061*** (-7.1778)		0.0013** (2.0480)
Cons	0.1365*** (45.5180)	0.4094*** (10.8548)	0.0667*** (31.5561)	0.4418*** (15.0352)
Enterprise and Year	Yes	Yes	Yes	Yes
N	18416	18380	18416	18380
R^2	0.054	0.300	0.035	0.062

Ⅲ. Further study

This paper further studies how financial mismatches aggravate the debt risk faced by enterprises. The types of corporate loans are divided into short-term loans and long-term loans, mortgage loans and credit loans according to the length of time and the presence or absence of collateral. The proportion of the above four types of loans in the total corporate loans is regressed with financial mismatch indicators. The regression results are shown in Table 4 and table 5.

Table 4: Financial Mismatch And Long-term And Short-term Borrowings

	(1) ShortLoan	(2) ShortLoan	(3) LongLoan	(4) LongLoan
FM	1.0021*** (7.0843)	0.7624*** (5.2314)	-0.0546 (-1.6186)	-0.0342 (-1.0212)
ROA		-0.2316*** (-4.6179)		0.0091 (0.7871)
Duality		0.0293*** (4.2713)		-0.0022 (-1.3777)
Govern		0.1016** (1.9618)		-0.0128 (-1.0781)
Top1		0.2477*** (7.8916)		0.0323*** (4.4805)
Lev		0.4933*** (25.1121)		0.1378*** (30.5571)
Size		-0.0699*** (-13.8511)		0.0192*** (16.5997)
Cash		-0.1665*** (-5.3299)		-0.0531*** (-7.4000)
Tobinq		0.0177*** (6.8863)		-0.0001 (-0.1237)
Cons	0.1896*** (26.0614)	1.3038*** (11.9246)	0.0548*** (31.6107)	-0.4241*** (-16.8924)
Enterprise and Year	Yes	Yes	Yes	Yes
N	18416	18380	18416	18380
R^2	0.012	0.090	0.006	0.125

In order to resist liquidity risk and credit risk, banks prefer short-term loans and mortgage loans. Short term loans make the use of bank funds more flexible and avoid insufficient liquidity; Mortgage loan can ensure that the bank can recover the arrears and avoid losses by disposing of the collateral when the borrower defaults. From the perspective of business development, enterprises prefer long-term loans and credit loans, because the cash flow pressure brought by long-term loans is small, enterprises can invest in some projects with long return cycle and high yield; Credit loans are not limited to the value of fixed assets owned by the enterprise, so it is easier for enterprises to obtain sufficient loans. In this way, there are naturally structural contradictions between the supply and demand sides of credit. In this case, the power of both sides in the credit market determines the main types of loans to a certain extent.

The empirical results in Table 5 and table 6 show that the financial mismatch increases the proportion of short-term loans and reduces the proportion of credit loans under the significance level of 1%. The increase in the proportion of short-term loans and the decline in the proportion of credit loans fully show that banks are a strong party in the credit market under the financial mismatch, and their borrowing preferences have been met to a great extent. As a weak party in the credit market, enterprises are more difficult to obtain long-term loans and credit loans, with shorter borrowing periods and higher borrowing costs, and are bound to face higher corporate debt risks.

Table 5: Financial Mismatch And Mortgage Credit Loan

	(1) *CreditLoan*	(2) *CreditLoan*	(3) *MortgageLoan*	(4) *MortgageLoan*
FM	-0.9516***	-0.7915***	0.3512**	0.0885
	(-5.0632)	(-3.9981)	(2.0643)	(0.5051)
ROA		0.0117		-0.0109
		(0.1774)		(-0.1819)
Duality		-0.0016		-0.0069
		(-0.1863)		(-0.8533)
Govern		-0.0132		-0.0065
		(-0.2103)		(-0.1071)
Top1		0.1854***		-0.0012
		(4.5064)		(-0.0331)
Lev		-0.2268***		-0.1600***
		(-8.5931)		(-6.6829)
Size		-0.0181***		-0.0894***
		(-2.7074)		(-14.7057)
Cash		-0.1171***		0.1175***
		(-2.8560)		(3.2234)
Tobinq		0.0124***		-0.0080**
		(3.5238)		(-2.5592)
Cons	0.3938***	0.8191***	0.3508***	2.3530***
	(43.3569)	(5.6045)	(43.8125)	(17.8081)
Enterprise and Year	Yes	Yes	Yes	Yes
N	18416	18380	18416	18380
R^2	0.018	0.033	0.039	0.079

Ⅳ. Robustness test

This paper adds the consideration of profit, and constructs the enterprise financialization index (fin2) as the explained variable after standardizing the two variables of financial asset allocation proportion and financial activity profit proportion. The regression is carried out again. The specific empirical results are shown in columns (1) and (2) of table 6. The results are similar to the benchmark regression results, which confirms the robustness of the benchmark results. In addition, in order to verify the robustness of the results, this paper selects whether financialization is the explanatory variable, and selects the panel logit model for regression analysis. The empirical results are shown in columns (3) and (4) of table 7, and the conclusions are consistent with the regression results above.

Table 6: Robustness Test: Dependent Variable Replacement

	(1) *Fin2*	(2) *Fin2*	(3) *Dfin*	(4) *Dfin*
FM	0.1192***	0.1093***	0.5793***	0.2796**
	(3.5217)	(4.1101)	(4.2493)	(2.0462)
Z		-0.0465***		-0.3688***
		(-7.5226)		(-16.2473)
ROA	-0.0200*	-0.0138	-0.2777***	-0.2306***
	(-1.7548)	(-1.2074)	(-5.6526)	(-4.7048)
Duality	-0.0009	-0.0008	-0.0154**	-0.0133*
	(-0.5239)	(-0.4705)	(-2.2537)	(-1.9589)
Govern	0.0329***	0.0316***	0.0663	0.0606
	(2.7285)	(2.6280)	(1.2629)	(1.1624)
Top1	-0.0192***	-0.0193***	-0.2241***	-0.2166***
	(-2.5846)	(-2.6021)	(-7.1292)	(-6.9421)
Lev	-0.0079*	-0.0246***	0.1878***	0.0384*
	(-1.7392)	(-4.8636)	(9.7835)	(1.8077)
Size	-0.0138***	-0.0140***	0.0749***	0.0712***
	(-11.6592)	(-11.8475)	(15.2088)	(14.4838)
Cash	-0.0265***	-0.0259***	0.1350***	0.1357***
	(-3.3936)	(-3.3219)	(4.3174)	(4.3619)
Tobinq	0.0018***	0.0017***	0.0316***	0.0298***
	(3.1736)	(3.0317)	(13.0313)	(12.3594)
Cons	0.3430***	0.3610***	-0.8840***	-0.6879***
	(13.2833)	(13.9510)	(-8.3016)	(-6.4544)
Enterprise and Year	Yes	Yes	Yes	Yes
N	18416	18380	18416	18380
R^2	0.058	0.062	0.109	0.124

CONCLUSIONS

Using the data of listed companies from 2010 to 2020, this paper empirically tests the impact of financial mismatches on enterprises' "from real to virtual". The results show that: first, the increase of the degree of financial mismatch will increase the willingness of enterprises to invest in finance, reduce the level of physical investment, and aggravate the "Disenchantment" of physical enterprises. The mechanism test results show that the mechanism of financial mismatch on enterprise financialization mainly increases the debt risk of enterprises by changing the debt structure. The higher the degree of financial mismatch, the higher the proportion of short-term debt in corporate debt and the lower the proportion of credit loans, the deterioration of the asset liability structure of enterprises, and the stronger the financing constraints they face, which is not conducive to further financing, investment and debt repayment of enterprises. Enterprises will be more inclined to financial investment with higher yield and stronger liquidity, showing the phenomenon of "disenchantment from reality to emptiness". Second, financial mismatches have a greater impact on enterprises that are at high risk and bear high liabilities. For enterprises that have already been over indebted, financial mismatches further lead to a significant increase in corporate debt risk, and enterprises are more likely to mitigate debt risk through financial investment. After passing the robustness test of replacement variables, the above conclusion is still valid.

This paper puts forward the following policy implications: first, financial mismatch is an important cause of corporate debt risk, and it is a major risk hidden danger facing China's financial system. In order to enhance the financial support for the real economy, improve the enterprise financing environment and prevent systemic financial risks, the key lies in promoting the financial supply side reform, deepening the multi-level financial market, promoting the rational and efficient allocation of financial resources, and allowing financial resources to flow to enterprises and departments with high production efficiency and strong innovation ability. Secondly, to reduce the adverse effects of financial mismatches on corporate financing constraints and debt risks, we should appropriately improve the level of competition in the banking industry and the scale of the credit market, promote financial resources to private enterprises and small and medium-sized enterprises with market-oriented competition, increase the proportion of long-term loans and credit loans, improve the debt structure of enterprises, and reduce the debt risk of enterprises. Third, by removing the blocking points that restrict the reasonable flow of financial elements, reduce the debt risk of enterprises, prevent the accumulation and spread of risks at the enterprise level and the financial system, so as to reduce systemic financial risks, promote the continuous improvement of the financial system, promote the sustainable and healthy development of the real economy, and prevent real enterprises from "falling out of reality to falsehood".

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Entrepreneurial Leadership, Interrelationship Among Business Units, Competitive Advantage And Private University Performance In Indonesia: A Conceptual Framework

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ABSTRACT

The performance of private universities is reflected in the mission and strategic objectives of the organization as outlined in a set of financial and non-financial performance measures to achieve the organization's strategic goals and objectives. This study also explores the role of entrepreneurial Leadership and the linkage of existing resources to improve the performance of private universities. This study discusses the role of entrepreneurial-oriented Leadership, that measured by the dimensions of vision and mission, creativity and innovation, an opportunity focused, risk-taking, and proactive, as well as the role of the interrelationship among business units as measured by the dimensions of tangible, intangible, and competitor interrelationship which can affect the performance of private universities and the mediating role of competitive advantage variables. The findings of this study are expected to be a reference for leaders in private universities to prepare entrepreneurial leadership attributes and help leaders determine investments and maintain their resources to support the achievement of private higher education performance that is superior to its competitors and sustainable. This study proposes a conceptual framework in which entrepreneurial leadership, interrelationships among business units, and the mediating role of competitive advantage can improve the performance of private universities in Indonesia.

Keywords: Entrepreneurial Leadership; Performance of Private Universities; Interrelationships Among Business Units; Competitive Advantages.

INTRODUCTION

The implementation of higher education in Indonesia is stated in the Law of the Republic of Indonesia No. 12 of 2012 concerning Higher Education. In the 2020/2021 academic year, the number of higher education in Indonesia reached 4,593, a decrease of 0.6% from the number of higher education in 2019/2020, 4,621. The number of higher education in the form of private higher education dominates as much as 3,044 or 66%, and 70% of students in Indonesia study at private higher education. When viewed in terms of the Gross Enrollment Rate (GER) of higher education in Indonesia in 2020, it is in the range of 36.16% of the total population aged 19-23 years, as many as 22,120,400 who have the opportunity to receive higher education; this is not proportional to the number of people aged 19-23 years. The number of higher education in Indonesia with interest in the Gross Participation Rate (APK) of the public enter Higher Education; although there is an increase in the Gross Participation Rate (APK) every year, this triggers a high level of competition between higher education, especially private higher education (Higher education statistics, 2020). However, the match also occurs between faculties to win students' interest in choosing existing study programs to meet class capacity.

Based on each island's distribution of private higher education accreditation data, the number of excellent private higher education or an A grade is still dominated by private higher education in Java by 2.46%. In contrast, on the island of Sumatra, private higher education with an A accreditation score are only 0.13% (Higher education statistics, 2020).

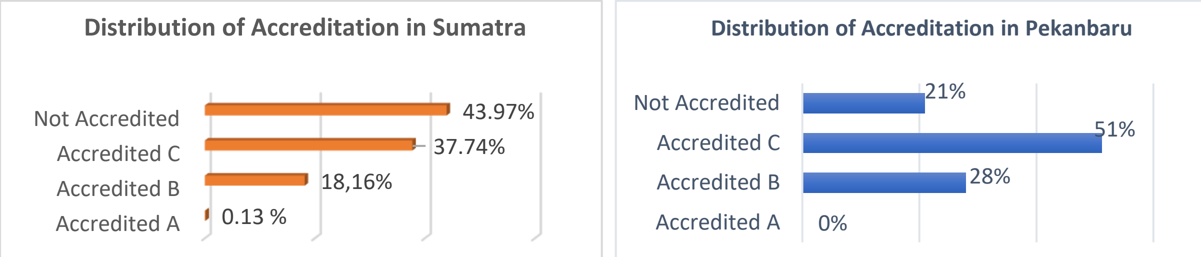


Figure 1: Comparison of Accreditation Data in Sumatra Island and Pekanbaru City
Source : Higher education statistics, 2020

Taking into account the data on the trend of higher education accreditation in Sumatra, it is still dominated by a Good Accreditation score or C of 37.74%, private higher education with an accreditation value of Very Good or B of 18.16%. In comparison, private higher education with an excellent accreditation value or A are only 0.13%, even the rest, as many as 43.97%, have not been accredited or are still applying for accreditation. Especially in Pekanbaru City, no private higher education in Pekanbaru City have been accredited A or excellent. Accreditation is still dominated with a C score of more than 50%, the remaining 28% are certified B, and 21% are not yet accredited or are still in the process of accreditation.

The performance of higher education institutions in Indonesia is reflected in the accreditation ranking of universities and study programs. Leadership is essential in higher education performance (Wahab & Tyasari, 2020). According to Vecchio, (2003) at leadership behavior in the context of entrepreneurship and general management trends from a psychological point of view. Porter (1985) identifies some relationships between business units that might produce complementary effects. For example, interchange can help emphasize the unique nature of an activity. Porter (1998) explained that there are three types of relationships between business units that can be done, namely tangible interrelationships, intangible interrelationships, and competitor interrelationships, all of which have equally important but different effects from one another. In the theory of competitiveness in the industry, competitive strategy is the study's main contribution (ME Porter & Kramer, 2002). Competitive advantage is a factor that distinguishes a company from its competitors by providing a unique side in its market so that it excels and becomes a market leader from its competitors (Zimmerer & Scarborough, 2008). The data distribution clearly demonstrates that private universities' performance is still not up to par. Therefore, it is necessary to have an entrepreneurial leadership role for all officials and organizational resources to support operations such as tangible and intangible assets that support creating a competitive advantage that is difficult for competitors to imitate so that it is expected to be able to improve higher educational performance.

LITERATURE REVIEW

Entrepreneurial Leadership

Entrepreneurial Leadership is the main foundation for companies to be able to design and improve company performance for the better. It is one of the leadership models that can anticipate the development of an increasingly competitive business environment. According Gupta et al. (2004) entrepreneurial Leadership as Leadership that creates imaginative scenarios that are used to gather and mobilize supporting players who become committed by the vision to the discovery and exploitation of strategic value creation.
An entrepreneurial leader can or encourages others to identify and capitalize on opportunities

while showing evidence of innovation, risk-taking, and pro-activity (Currie, G., Humphreys, M., Ucbasaran, D., and McManus, S. (2008). Alvarez and Barney (2002) describes that entrepreneurial Leadership consists of actions toward business formation at the individual level, efforts to follow innovations at the organizational level, and actions to take advantage of different opportunities at the market level. According Amir et al., (2012) that entrepreneurial Leadership is a leadership style that can delegate, build responsible employee behavior, make and determine decisions, and work independently. Entrepreneurial Leadership is studied as the process of creating an entrepreneurial vision and inspiring groups of people to implement it in a highly uncertain environment

Shaheen & Ahmad, (2020) dividing entrepreneurial Leadership into dimensions of Vision and Mission, Innovative and calculative, Passion and Persistence, Opportunity focused, Risk-taker and resilient, Capacity building, and trust. In several references, entrepreneurial Leadership is described as a leader who is proactive, innovative, and willing to take risks (Chen, 2007; Jagdale & Bhola, 2018; Fernald, LW Jr, Solomon, GT, & Tarabishy, 2005; Othumary Mgeni, 2015); Dwi Widyani et al., 2020. Shaheen & Ahmad, (2020), examines the impact of entrepreneurial Leadership on university performance with dimensions the vision and mission, Innovative and calculative, passion and persistence, opportunity focused, risk-taker and resilient, capacity building and trust, his research revealed that the entrepreneurial leadership dimension is highly recommended for leadership to achieve higher education performance targets.

Interrelationships among business units

Porter (1998) divides three types of linkages between business units into three parts, namely tangible connections, intangible links, and competitor links. Porter views the three types as essential but differ in their impact on competitive advantage and do not provide mutually exclusive benefits.

Tangible Interrelationships arise from opportunities obtained from various activities in the value chain between business units. Tangible assets are physical and quantitative resources used in organizational activities. Resources such as property, plant and equipment, machinery, furniture, and vehicles are tangible resources. According Jawed & Siddiqui, (2020) explains that tangible resources/intangible assets include operations acquired in cash, land, raw materials (in shares), financial investments (e.g., stocks, bonds, equity positions in other companies), and capital acquired.

Newbert, (2007), state that from his observations using the resource-based approach, he found that 50% of studies using tangible assets and performance as constructs showed a strong positive correlation between the two variables. According to Jawed & Siddiqui, (2020) the results of his research state that tangible and intangible assets contribute significantly to increasing sales, capturing more significant market share, increasing profits, creating competitive advantages, and improving company performance. Akinyi, (2010) state that his research examines the relationship of tangible and intangible resources to public school performance; tangible resources show a significant positive impact, including libraries, teaching and learning facilities, ICT, and co-curricular facilities.

Intangible interrelationship in this study focuses on intangible assets. Intangible assets can create a competitive advantage by transferring knowledge on managing specific business activities from one business unit to another. Intangible reciprocity is often challenging to implement, but its existence has the power to create a competitive advantage in some industries. IAS 38 (1998) defines intangible assets as non-monetary assets that can be identified without physical form. Intangible assets are measured based on legally protected reputation, designs and patents, company reputation, organizational culture, customer service reputation, human resource management policies, organizational structure, product/service reputation, and trademarks (Siddiqui, 2003).

Carmeli & Tishler, (2004) conducted a study on the influence of organizational resources on firm performance in industry in Israel, finding evidence that intangible assets are more important to support firm performance than structural resources. Siddiqui and Jamed (2019) studied whether tangible and intangible assets or capabilities have a greater contribution to

increasing sales, capturing larger market share, increasing profits, creating competitive advantage, and improving company performance. His research also found that intangible assets had an insignificant effect on company performance; the same results were also carried out (Akinyi, 2010).
The reciprocal relationships of competitors make tangible and intangible interrelationships even more essential to recognize and exploit. From a customer point of view, competitors complement each other in terms of providing products and services that add value to the company (Brandenburger & Nalebuff, 1997). A large number of results show that competitor orientation can improve a company's financial performance by positioning the company's strengths to overcome competitors' weaknesses (Day & Wensley, 1988); Slater & Narver, 1995; Luo et al., 2007). According Porter (1980), in his book Competitive Strategy: Techniques for Analyzing Industries and Competitors, argues that the company's profitability is highly dependent on its ability to beat its competitors. Luo et al., (2007) state that their research revealed that competitor orientation has a different effect, depending on the dimensions or strategy and objectives of competitor orientation, from competitors who gain financial benefits. Thus, the results of his research suggest that managers must be competitor-oriented and remain cautious.

Competitive advantages

Competitive advantage can be obtained sustainably through sharing activities in each business unit in conditions of increasingly fierce competition. Competitive advantage can be obtained by reducing costs or increasing differentiation. If top management is going to differentiate, then it is necessary to determine the importance level by comparing it with the expenses incurred. Competitive advantage can be considered unique if it has different capabilities and benefits from other companies. Competitive advantage describes a business situation that can achieve consumer desires compared to its competitors.
Competitive advantage is defined as the ability of an organization to maintain a standing position against competitors (Li et al., 2006). Competitive advantage is an ability that allows an organization to differentiate itself from its competitors (Tracey et al., 1999; Li, Nathan, and Rao, 2006). To maintain a position from competitors, the company must have characteristics that make the company different from competitors, thus giving it an edge over competitors (Tracey et al., 1999)
Competitive advantage is a condition where the company has a complex strategy to imitate (JB Barney, 2001). Superior resources will enable the company to produce more economically to meet customer needs. Barney, (1991) argues that a company has a competitive advantage if it implements a value creation strategy that is not being implemented simultaneously by current and potential competitors. Newbert, (2007) prove a positive and significant relationship between competitive advantage and organizational performance. Similar findings are also shown by research (López-Gamero et al., 2009; kamukama et al., 2011; Sungyuan, 2015; and Zhou & Brown, 2006). The results of research Wijayanto et al., (2019) conclude that competitive advantage has a positive and significant relationship to financial performance and firm value in manufacturing companies in Indonesia.

Organizational Performance

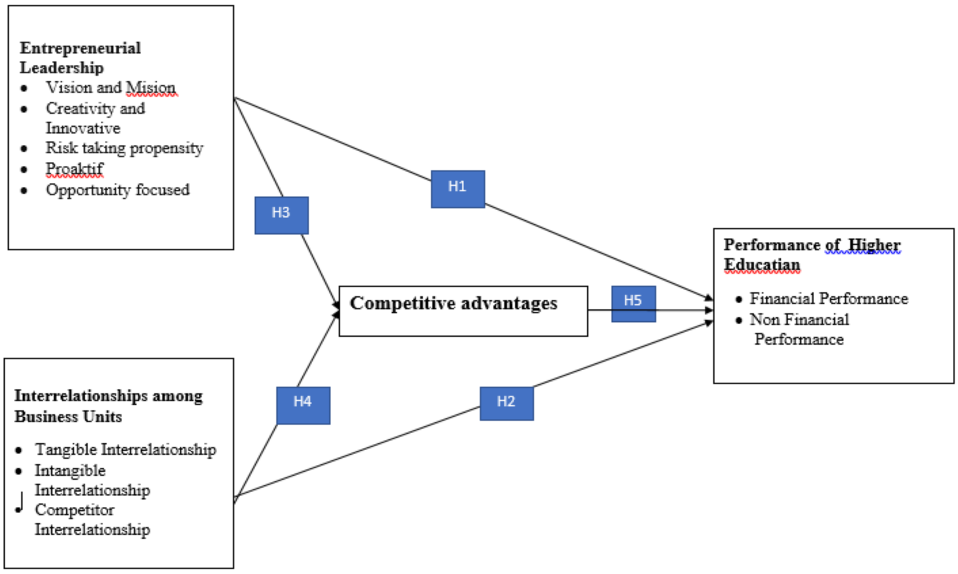
Organizational performance refers to the results to be achieved by the organization following the company's Vision, mission, and goals. Organizational performance measurement helps organizations reflect on the results that have been carried out. Organizational performance is a complex multi-dimensional phenomenon with little agreement on how to define and operationalize the construct (Haber & Reichel, 2005; Dess & Robinson, 1984)
Kaplan and Norton, in the early 1990s, developed a performance measurement concept known as the Balanced Scorecard concept, which not only emphasizes the financial aspect but also emphasizes the performance of non-financial aspects such as customers, internal business processes, employees, and systems that significantly affect long-term financial performance. Financial performance in a company is related to the presentation of the

company's performance as outlined in the income statement or net income (Ribeiro Soriano et al., 2012; Gherghina & Simionescu, 2015). Financial performance is measured using return on sales (ROS) and return on investment (ROI); return on assets (ROA) and return on equity (ROE). In addition, Bass (2002), financial performance is measured by net income obtained from total sales after deducting production and distribution costs, wages, controlled costs, fixed costs, and percentage of total sales.

Beard & Girardeau, (2009), measures non-financial performance using the dimensions of student learning outcomes, student and stakeholder-focused outcomes, market outcomes, organizational effectiveness outcomes, governance, and social responsibility outcomes. Yu et al. (2009) explained that non-financial performance dimensions used are customers, internal business processes, learning, and growth. In research (Eltobgy et al., 2011), the indicators used to measure non-financial performance are Education and Learning Excellence, Scientific Research Excellence, Community Participation, Environmental and Stakeholder Development, Institutional Capacity, and Quality Management. According Dwi Widyani et al., (2020) Non-financial performance is measured by Productivity, Stability, and Image and then Al-Ashaab et al., (2011) measured non financial performance by competitiveness, sustainable development, Innovation, strategic partnership, Human resources.

RESEARCH DESIGN

This research uses two independent variables, namely entrepreneurial leadership and Interrelationship among business units, one mediating variable, namely competitive advantage, and one dependent variable, higher education performance. The entrepreneurial leadership variable in this study was measured by indicators of vision and mission, creativity and innovation, risk-taking propensity, proactive, and opportunity focused. In contrast, the interrelationship among business unit variable was calculated by tangible, intangible, and competitor interrelationship. Private higher education in this research measured financial and non financial performance. In the following figure 2, path analysis will be used to test the relationship of each variable to each other.



The re

1. nd Mission, ity-focused

2. ensions of tangible interrelationship, intangible interrelationship, and competitor interrelationship affect the performance of private universities?
3. Does entrepreneurial Leadership affect competitive advantage?
4. Does interrelationship among business units affect competitive advantage?
5. Does competitive advantage affect Private University Performance?
6. Does competitive advantage mediate the relationship between entrepreneurial Leadership and Private University Performance?

7. Does competitive advantage mediate the relationship between interrelationships among business units and private university performance?

CONCLUSION

Entrepreneurial Leadership is part of the leadership style; the results of previous studies have proven that entrepreneurial Leadership plays a role in improving organizational performance. The proposed elements of the research model are entrepreneurial-oriented leadership practices, relationships with company resources such as tangible and intangible assets, and relationships with competitors. Furthermore, the relationship between private higher education ' performance and competitive advantage as mediation is also a consideration in this study. Interesting to study because the demands and challenges of Private higher education differ from Publik higher education. Based on some previous research literature and limitations, this study will provide an overview of new knowledge and overcome literature gaps.

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Does Financial Literacy Really Matter for Small and Medium-Sized Enterprises? A Review from Malaysia Perspective

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ABSTRACT

Entrepreneurs must choose wisely and think through all of their possibilities in order to optimise their revenues. In this situation, not excluded the owners of small and medium-sized enterprises (SMEs) are tasked with a variety of tasks that call for multiple decision-making processes. It should be emphasised that those actions have financial repercussions, necessitating the need for businesses to be financially educated. Notably, numerous researchers have conclusively shown that SMEs, particularly microbusiness owners, have inadequate financial literacy levels in many nations around the world, including Malaysia. Therefore, SMEs should be given attention as financial literacy is essential to the success of any business endeavour. This paper is aiming to review and examine studies on financial literacy among SMEs in Malaysia compiled from the years 2018 to 2022 to see the current scenario for future studies and works. The methodology employed is by means of secondary data and literature review. Up to the present, it is clear that current approaches and strategies toward financial literacy of small and medium-sized enterprises are risen in term of needs. The study findings bring implication to theoretical and practical contributions.

Keywords: Financial Literacy; Small and Medium-Sized Enterprises; Malaysia.

INTRODUCTION

Malaysians continue to have poor levels of national financial literacy as measured by financial knowledge. According to a poll conducted by the Credit Counselling and Debt Management Agency (AKPK), 1 in 3 Malaysians consider their level of financial management confidence to be low. Although Malaysians are largely ignorant of their lack of financial knowledge (Aziz and Kassim, 2020). According to Bank Negara Malaysia, people with low and sporadic incomes are more likely to experience financial hardship, while those with greater levels of education are not always better at managing their money. This naturally leads one to assume that understanding business finance management is equally important for potential and aspiring small- and medium-sized business owners in order to achieve long-term financial growth and stability. The survival more than the success of any profit-oriented firm depends on having a proper understanding of the financial operations of the management and reporting of a commercial enterprise (independent of size and turnover volume). This explains why training programmes related to financial literacy at all levels have suddenly increased and intensified. The integration of financial education components into school curricula (by MoE), finance carnivals and train-the-trainer programmes for government agencies (BNM), smart investments (SC), retirement advisory services (EPF), and various outreach programmes by national agencies for credit management and counselling are just a few of the initiatives currently in place (AKPK) (Rahim and Balan, 2020). In addition to being vital for individuals, financial literacy is also crucial for businesses. The key to success in business is a firm management or business owner (Damayanti et al., 2018). Moreover, owners and managers of small and medium-sized businesses (SMEs) should be financially educated because SMEs are crucial to economic growth, particularly in developed and emerging nations (Ahmad, 2012).

Firms are divided into SMEs and major businesses in the Malaysian economy. According to the Economic Census 2016, 907, 065 (98.5%) of Malaysia's 920, 624 business establishments were small and medium-sized enterprises (SMEs). SMEs are groups of micro, small, and medium-sized businesses. Micro-businesses tend to be the most common sort of business entities in Malaysia out of the three (Department of Statistics Malaysia, 2021). Additionally, SMEs support local economic growth by generating job opportunities, raising household income, and boosting rural industries. Contributions to people can be understood in terms of the fundamental entrepreneurial development that turns merchants become entrepreneurs. Due of these factors, the Malaysian government created the SME Master Plan 2012-2020, which set the contribution of SME to the national GDP, employment, and export value at 41%, 65%, and 23%, respectively. Despite the growing numbers of SMEs in Malaysia and their remarkable contributions toward economic development and society, the performance of SMEs has not yet reached the desired target (Yusoff *et al.,* 2018). Besides, Jebna and Baharudin (2013) pointed that the failure rate of SME firms is high given that no complete data exist to obtain accurate statistical figures.

Bernama (2017) reported that nearly 80% of SMEs in the country failed to survive in the first three years. The current disease, novel coronavirus disease 2019 (COVID-19) has affected the SME Master Plan 2012-2020, which could in turn threaten the economic well-being of various layers of society in Malaysia. The contribution of SMEs to the Malaysian GDP was down by more than 7 percent in 2020 compared to the previous year. Generally, the contribution of Malaysian SMEs to the country's GDP was relatively low. In 2019, SMEs in Malaysia contributed 39.8% to the national GDP (Department of Statistics Malaysia, 2020), compared to an ASEAN regional average of 44.8% (AEM-METI Economic and Industrial Cooperation Committee, 2021). Similarly, the contribution of Malaysian SMEs to total export value in 2018 was 17.3%, slightly lower than the average ASEAN regional contribution of 20.4% (Asian Development Bank, 2020). These alarming performance outcomes may cause Malaysian SMEs to lag far behind in seizing opportunities globally and ultimately to fail to remain competitive (Khalique *et al.,* 2011).

SME businesses have the ability to influence a nation's economy. SMEs deal with a variety of issues and inadequacies. One of them is incapable of managing or owning SMEs financially. (Damayanti *et al.,* 2018). More than two third of overall SMEs is dominated by micro enterprises (Department of Statistics Malaysia, 2021). Thus, it can be said that average of SMEs is from micro enterprises. Micro-businesses' ability to survive rests heavily on effective financial management. However, there is ongoing discussion about whether micro-business owners can efficiently manage their resources by utilising their financial knowledge and talents (Topimin and Hashim, 2020). Financial troubles can be avoided with good financial literacy, especially now during COVID-19. Financial literacy can help people handle their money well even in difficult circumstances (Yuesti *et al.,* 2020).

Based on the above explanations, then questions arise, does financial literacy really matter for small and medium-sized enterprises? If do, what are the vital things to be highlighted there?

DEFINITION OF FINANCIAL LITERACY

Financial literacy is a fundamental requirement in the form of awareness and ability to handle personal finances for the purpose to construct good financial decision outcomes and escape financial difficulties (Muñoz-Murillo *et al.,* 2020). Financial literacy, financial knowledge, and financial education have all been used interchangeably in academic writing as well as in popular media. According to Huston, the four main areas that resulted from these research's definitions of financial literacy and comprehension are personal finance fundamentals, borrowing, saving/investing, and protection (2010). Huston asserts that there are two components to financial literacy: theoretical knowledge of personal finance and practical application of that information (application). According to Dew and Xiao (2011), financial behaviour may be divided into two categories: finance and consumption, both of which are considered as favourably contributing to people's financial well-being. While the second is concerned with how money will be invested and saved, the first is focused on how money will be used for consumption.

DEFINITION OF SMEs

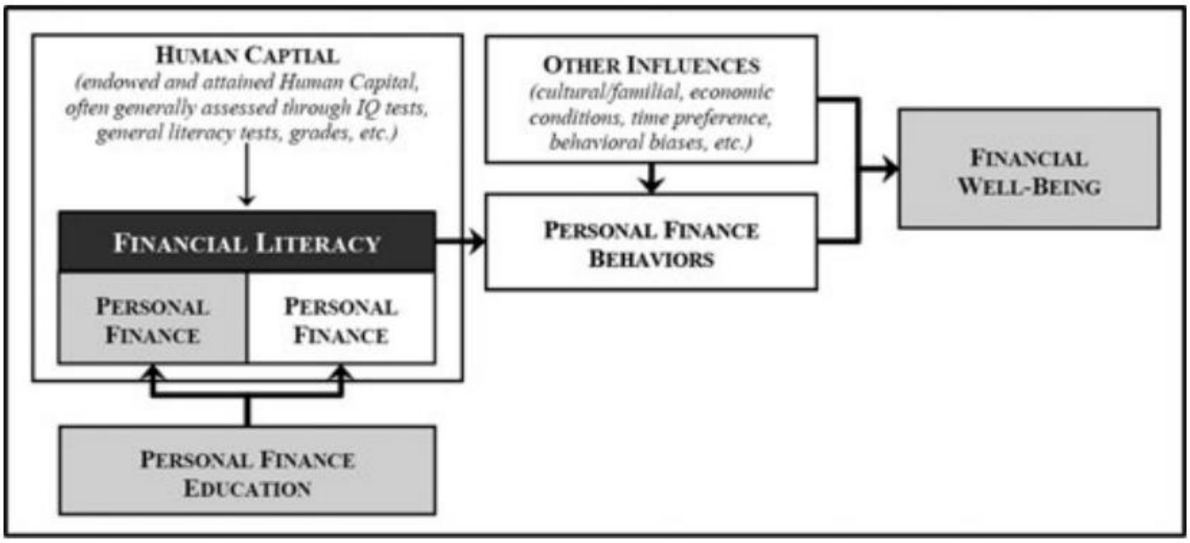
The definition of a small and medium-sized enterprise (SME) highlights two criteria: for the manufacturing sector, sales turnover must not exceed RM50 million or full-time employees must not exceed 200; and for the services and other sectors, sales turnover must not exceed RM20 million or full-time employees must not exceed 75. Micro, small, and medium-sized businesses are the three various scales used to categorise businesses within the category of SMEs. Micro enterprises tend to be the most common kind of business establishments in Malaysia among these three categories. Simple definition of a micro business for all industries: less than RM300,000 in annual sales or less than 5 workers (SME Corporation Malaysia, 2022).

UNDERPINNING THEORY

Social Learning Theory is suggested guides this study. Social learning theory, proposed by Albert Bandura (1971), emphasizes the importance of observing, modelling, and imitating the behaviours, attitudes, and emotional reactions of others. The interaction between environmental and cognitive elements that affect human learning and behaviour is taken into account by the social learning theory (McLeod, 2016). This theory describes how people pick up on other people's behaviours by watching them. In this context, SMEs or micro-entrepreneurs also as individuals are tend to mimic a behaviour if they observe positive outcomes. However, if they identify negative outcomes, they are less likely to imitate (Bandura and Walters, 1977). Based on Bandura’s Social Learning Theory, a person personality developed over time from social experiences and activities and whoever is the frequent contact of the young people influence their learning and practices through observation and imitation (Salumintao *et al.,* 2019). Social interactions can influence people’s economic and financial decisions through several channels, with two mechanisms featuring particularly prominently in narratives of social finance (Kuchler and Stroebel, 2021). It can be concluded, SMEs or micro-businesses may adapt a personality, attitudes as well as behaviours through their circle especially for start-up businesses with psychology elements of perception, attention, learning, memory, concept formation, reasoning, judgment and decision-making, problem solving, and language processing and all of this give influence to their behaviour in finance. Financial literacy can develop through surrounding or circle and combination with cognitive psychology.

THEORETICAL FRAMEWORK

Based on Figure 1 below shows, framework suggested for this study as proposed by



Huston (2010). This framework gives brief overview about financial literacy, factors contributing to it and outcome from it.

Figure 1: Relations among financial literacy, knowledge, education, behaviour and well-being

(Source: Huston, 2010)

RESEARCH METHOD

This study provides a review of existing literatures that related to financial literacy in SMEs. This study relies on secondary source of data by means literature review. Traditional literature review employs methodology of this study (see Munn *et al.,* 2018). Apart from that, the aim of this study is to review and reveal research gaps and vital points from financial literacy's studies from previous studies that had been done in Malaysia from 2018 to 2022 related to financial literacy among SMEs. Therefore, empirical studies were reviewed to fulfil research objective. Table 1 below shows summary of empirical literature that had been reviewed.

EMPIRICAL LITERATURE REVIEW

Table 1: Summary of Previous Studies from Malaysia related to Financial Literacy of SMEs (2018 until 2022)

AUTHOR (S), YEAR	TITLE	AIM/ OBJECTIVE	METHODOLOGY	FINDINGS
1) **Yakob *et al.* (2021)**	Financial Literacy and Financial Performance of Small and Medium-sized Enterprises	To examine the influence of financial literacy on the performance of small and medium-sized enterprises (SMEs) in Malaysia	**Respondents:** 200 SME managers/ owners in the states of Kedah, Perlis, and Penang, which have been included under Northern Corridor Economic Region (NCER). **Approach:** Quantitative study, Simple random sampling	The performance of SMEs is positively and significantly impacted by financial literacy.

2) Topimin and Hashim (2020)	The Financial Literacy of Micro Business Entrepreneurs in Sabah	To investigate the level of financial literacy of the entrepreneurs of micro businesses in Sabah and its influence on their financial conduct	**Respondents:** In-depth interviews with 15 micro business entrepreneurs in Sabah **Approach:** Qualitative study, snowball sampling and interview via telephone	Indicating a low level of financial literacy is the fact that the majority of microbusiness owners are unfamiliar with basic financial terms and limit their understanding of financial literacy to just a few specific financial activities, like record keeping and looking for convenient financial resources. Additionally, the microbusiness owners in this study are not aware of more sophisticated aspects of financial literacy including the necessity of a system for financial planning and the usage of the appropriate kind of financing structure. The lack of financial knowledge among microbusiness owners has also made it difficult for them to obtain outside financing.

3) **Salleh and Padzim (2018)**	The prevalence of Micro Takaful Products in the Eyes of Malaysian SMEs	To examine the level of awareness and understanding among Malaysian SMEs towards Micro Takaful products and also identifies the differences of awareness and understanding level among the SMEs of different educational background	**Respondents:** 206 of SME owners primarily the micro entrepreneurs located in Kelantan, Malaysia. **Approach:** Quantitative study The respondents are selected based on their race, type of business and those who are accessible during the survey. The data is analysed using Statistical Package for Social Science (SPSS)	In Malaysia, there is still a lack of awareness and understanding of micro-Takaful among SMEs. There is a statistically significant relationship between SMEs' owners' understanding and awareness of Micro Takaful products. There is no significant difference between educational level and the level of awareness. The level of understanding differs significantly depending on one's education.
4) **Rahim and Balan (2020)**	Financial Literacy: The Impact on The Profitability of The SMEs in Kuching	To investigate the financial knowledge, financial behaviour and the attitude towards finance amongst on small medium entrepreneurs (SMEs) in Kuching	**Respondents:** This study focuses on both formal and informal businesses owned by entrepreneurs in Kuching. 235 of SMEs in Kuching City **Approach:** Quantitative study	The profitability of SMEs is significantly impacted by financial knowledge. The profitability of SMEs is significantly affected by financial behaviour. The profitability of SMEs is significantly impacted by financial attitude.

5) Awang *et al.* (2020)	Knowledge, Acceptance and Application of Islamic Financial Management among Small and Medium Enterprises (SMEs) Halal Entrepreneurs in Peninsular of Malaysia	To examine the relationship between the knowledge and acceptance of Islamic finance, and the application of Islamic financial management among halal entrepreneurs in Peninsular Malaysia	**Respondents:** 200 halal SME entrepreneur in Peninsular Malaysia **Approach:** Quantitative study, Random sampling technique, SPSS	The knowledge of Islamic finance and application of Islamic financial management among SMEs halal entrepreneur has significant and positive relationship. The acceptance of Islamic finance and application of Islamic financial management among SMEs halal entrepreneurs has significant and positive relationship.

6) **Razak *et al.* (2020)**	The Effect of The Demographic Factors of Micro-Entrepreneur on Financial Literacy: Case of Amanah Ikhtiar Malaysia (Aim)	To investigate whether demographic factors such as gender, age, marital status and education have an effect the financial literacy on micro-entrepreneurs	**Respondents:** 312 AIM micro-entrepreneur throughout Malaysia **Approach:** Quantitative study, random sampling technique, SPSS	Financial knowledge: Financial knowledge is crucial for three reasons: first, it helps consumers comprehend products; second, it helps people save money, which is crucial for the survival of their businesses; and third, it helps people calculate interest. Attitude: The top three reasons are to keep company and personal expenses separate; creating a budget is crucial for business success; and using precise accounting procedures. Skills: Entrepreneurs need the top three talents, which may be acquired via practise and improved with financial software.

7) **Ayub *et al.* (2020)**	The Role of Business Grant Assistance, Micro Saving and Financial Knowledge towards Bumiputera SME Business Performance in Sabah	To examine the influence of business grant, micro saving, and financial knowledge towards Bumiputera SME business performance in Sabah	**Respondents:** 96 SMEs who have been assisted and supported by TERAJU programs **Approach:** Quantitative study, SPSS 26 and SmartPLS 3.0.	The performance of Bumiputera SME businesses in Sabah is not significantly correlated with business grant support. Microsavings and Bumiputera SME Performance in Sabah have a substantial link. There is no substantial correlation between financial knowledge and Bumiputera SMEs' Business Performance in Sabah.
8) **Azman *et al.* (2020)**	The Utilisation of Islamic Fintech (i-Fintech) in Promoting Sustainable Inclusive Growth: Evidence from Micro-Entrepreneurs in Malaysia	To examine the impact of i-fintech use in stabilising micro-entrepreneurs' income	**Respondents:** 120 micro-entrepreneurs who had adopted i-fintech into their business. **Approach:** Quantitative study, using Amos and SEM models	For micro-entrepreneurs, crowdfunding has a good and significant association with sustainable income. For micro-entrepreneurs, mobile money has a favourable and significant association with sustainable income. For micro-entrepreneurs, peer-to-peer financing has a favourable and significant link with sustained revenue.

9) Thab et *et al.* (2019)	Financial Literacy Among SMEs in Malaysia	To investigate the financial literacy among the SMEs in food and beverage sectors in Malaysia	**Respondents:** 122 of SMEs across the state of Selangor **Approach:** Quantitative study, purposive sampling	Age and marital status are two sociodemographic characteristics that have an impact on SMEs' financial literacy. Financial behaviour and attitude are strongly correlated with SMEs' financial literacy.
10) Halim *et al.* (2022)	Analyzing the Factors that Influence the Entrepreneur Business Performance of Tourism Destination of Kuala Terengganu City Centre, Malaysia	To determine the entrepreneurship factor that affects the business performance among Malay micro-enterprises operating their business in (Kuala Terengganu City Centre) KTCC	**Respondents:** 225 Malay micro-entrepreneurs operating their business, including the North and South areas of KTCC **Approach:** Quantitative study, non-probability has been chosen by using the purposive sampling methods, using SPSS version 22	Business performance among Malay micro-entrepreneurs was unaffected by financial literacy and innovative variables.

(Source: Developed for Research)

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DISCUSSION AND CONCLUSION

Based on the review process, ten studies tend to be relevant to gather information from. The findings from this review revealed the important of financial literacy to be taken serious by all segments especially SMEs and the most important, micro-entrepreneurs. This put into highlight because the alarming low level of financial literacy among micro-business nowadays. Besides, the vital to improve level of financial literacy among SMEs is significant as a result for their business performance, sustainable income, profitability, financial conduct as suggested by prior studies. Moreover, financial literacy often used interchangeably with financial education and financial knowledge. In addition, financial literacy components usually highlighted in several of studies are encompassing financial knowledge, financial attitude and financial behaviour. There is important to focus studying financial literacy in Islamic way as well as technology based because the lack of study in that area (e.g., Islamic financial literacy items validation, financial literacy: financial technology (fintech) and business performance of SMEs etc).

As a result, this study brings implication in theoretical and practical contributions. First, this study revealed financial literacy components into three; financial knowledge, financial attitude and financial behaviour. This study also brings significance to practitioners, regulators and academicians to take the point discuss into consideration.

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Advanced Measures and Enlightenment of the Protection of Consumer Rights and Interests of Banks in Developed Countries

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Abstract

In the 21st century, personal business of banks has developed rapidly, and individual consumers are playing a more and more significant role in the banking industry and even the financial market. At the same time, various behaviors against the rights and interests of bank consumers also show a diversified and frequent development trend, and the importance of consumer rights and interests protection is gradually highlighted. Countries (regions) around the world have established and improved financial regulatory legislation systems to strengthen the protection of the rights and interests of financial consumers.This paper enumerates the specific measures taken by some developed countries in the protection of consumer rights and interests in banks and discusses the enlightenment brought by these measures to China.
Key words: Finance; Consumer; Complaint handling; Banking supervision

INTRODUCTION

The financial crisis in 2008 brought turmoil to the world economy, and this crisis was the result of the behavior of US financial institutions that violated the rights of financial consumers. Before the crisis, some financial institutions did not consider the risk profile of high-risk and low-income groups to sell mortgage loans to them, and eventually many borrowers were unable to repay and defaulted on a large scale, triggering the subprime mortgage crisis. The financial crisis has exposed major problems in the prevention of systemic risks in the prudential supervision system aimed at realizing the stable operation of financial institutions. China has entered a period of drastic reform, and many international financial organizations and countries have begun to work on the discussion and reform of the financial consumer rights protection system. For example, the United States promulgated the Dodd-Frank Wall Street Reform and Consumer Protection Act in 2010, which clearly stipulates that the responsibility for protecting financial consumers is undertaken by a newly established independent federal regulatory agency, the Financial Consumer Protection Bureau. To achieve fair, transparent and effective competition in the financial market[1]. The "Financial Services Act 2012" promulgated by the UK abolished the Financial Services Authority and established the Prudential Regulation Authority and the Financial Conduct Authority. It has realized the separation of behavioral supervision and prudential supervision from the system[2].

Facing the dual pressure of the complicated international situation and the financial reform and innovation of the Chinese government, China urgently needs to make further policy changes to activate the vitality of the market economy, among which the reform of financial

[1]https://www.investopedia.com/terms/d/dodd-frank-financial-regulatory-reform-bill.asp
[2]https://corpgov.law.harvard.edu/2013/03/24/financial-services-act-2012-a-new-uk-financial-regulatory-framework/

policy is the most important. With the rapid development of banks' business, the speed of introducing new financial products of banks has been greatly accelerated. While bringing convenience to financial consumers, there are also irregularities in the behavior of banks in providing financial products and services. Banks' financial consumers protect themselves. Problems such as weak awareness and low ability to identify risks have emerged, and the problem of financial consumer rights violations has become increasingly prominent and expanding. Under this circumstance, the financial regulatory authorities and the Chinese government need to further improve financial regulatory policies and should adopt a proactive and open attitude, study and learn from the advanced experience of developed countries in the practice of financial consumer protection, and improve the rights and interests of financial consumers. Protection system, actively build a financial consumer protection system, strengthen the protection of the legitimate rights and interests of financial consumers, promote the healthy development of the financial market and promote the harmonious development of the economy and society, and contribute to China's financial reform and market economy transformation.

RESEARCH METHOD

Based on citing a large number of research literature, this paper comprehensively uses the research method of comparative analysis, and starts from the existing theories of financial consumer rights protection and financial stability. The differences in the protection of financial consumer rights and interests between China and the United States are summarized, and relevant suggestions are put forward for the shortcomings of China's financial consumer rights protection system.

RESULTS AND DISCUSSION

The protection of financial consumer rights is conducive to improving the stability of the financial system. After the financial crisis, countries around the world strengthened the positive role of a series of reforms in the protection of financial consumers' rights and interests in maintaining financial stability.This chapter provides a comparative analysis of financial consumer protection in China and the United States in terms of the coordination mechanism between prudential regulation and financial consumer protection, legislation and legal effectiveness, and financial consumer education, in order to identify the shortcomings of financial consumer protection in China.

1. A comparison of regulatory and financial consumer protection coordination mechanisms in the United States and China

Prior to the crisis, financial consumer protection responsibilities and prudential regulatory functions were usually assigned to US regulators simultaneously. While financial regulators had sufficient expertise, they could only enforce financial consumer protection-related regulations on institutions within their regulatory purview, not on all financial products. In this form, regulatory responsibilities are split between different regulators, which can easily exclude institutions from regulatory gaps and thus lead to market distortions. When prudential regulation and financial consumer protection are concentrated in one institution, the other is likely to receive insufficient attention and resources and face regulatory inadequacies. The fragmentation of the financial consumer protection function and its conflict with the prudential regulatory function proved to be one of the reasons for the inadequate protection of financial consumers, which led to the sub-prime mortgage crisis in the US. It follows that when the protection of financial consumers is the responsibility of several institutions responsible for both prudential regulation and market conduct regulation, the first issue to be addressed is how to coordinate the two in order to create synergies.

1.1Establishment of a dedicated independent financial consumer protection agency in the US

The US approach is to transfer the financial consumer protection function, which was previously dispersed among the various regulatory authorities, to the Financial Consumer Protection Bureau, which is exclusively responsible for protecting the rights of financial consumers. The Financial Consumer Protection Bureau is characterised above all by its independence. For example, the Director of the Agency is appointed directly by the President with the consent of Congress, while the appointment of the Deputy Director is the responsibility of the Director himself. In terms of funding, the Bureau is appropriated by the Federal Reserve Board from the consolidated revenues of the Federal Reserve System, and the Director determines the amount of appropriations necessary to ensure that the Bureau is able to carry out its mission to the extent reasonably necessary and within the limits set by law. In addition, the FCPB is free from interference with its rule-making and enforcement powers. While ensuring the independence of the FCPB, and in order to promote synergies between financial consumer protection and prudential regulation, the US attaches great importance to the coordination mechanisms between the FCPB and prudential regulators, which are clearly set out in the Act. On the one hand, in the securities markets, the Act provides that the FCPB shall coordinate with the Securities and Exchange Commission, the CFTC and other federal agencies and state regulators, as appropriate, to harmonise regulatory treatment of consumer financial products and services and investment products and services to the extent possible. On the other hand, in coordinating with bank regulators, the Act provides that, for non-depository related persons, the FCPB shall coordinate its own regulatory efforts with those of state bank regulators, which are prudential regulators, including by establishing appropriate timelines and information requirements. In addition, the US has established the Financial Stability Oversight Council (FSOC) to identify, monitor and respond to risks that arise that threaten the stability of the US financial system. Thus, under the current regulatory regime in the US, systemic risk prevention regulation, prudential regulation and financial consumer protection regulation are all carried out by separate agencies with a clear division of labour. This regulatory arrangement has effectively facilitated the coordination and maintenance of prudential regulation and financial consumer protection in maintaining the stability of the financial system.

1.2 Lack of coordination mechanism between financial consumer protection and prudential regulation in China

Unlike the United States, which established a dedicated independent financial consumer protection agency, China has adopted a model of integrating multiple financial regulators by establishing separate financial consumer protection departments under the separate regulatory landscape of the Central Bank of China and the Banking Regulatory Commission. 2010 saw the establishment of the Insurance Consumer Protection Bureau by the China Insurance Regulatory Commission and the Investor Protection Bureau by the China Securities Regulatory Commission. 2012 saw People's Bank of China and the CBRC also set up separate financial consumer protection bureaus. In 2012, the People's Bank of China and the China Banking Regulatory Commission set up their respective bureaus for the protection of financial consumers' rights and interests.By their very nature, financial consumer protection agencies are internal functions of the prudential regulator. In the past two years, the financial regulatory coordination mechanism in the form of joint meetings has not been able to achieve its objectives, and there has been "free-riding" and shifting of responsibilities among financial consumer protection authorities in their daily work. With the advancement of financial innovation, the competition among various financial institutions has become more mixed, and cross-industry and cross-market financial products and services, such as asset management products, wealth management products and private equity funds, have emerged, and different regulators will have different requirements for uniform market conduct, which may lead to confusion. In addition, the above situation also provides a basis for regulatory arbitrage, where financial institutions can consciously move closer to industries regulated by more laxly regulated authorities in terms of product design through product nesting and other forms of innovation, without changing the essence of the product. Moreover, for such products, the more ambiguous product boundaries may lead to the gradual emergence of a regulatory vacuum, exposing financial consumers to uncertainty and making it impossible for them to even defend their rights and interests through complaints should problems arise. All these weaken the practical effect of financial consumer protection. Therefore, how to ensure the full play of the financial consumer protection function and how to reconcile the conflict between prudential regulation and consumer protection are urgent issues to be addressed in the setting of China's financial consumer protection institutions.

2. Comparison of legislation and legal effects

2.1The US has a well-developed legal system and a high level of legislation

In the wake of the financial crisis, US financial regulatory reformers have come to realise that protecting the rights of financial consumers is an integral part of maintaining financial stability. The provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act in relation to the Financial Consumer Protection Authority (FCPA) are described above and will not be repeated here. In addition, the US has also strengthened financial consumer protection by amending and consolidating previous laws and regulations relating to financial consumer protection. For example, on July 2008, the Federal Reserve announced the final amendments to the Honest Credit Act, which came into effect on October 1, 2009. In 2009, the President of the United States signed into law the Credit Opening Business-Related Responsibility and Disclosure Act (CIBRDA) to enhance the protection of credit card consumers. Information Disclosure Act to strengthen the protection of credit card consumers. The Act further regulates the conduct of credit card operators in several areas, mainly in terms of consumer protection and information disclosure to consumers. The legislation in the United States was passed by the Senate and has a high level of legal force. The Bureau of Financial Consumer Protection also has a number of rules governing the market conduct of financial institutions, such as Regulation Z, which mainly covers consumer credit payments, requires lenders to clearly disclose the cost of credit and dispute resolution mechanisms, and will be amended in due course by evaluating the pros and cons of the regulations. As a result, the US has established a relatively comprehensive system of laws to protect the rights of financial consumers.

2.2 China's legislation is not at a high enough level to effectively meet the needs of practice

China currently has no basic legislation specifically protecting the rights and interests of financial consumers. The current legal basis for protecting the rights and interests of financial consumers is the Law of the People's Republic of China on the Protection of Consumer Rights and Interests, a general law on how consumers can protect their consumer needs in the course of purchasing or using goods or receiving services. Although the new Law on the Protection of Consumer Rights and Interests, which was promulgated and implemented in 2014, contains provisions to protect the right to information of financial consumers, the Law is not very applicable to the protection of the rights and interests of financial consumers due to the professional and special nature of financial consumption, which is different from general consumption. Secondly, the Securities Law of the PRC, the Commercial Banking Law of the PRC and the Insurance Law of the PRC also provide for the protection of financial consumers. For example, the Commercial Bank Law requires commercial banks to protect the legitimate rights and interests of depositors from infringement by any entity or individual, but these laws and regulations are more from the perspective of maintaining the safety and efficiency of financial institutions. The protection of the rights and interests of financial consumers is more often than not only touched upon in principle and not clearly defined. on 7 May 2013, the People's Bank of China formulated the "Measures for the Administration of the Protection of the Rights and Interests of Financial Consumers by the People's Bank of China (for Trial Implementation)". In order to implement the Guidance Opinions of the General Office of the State Council on Strengthening the Protection of the Rights and Interests of Financial Consumers, the People's Bank of China issued the Implementation Plan for the Protection of the Rights and Interests of Financial Consumers of the People's Bank of China on 27 December 2016 to further improve the rights and interests of financial consumers in four areas, including the regulation of financial conduct, protection of personal financial information, complaint acceptance and supervision and management mechanisms. In addition, the PBOC has conducted a comprehensive study on the rights and interests of financial consumers in China. In addition, the People's Bank of China has conducted a comprehensive study on major issues relating to the protection of the rights and interests of financial consumers in China and has worked with relevant parties to draft relevant policies and regulations. on 18 July 2015, the People's Bank of China and ten other ministries and commissions issued the Guidance on Promoting the Healthy Development of Internet Finance, which sets out specific requirements for the protection of the rights and interests of consumers and investors in the Internet finance sector. The China Banking Regulatory Commission ("CBRC") protects the rights and interests of financial consumers more from regulation and guidance on the conduct of banking institutions. 2013 saw the promulgation of the Guidelines on the Protection of Consumer Rights and Interests in the Banking Sector, which filled the gap in the domestic banking consumer protection regime and marked the full integration of consumer protection into the banking regulatory system. Although China has explored the protection of financial consumers' rights and interests at the level of sectoral regulations, there is the problem of low-level legislation, which does not provide strong rigid constraints on financial institutions and cannot meet the needs of practice.

3. Comparison of financial consumer education systems

3.1 The United States has established a multi-party financial education work mechanism

The United States has always attached great importance to financial education and has made improving national financial literacy an important part of its national strategy. In the US financial education system, financial regulators, financial institutions and school education institutions all act as education delivery agencies, carrying out education activities in their respective fields according to the types of consumer groups. The Council on Financial Literacy and Education (CFLE), comprising nearly 20 relevant departments, is the most important participant in the advancement of financial education in the US. The Council is responsible for developing a national financial education strategy, setting up a national financial education website, MyMoney.gov, and holding annual financial education seminars to evaluate financial education efforts with other organisations and identify and address existing problems. The Federal Reserve has a Bureau of Consumer and Community Affairs that focuses on financial information relevant to consumers, such as savings arrangements, credit management and planning, family home ownership and retirement planning. The Department of the Treasury has an Office of Financial Education, which specialises in financial and tax information and education. In addition, financial education in schools was introduced in the 1980s and many state and territory high schools are required by law to offer courses on financial literacy. In the aftermath of the financial crisis, the US has further strengthened its efforts to educate financial consumers in the context of financial regulatory reform. The newly established Office of Financial Consumer Protection (OFCP) created the Office of Financial Education (OFE) to create a range of opportunities for consumers to gain the financial knowledge necessary to manage their finances. The Office is working with the Financial Literacy and Education Commission to develop programmes to promote financial literacy in four main areas: savings planning, credit management, family housing and retirement planning. In addition, the Financial Consumer Protection Bureau's website includes a section on educational resources, which includes financial literacy content for adults and young people, as well as free downloadable materials. This shows that the US has established a multi-stakeholder educational process and has incorporated basic financial consumer education into the national education system.

3.2 Financial consumer education in China still needs further strengthening

The Bureau of Financial Consumer Protection of the People's Bank of China conducted a survey on consumer financial literacy in representative provinces in China in 2021. The survey revealed that Chinese consumers still have blind spots in many financial basics. Many respondents are unaware of compound interest and loan knowledge, confused about the relationship between risk and return, and do not diversify their investment portfolios. Only 56.59% of respondents were able to correctly understand compound interest and 56.99% knew the difference between equal principal and equal interest, which means that nearly half of consumers still do not understand these basic financial knowledge. In terms of awareness of the risk-benefit relationship, 74.63% of respondents believed that high returns often come with high risks, a decrease of 3.19 percentage points compared to 2019. In terms of risk diversification, only 48.37% of respondents had correct knowledge of the diversification principle, a decrease of 9.71 percentage points compared to 2019[3]. This shows that financial consumer education in China needs to be further promoted and strengthened. There is a single approach and measure for financial consumer education in China, and a lack of innovative forms of education. The dissemination of financial knowledge is mostly done through traditional forms such as posters in the lobbies of business establishments, distribution of leaflets and posting of slogans, which on the one hand are easily overlooked by the public and on the other hand suffer from a heavy emphasis on business promotion and cannot achieve the effect that financial education should achieve. Traditional forms such as brochures also suffer from the use of obscure text and the use of specialized financial vocabulary, which makes it difficult for consumers to understand and apply the financial knowledge they receive. At this stage, financial education in China is not conducted in accordance with the actual needs of consumers and lacks effective interaction mechanisms, so the public's intention to receive financial education on their own initiative is low. In addition, the survey results show that there is a clear urban-rural and regional imbalance in consumers' financial literacy. The financial literacy level of urban consumers is significantly higher than that of rural consumers, and the financial literacy level of consumers in the eastern region is higher than that of other regions. This feature indicates that there is an uneven development of the financial consumer education system in China. The disparity in economic levels between the eastern region and other regions has resulted in a significant gap in the allocation of financial education resources, and there is a near gap in financial consumer education efforts for disadvantaged groups. Overall, China's current financial consumer education system is still imperfect, with the fragmented management of education organisations weakening the linkage effect of education and the lack of an education guarantee mechanism reducing the amplification effect of education. Under the guidance of the regulatory authorities, financial institutions have launched education activities on financial consumer protection, but the lack of awareness of consumer rights cultivated by financial institutions has tended to make education unilateral. However, education on consumer rights awareness is in conflict with the interests of financial institutions, so with financial institutions as the main force in consumer education, they themselves lack the incentive to educate consumers on consumer rights awareness and in some cases, out of their own self-interest and in the absence of regulatory constraints, are prone to do education and publicity that is detrimental to consumers, for example, by persuading unqualified consumers to buy high-risk financial This is in fact a "pseudo-education" of consumers.

CONCLUSIONS

In the wake of the 2008 financial crisis, which highlighted the importance of protecting the rights and interests of financial consumers in maintaining financial stability, countries and major financial organisations around the world have embarked on a series of reforms of their financial regulatory systems oriented towards the protection of the rights and interests of financial consumers.

1. there is a need to integrate the financial consumer rights protection system into the macro-prudential management framework, and to make good protection of financial consumers' rights and interests an important part of the work to prevent systemic risks, so that the core objective of the macro-prudential management framework to safeguard the stability of the financial system can be better achieved.
2. A sound assessment and evaluation mechanism for the protection of the rights and interests of financial consumers. Only through the establishment of strict and unified assessment standards can banking institutions' self-assessment results on financial consumer protection be authentic and credible. In addition, the People's Bank of China (PBOC) and the relevant regulatory authorities can adopt on-site and third-party assessments to ensure the

[3] https://baijiahao.baidu.com/s?id=1709929335284436318&wfr=spider&for=pc

fairness and impartiality of the assessment results. The CBRC can use the annual assessment results of financial consumer protection as one of the factors for differentiated prudential supervision, and adopt differentiated supervisory measures in the areas of market access, off-site supervision, on-site inspection and capital supervision, etc., and impose higher and stricter supervisory requirements on banking institutions with low financial consumer protection assessment results. (b) Provide incentives to banking institutions with good results in the assessment of the financial consumer protection environment, and establish benchmarking and standardisation of business practices to be reflected in performance evaluation and assessment

3. Establish a Chinese "Financial Consumer Protection Law" to reflect the importance of the protection of financial consumer rights and interests. In the process of accelerating the development of China's legal system for the protection of the rights and interests of financial consumers, a combination of principle-based and rule-based legislation could be adopted. In addition, the law will also regulate those areas where the rights of financial consumers are repeatedly infringed, and will prohibit certain practices of financial institutions that infringe on the rights of financial consumers, thus ensuring that the protection of the rights of financial consumers is based on law.

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Overview the Impact of China's Financial Stability on China's Macroeconomy in the Post-Epidemic Era.

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ABSTRACT

During the pandemic Covid-19, there are various impact to the economy especially to the financial stability. In an effort to control the situation and the spread of the virus, world governments undertook prompt measures like lockdowns, travel restrictions, and quarantine. These measures, however, had severe effects on the economies in form of economic growth and energy consumption globally. In financial stability, the system can soak up the shocks mainly through self-corrective structures, blocking adverse effects from having a distracting effect on the real economy. It is vital for economic growth since many transactions in a real economy occur via financial systems. The real importance of financial stability is best demonstrated in its deficiency during eras of financial instability. During these periods, banks seem reluctant to finance profitable projects, asset prices tend to diverge disproportionately from their intrinsic values and payments tend to delay. Main instability may result in bank runs, hyperinflation or even stock market crashes shaking the confidence of an economic system (The World Bank, 2016). Thus in this paper is to examine the impact of China's financial stability on China macroeconomic.

Keywords: COVID-19, China Macroeconomic, Post Pandemic: Financial Stability

INTRODUCTION

The outbreak of the COVID-19 pandemic because by acute respiratory syndrome coronavirus 2 (SARS-CoV-2), became a Public Health Emergency of International Concern early in January 2020 and later a global pandemic in March 20020 by World Health Organization (WHO) (WHO, 2022). By October 11th, 2020, the world had recorded over 37 million cases and more than 1.07 million deaths related to the virus. In an effort to control the situation and the spread of the virus, world governments undertook prompt measures like lockdowns, travel restrictions, and quarantine. These measures, however, had severe effects on the economies in form of economic growth and energy consumption globally. For instance, on the issue of economic growth, Organization for Economic Co-Operation, and Development (OCED) discovered that the real GDP of many nations with exception of China would experience a drastic decrease in 2020 (Wang & Zhang, 2021). In the light of the pandemic, the Chinese government took well-timed and efficient measures. By the conclusion of the first quarter of 2020, the outbreak in China experienced effective control and the national economy got into the post-epidemic recovery era. Based on numerous statistical data released on major economies, many economies except China had negative economic growth in 2020. Some of the noticeable economic growth include the United States (3.5%), Japan (4.8 percent), Germany (5%), France (9.0% and Britain (10%) (Jiang, Wang, & Zhao, 2022). Despite China suffering a lot from the pandemic, it primarily and successfully managed to control the spread of COVID-19 and reversed the economic decline of mentioned nations worldwide.

There exist many definitions of financial stability and the most common concerns are the absence of system-wide episodes in which the financial system fails to function (crises) and more to the resilience of the financial system. Generally, a stable financial system can efficiently allocate resources, evaluate, and manage financial risks, maintain employment levels near the economy's natural rate and eliminate relative price fluctuations of real or financial assets which can affect monetary stability or employment levels (The World Bank, 2016). Additionally, a financial system seems to be in the scope of stability when it disintegrates financial imbalances that occur endogenously or due to significant unfavorable and unanticipated events. In stability, the system can soak up the shocks mainly through self-corrective structures, blocking adverse effects from having a distracting effect on the real economy. It is vital for economic growth since many transactions in a real economy occur via financial systems. The real importance of financial stability is best demonstrated in its deficiency during eras of financial instability. During these periods, banks seem reluctant to finance profitable projects, asset prices tend to diverge disproportionately from their intrinsic values and payments tend to delay. Main instability may result in bank runs, hyperinflation or even stock market crashes shaking the confidence of an economic system (The World Bank, 2016).

B. Macro-Economy

Macroeconomics concentrates on the performance of the economies such as changes in economic output, inflation, interest and foreign exchange rate, and the balance of payments. Other areas that macroeconomics tackles include poverty reduction, social equity, and sustainable growth which are achievable with sound monetary and fiscal policies (Liu, Liu, & Yan, 2020).

As a response to the outbreak of the pandemic, the Chinese government undertook different policies and plans to preserve economic actions and attain economic growth. The technologically focused pandemic management programs like the application of facial detection and big data to trail population movement and population 3-d technology offer prospects for additional application of these cutting-edge modern technologies in businesses. The global cooperation initiatives of the government like the provision of biomedical products and medical supplies to developing economies increased the visibility of Chinese products in such economies thus promoting China exports. Regarding macroeconomics management, the government implemented a domestic demand-driven growth method to the exceptional disturbances that the pandemic had caused to world trade. In the meantime, the Chinese administration provided the manufacturing sector with robust fiscal incentives to promote Chinese manufacturers' adoption of production capacity to the emerging demands for pandemic-control supplies (Jiang, Wang, & Zhao, 2022).

China which has the largest population also has the largest labor force in the world. As a result, the labor-intensive manufacturing sector of China remains the main driver of the country's economic growth for over 4 decades. While the different COVID-19 measures like smart lockdown, public health interventions, and changes in the new laws that the government adopted during the pandemic helped manage the spread of the virus and keep the labor force of China healthy. Traditionally, the country has many monetary policy targets such as stabilizing inflation, promoting economic growth, preserving employment, promoting financial stability, and maintaining BoP. Financial challenge has become one of the main challenges in post-pandemic times. As a result of the huge liquidity injection during the pandemic era, China's stock and housing market underwent a remarkable run-up. The stock market experienced a specific correction after the Chinese Lunar New Year holiday. However, the housing market remains overheated especially among tier 1 cities. Also, the macro leverage ratio rose to a new high post-pandemic stimulus package (Dong & Xia, 2021).

LITERATURE REVIEW

The significance of finance in economic growth and development follows the works of Schumpeter (1982), Goldsmith (1969), and McKinnon (1973). Financial industry growth aids in the gathering of savings needed for the manufacturing process and for investment actions by businesses hence availing the networks for providing much-needed finance for economic growth. According to King and Levine (1993a, 1993b), there are three major channels via which financial development impacts economic growth. They are the level of intermediation, efficiency, and composition. On the other hand, the degree of intermediation is normally assessed by the size of the bank of credit to GDP ratio and stock market capitalization ratio. Efficiency on the other side is evaluated by private industry credit to GDP ratio, the overall value of shares exchanged on the stock market to GDP ratio, turnover ratio, legal and institutional advancement, and structure by the maturity of bank credit as a ratio of fixed income securities.

Regardless of the theoretical framework applied, the effects of financial markets on growth tend to be temporary or lasting. In conventional growth theories, the impacts tend to be temporary since they are present only in the shift to an economy's stable-state growing path. In modern theories of endogenous growth, the impacts of financial markets tend to be lasting as they can raise the economy to a higher growth pathway forever (Deabes, 2004). As a result, the financial system has the potential to impact the growth rate permanently through ways like improving the average productivity of capital and channeling investment funds to organizations in the process of financial intermediation and savings (Manu, Adjasi, Abor, & Harvey, 2011).

Based on the empirical side, economists have different views concerning the correlation between the financial sector and economic growth. Therefore, the significance of the financial sector to economic growth has been the center of great debate. As such, growing bodies of studies have shown a strong connection between the financial sector and economic growth (Bist & Read, 2018). There are three major opposing hypotheses concerning the connection between the financial sector and economic growth. First, there is the supply-leading hypothesis seeking to know whether the financial sector leads to economic growth, the demand hypothesis which seeks to know whether economic growth improves the financial sector's intermediation and the bidirectional causality hypothesis which seeks to know whether the financial systems may be both growths encouraging and growth persuaded.

Based on the recent literature, the stability of financial systems seems very important in augmenting economic growth. Therefore, a stable financial system serves as the main enhancer of economic performance in many dimensions, and on the other hand, an unstable financial system tends to detract from economic performance. Additionally, a strong financial system seems less susceptible to the risks of financial crisis erupting during real economic disturbances like the COVID-19 Pandemic and tends to be more resilient during crises.

The theoretical connection between financial stability and economic growth seems to hang on to five different aspects which intersect macroeconomics and finance. These aspects include symmetric info and agency issues in financial deals, the possibility of sudden and dramatic re-appreciations of market risk, changes in credit supply as a critical channel by which market risk becomes systematic, bank funding terms, and central bank liquidity as a substitute for market liquidity when private credit vanishes.

For several years, the Chinese government started to concentrate its attention on lowering financial risks together with other long-term goals thus accepting slower growth in the process. The effort bore positive fruits as the country experienced economy-wide leverage stabilized, albeit at a higher relative to other economies at a similar stage of development.

OVERVIEW OF ECONOMIC AND FINANCIAL STABILITY IN CHINA

i. Economic Growth (GDP)

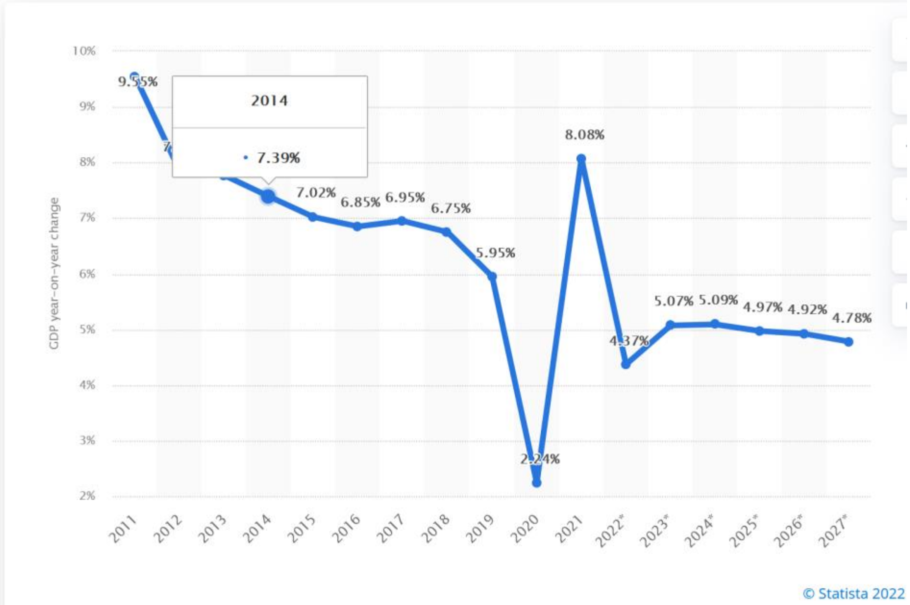

FIGURE 1China's GDP annual change.

China's economic growth during the pandemic and post-pandemic is presented in the graph above. COVID-19 took control on 2020-21 a year when the Chinese economy recorded an 8.08 percent economic growth after which the economy experienced a massive fall in its growth during the 2022 financial period after recording 2.24%. Also, based on the graph the Chinese economy started to pick up the growth pace after recording a 4.37 percent recovery in 2023 and is expected to grow to 5.09 percent in 2024. However, the projections on the economic growth of the Chinese economy are that it will experience a declining trend for the next three fiscal years.

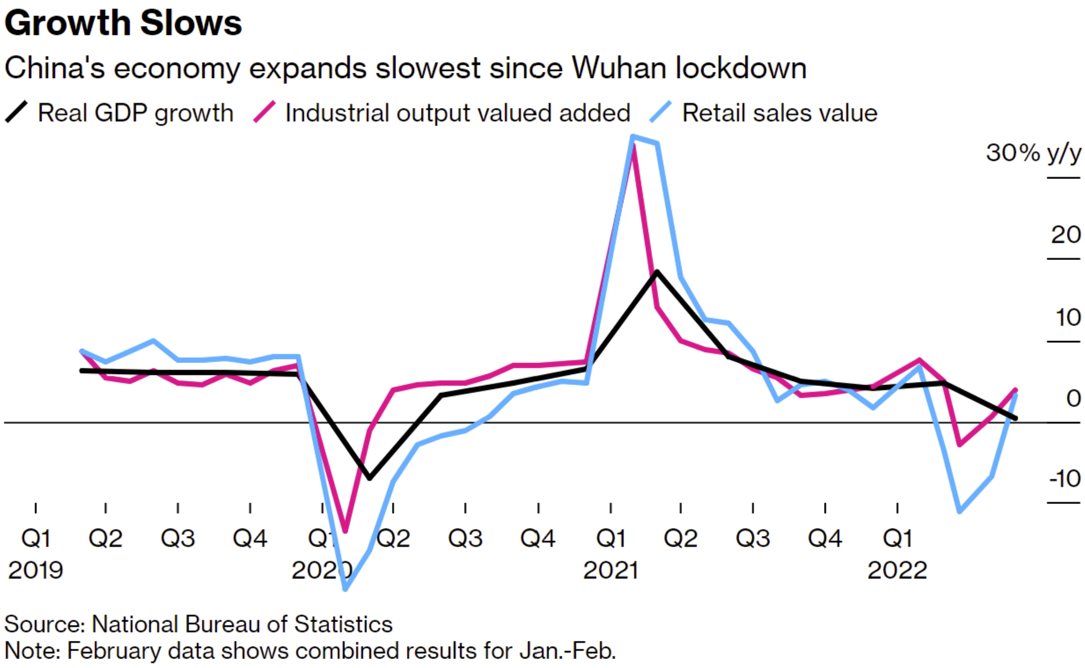

Figure 2: Graph of China's Real GDP growth, Industrial output value-added, and Retail sales value.

The graph above shows real GDP growth, industrial output value-added, and retail sales value in the Chinese economy post-pandemic. According to the graph, the three

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elements of the economy underwent a downward trend during the 2020 first quarter period after which the economic recovery saw them gain upward momentum. The graph shows that the economy recorded a 30 percent rise in the real GDP, industrial output, and retail sales value. Nonetheless, as more lockdowns post-pandemic continue to be implemented in China, these elements of the economy especially the real GDP continue to decline.

TABLE 1： China Inflation Rate percentage change (2019-2021).

China Inflation Rate - Historical Data		
Year	Inflation Rate (%)	Annual Change
2021	0.98%	-1.44%
2020	2.42%	-0.48%
2019	2.90%	0.82%

The Chinese inflation rate as per the table was 2.90 percent in 2019, 2.42 percent in 2020, and 0.98 percent in 2021. According to the table, the 2.90 percent inflation which the economy recorded during the 2019 fiscal year was an increase of 0.82 percent in 2018. The inflation rate of 2.42 percent in 2020 was a 0.48 percent decline from the 2019 fiscal period while the 2021 inflation rate of 0.98 percent was a decline of 1.44 percent from 2020. A drooping inflation rate signifies that prices will increase at a slower rate and this tends to bring some benefits to an economy, for example, a falling inflation rate can enable the products of a nation to become more globally competitive increasing exports and growth and increases the rate of return for savers. As a matter of fact, Chinese inflation rates bring a huge contrast to many advanced economies thus providing the country space for additional monetary loosening while rates in the U.S, E.U, and Britain continue to hike.
In the 2022 2nd quarter, the consumer price index (CPI) grew 2.1% during the month of May (Finance. yahoo, 2020).

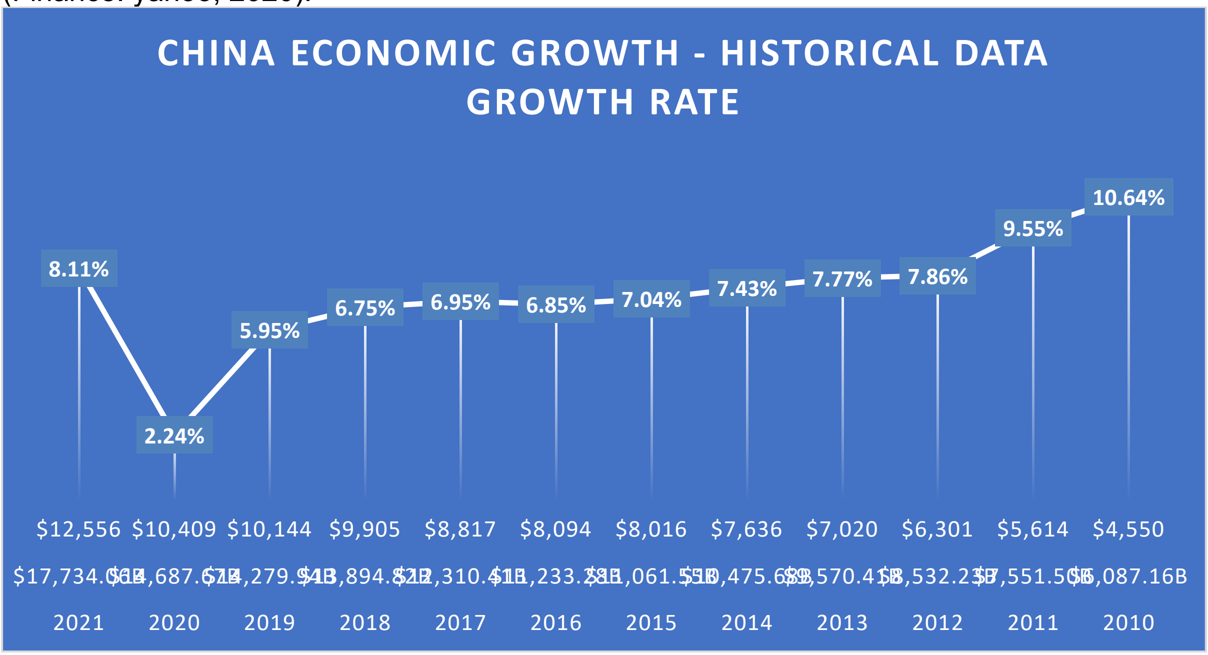

Figure 3: China's Economic growth 2010-2021

Table 2: China Economic Growth - Historical Data

China Economic Growth - Historical Data

Year	GDP	Per Capita	Growth Rate
2021	$17,734.06B	$12,556	8.11%
2020	$14,687.67B	$10,409	2.24%
2019	$14,279.94B	$10,144	5.95%
2018	$13,894.82B	$9,905	6.75%
2017	$12,310.41B	$8,817	6.95%
2016	$11,233.28B	$8,094	6.85%
2015	$11,061.55B	$8,016	7.04%
2014	$10,475.68B	$7,636	7.43%
2013	$9,570.41B	$7,020	7.77%
2012	$8,532.23B	$6,301	7.86%
2011	$7,551.50B	$5,614	9.55%
2010	$6,087.16B	$4,550	10.64%

ii. Financial stability Law

Based on the research, the Chinese government seeks to establish a law on financial stability which in an effort to further strengthen safety nets to safeguard systematic financial risks in their economy. The administration will implement a financial stability protection fund to beef up its capacity to deal with major financial risks and establish a comprehensive cross-agency mechanism for risk detention ad disposal. In 2022, the Chinese economy seems to be slowing down in a period of resurgence in COVID-19 cases. The economy is experiencing a sluggish property market, and the fallout from the Ukraine war, straining the finances (Reuters, 2022). Regardless of the modest and focused policy responses to the pandemic, the administration allowed a rise in debt relative to GDP. The economic activity sustained recovery in 2021 while the authorities went on tightening the stimulus.

Asset prices and interest rates come because of the supplies and demand of focused investors and savers. This is because these two categories of people tend to react nearly to instantaneous investors' judgments concerning financial conditions. The measures of financial market liquidity offer information on the capacity of the financial market to absorb large transactions without large changes in prices and on the premiums, investors have the willingness to pay to hold onto more liquid assets.

iii. Debt-to-GDP

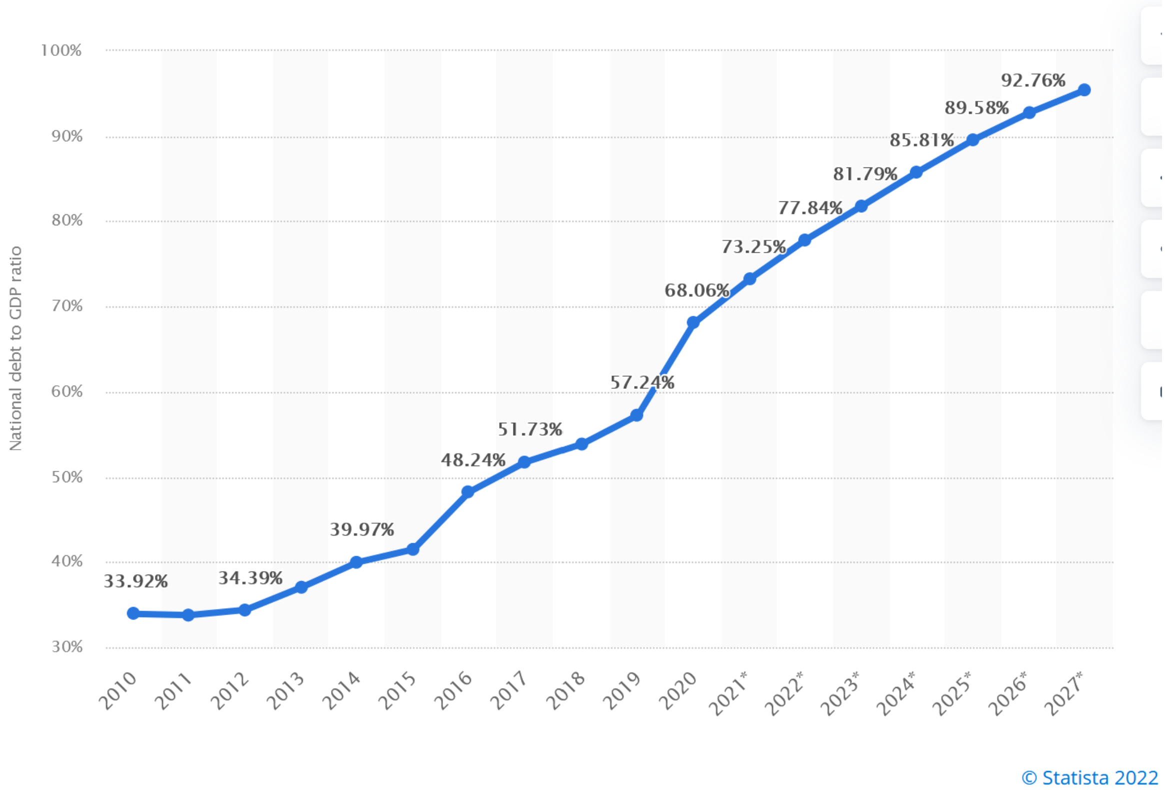

FIGURE 4: National debt to GDP ratio

The graph above shows the Chinese national debt concerning gross domestic until 2020 and the prediction for 2027. In the 2020 financial year, the economy's Gross National debt ranged at about 68% of the national GDP. The debt-to-GDP ratio explains a measure of comparing a nation's public debt to its GDP.

In economics, the ratio between a nation's government debt and GDP is normally known as the debt-to-GDP ratio. It serves as a useful indicator for investors to measure economic stability to fulfill future payments on its debts. As a result, a low debt-to-GDP ratio tends to indicate that an economy makes and sells a sufficient amount of goods and services to settle those debts. Of some of the important industrial and emerging nations, Japan shows the most debt-to-GDP ratios. China's national debt linked to GDP rose slowly but steadily from almost 23% in 2000 to 34% in 2012 and underwent a disruption by the global financial crisis in 2008. The country has in recent times increased credit financing to spur economic growth due to higher levels of debt. International trade frictions and the COVID-19 pandemic need more invigorating measures by the government and will inevitably lead to even higher debt growth in the years ahead (Statista, 2021). A nation with the ability to continue to pay interest on its debt without refinancing and without hampering economic growth is a stable economy.

Since financial stability has become a serious challenge in the post-pandemic era, the main cause had been attributed to a huge injection of liquidity during COVID-19, and the results are China's stock and housing markets experiencing a remarkable run-up.

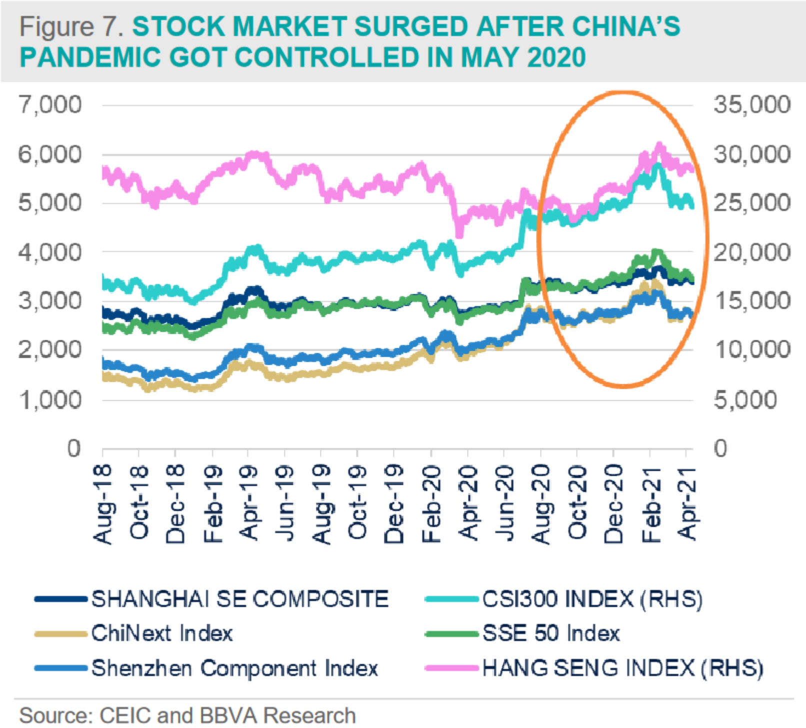

FIGURE 5: Graph of China Stock market

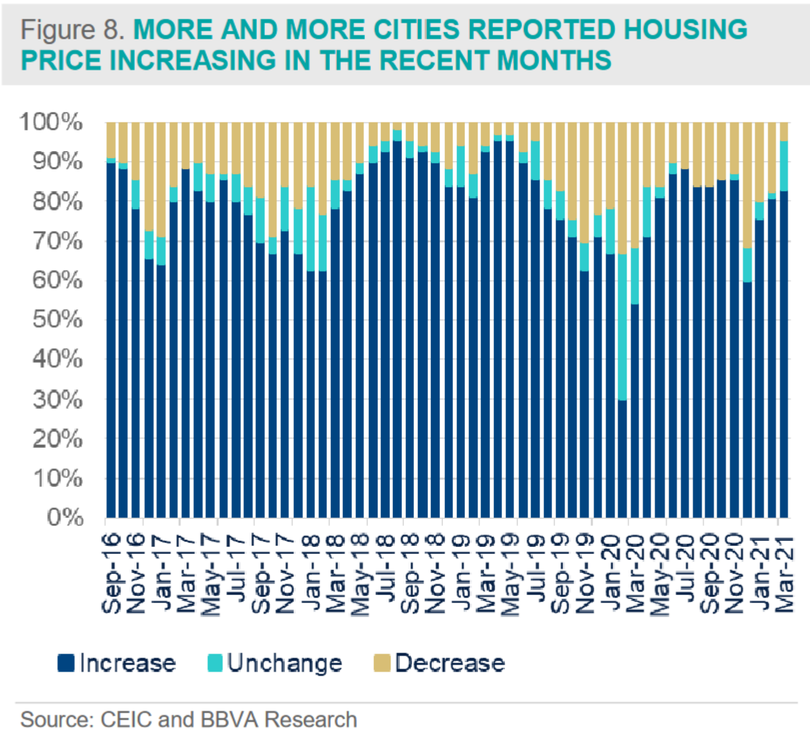

FIGURE 6: Graph representing China's Housing Price

Om whether and how monetary policy can assist sustain financial stability remains a serious open question. The Chinese market has been examining and considering whether and how to include asset prices into the monetary policy target in a bid to maintain financial market stability.

iv. BALANCE OF PAYMENT (BoP).

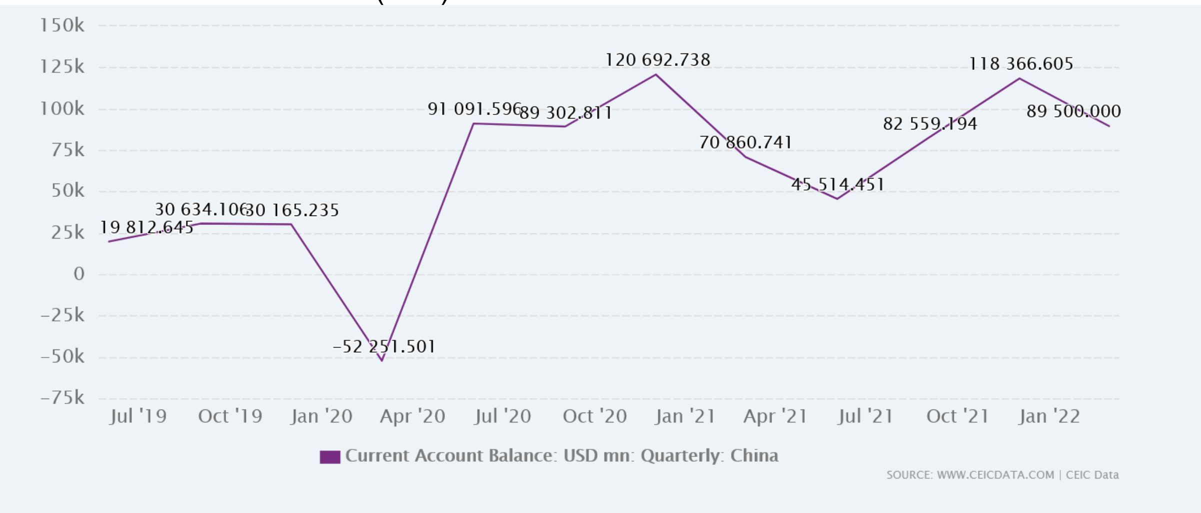

Figure 7: Graph representing China's BoP

In March 2022, China's Current Account recorded a surplus of 88.9 USD billion which was a drop from the surplus the economy had of $118.4 in the previous quarters. The balance of payments refers to the record of all global trade and financial transitions by a nation’s residents (Sandu, 2015). The BoP has three major elements including the current account, financial account, and capital account. In the economy, the current account helps the government to measure global trade, net income on investments, and direct payments. The second element which is the financial account helps the government to measure the change in international ownership assets while the capital account encompasses any additional financial transactions that do not impact the country’s economic output. Therefore, a nation's balance of payment informs the Central Bank and the government whether it saves enough to pay for its imports. Additionally, it shows if the nation makes enough economic outputs to pay for its growth. As a result, China's economy post-pandemic seems to record a surplus in 2021 and then a deficit in 2022. A BoP surplus shows that the nation's exports exceed the imports thus giving enough capital to pay for domestic production. Additionally, the country with a surplus in BoP can lend outside its borders and the surplus also boosts economic growth in the short term. This has been the case post-pandemic China where the nation has seen economic growth up until 2022. The reasons for China’s surplus post-pandemic highly relate to the health crisis. The COVID-19 pandemic has led to the distortion in international demand way from leisure, tourism, and commodities that the economy imports in large quantities to medical products, Information Technology, and home equipment exported by China (Fan & Liu, 2022).

In any economy, a money supply tends to increase price level more and national output less hence lowering the unemployment rate of the labor force and capital.

TABLE 8: Table representing Unemployment rate in China post-pandemic

Release Date	Time	Actual	Forecast	Previous
Jun 14, 2022	22:00	5.9%	6.1%	6.1%
May 15, 2022	22:00	6.1%		5.8%
Apr 17, 2022	22:00	5.8%	5.5%	5.5%
Mar 14, 2022	22:00	5.5%	5.1%	5.1%
Jan 16, 2022	22:00	5.1%		5.0%
Nov 14, 2021	22:00	4.9%		4.9%

Oct 17, 2021	22:00	4.9%		5.1%
Sep 14, 2021	22:00	5.1%		5.1%
Aug 15, 2021	22:00	5.1%		5.0%
Jul 14, 2021	22:00	5.0%		5.0%
Jun 16, 2021	03:00	5.2%		5.1%
Apr 15, 2021	22:00	5.3%		5.5%
Mar 14, 2021	22:00	5.5%		5.2%
Dec 14, 2020	22:00	5.2%	5.2%	5.3%
Nov 15, 2020	22:00	5.3%	5.3%	5.4%
Oct 18, 2020	22:00	5.4%		5.6%
Sep 14, 2020	22:00	5.6%		5.7%
Aug 13, 2020	22:00	5.7%		5.7%

iv. Unemployment

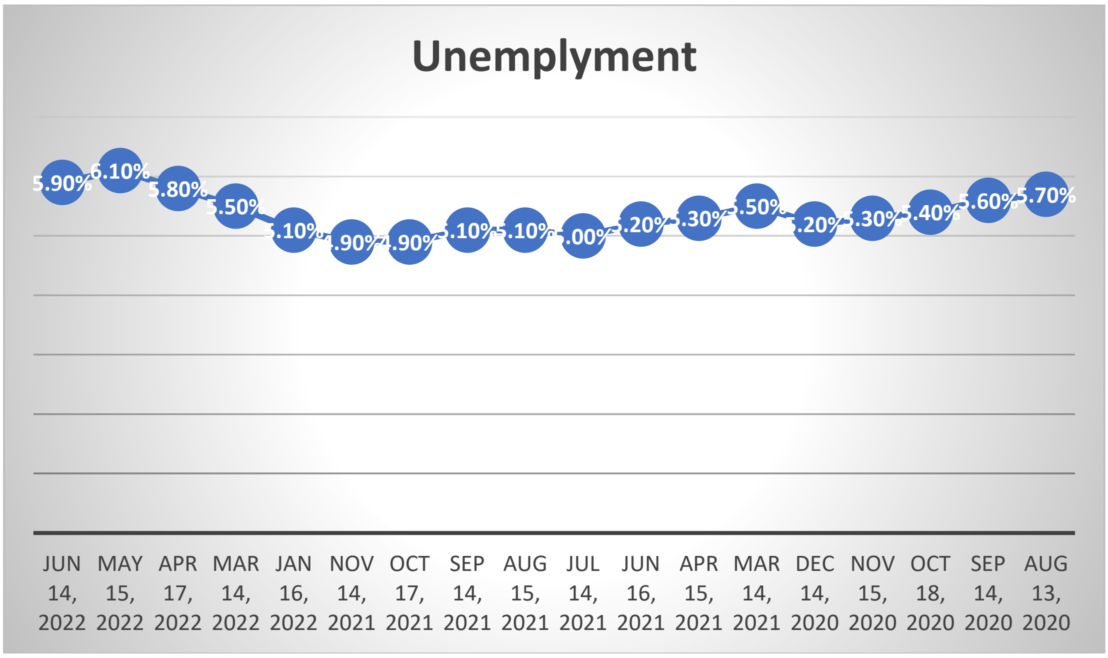

FIGURE 9: The unemployment rate in China post-pandemic

According to the analysis, and table above, the China unemployment rate fell to 5.90 percent in June 2022 from the previous month, May 2022 when the unemployment rates were 6.10 percent. Additionally, the records show that the unemployment rates reached the highest post-pandemic in the month of May 2022. The rate of unemployment represents the ratio of the labor force without an occupation and acts as a lagging indicator. The rate tends to rise or drop during the changing economic conditions and when the economy is undergoing a poor period and jobs become scarce, the unemployment rate tends to rise proportionately. On the other hand, during economic growth at a healthy rate, the job tends to be plenty, and unemployment rates tend to fall proportionately. The high rates of unemployment in China during the post-pandemic can be attributed to new lockdowns and rising cases of COVID-19 that affect many industries and hence the economy. Post pandemic era, stability in the finances within the economy has the potential to encourage more investment into various sectors leading to more job opportunities which in turn lowers unemployment rates (Hjazeen, Seraj, & Ozdeser, 2021).

CONCLUSION

Based on numerous statistical data released on major economies, many economies except China had negative economic growth in 2020. Some of the noticeable economic growth include the United States (3.5%), Japan (4.8 percent), Germany (5%), France (9.0% and Britain (10%). Generally, a stable financial system can efficiently allocate resources, evaluate, and manage financial risks, maintain employment levels near the economy's natural rate and eliminate relative price fluctuations of real or financial assets which can affect monetary stability or employment levels.

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A Conceptual Paper on the Relationship Between Finance, Engineering and Economic Growth

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ABSTRACT

This is a conceptual paper of a study based on the review of works of literature related to finance, engineering and economic growth. some countries face lagged economic growth if ignoring finance and engineering. Finance and engineering are becoming complements for every country to catch a rapid growth. The country will find it difficult to achieve economic growth because it may lack finance and engineering. However, a country able reaps a greater benefit if they are having a good financial system and better engineering. The field of engineering is broad, evolving, and integral to the promotion of human development and economic growth. The objective of this study is to examine existing research on whether finance and engineering play a significant role in economic growth. The paper went on to analyze the issues, concepts, and objectives for the forthcoming study through several works of literature from various disciplines. The conceptual paper signifies supplementing literature for academics as a reference for their research. The result of this research may provide information on how to enhance finance and engineering activities and develop an engineering index. It will also be relevant to policy-makers who design support mechanisms and schemes to promote the creation and growth of a country.

Keywords: Finance, Engineering, Economic growth, Engineering Index

INTRODUCTION

In growth theory, two channels by which financial development can impact growth are capital accumulation and total factor productivity (TFP). According to the Gurley and Shaw (1955) theory, the capital accumulation channel is usually referred to as the quantitative channel. In this article, the financial sector is discussed as a means of overcoming indivisibilities by mobilizing savings. Investment projects are financed by mobilizing and channeling savings to productive sectors, leading to higher output and capital accumulation The TFP channel, also known as the qualitative channel, promotes innovative financial technologies in order to reduce the informational asymmetry allowing for an efficient allocation of financial resources and a better monitoring of investment projects (King and Levine, 1993).

Efficient financial systems also facilitate the adoption of expensive new technologies. Finance systems serve key functions to link financial development with economic growth, such as providing information about potential investments and capital allocations; monitoring investments and exercising corporate governance; enhancing trading, diversification, and risk management; and mobilizing and pooling savings. In achieving economic development, it is not just enough with the development of infrastructure only, better condition of the transportation system, digital infrastructure, communication infrastructure, knowledge dissemination, education, training, research and development (R&D), and development of human capital is must to boost country productivity. To achieve those, engineering appears to be an important sector to develop and shape those economic indicators in achieving the long-run economic growth.

The impact of the engineering sector on the economy is even more significant when considering how it can accelerate business growth, improve public sector efficiency, create jobs, develop innovations, conduct research, and stimulate economic growth. The engineering industry is one of the foremost innovators, investing heavily in research and development (R&D). Engineers will be at the forefront of this growth as a country transition from manufacturing to a knowledge-based economy over the next few years, and innovation will certainly be the biggest opportunity for our nation.

Engineering entails the planning, construction, and maintenance of public infrastructures such as roads, trains, ports, water, electricity, and gas. As part of their role, they assess feasibility, design structural and system requirements, control damage and maintain systems, and monitor and address quality and safety concerns. Whether tackling everyday problems or extraordinary challenges, they develop real-world solutions. Engineers design and create goods, processes, and systems that benefit national.

Innovation is a major driver for businesses with strong engineering capabilities. Companies with existing engineering know-how are the first ones to approach. In the innovation process, engineers are ideally placed to use their knowledge of mathematical and physical theory to manage the long- and short-term benefits and risks. They are central to the commercialization process of R&D. Using their technical expertise and systematic thinking, they come up with innovative solutions to old problems. Their skills and know-how enable businesses to disseminate new technologies and create new products, procedures, and services these factors can differentiate one business from another which ultimately determines the success of a business.

Engineering will play a crucial role in managing this spending, guiding the initial scoping, informing decision-makers, managing projects, prioritizing maintenance, and ensuring taxpayers get value for money. Engineering decisions ensure that infrastructure is used more effectively, resulting in better-valued outcomes that meet community needs. While public agencies and private consultants contend that fewer engineers in the government sector contribute to waste, engineers already play an essential role in the delivery and management of infrastructure. Despite the difficulty of putting a dollar figure on the value that engineering provides to the public sector, it is possible to evaluate the present level of waste that occurs due to the lack of engineering investment in the public sector.

The ability to innovate is largely determined by our engineering capabilities. In the coming years, innovation will become increasingly important as our industries and companies compete in a more diversified and globalized economy. A strong engineering skill base and our innovative capability are essential for our successful transition to a knowledge-based economy. A great deal of our nation's prosperity and economic strength has already been contributed by engineers. Innovation will increase this contribution significantly in the coming decades, as the importance of innovation grows. Innovation and science are critical for every nation to establish new sources of growth, retain high wages, and seize opportunities for economic growth. Research and innovation are drivers of both productivity and economic growth, as the United States demonstrates with half of the economic growth in the last 50 years attributed to scientific research.

For example, investment in R&D and innovation can help the development of the country which increases the country's productivity. Although engineering has been highlighted as an essential element of sustained economic development, not many countries are involved in the engineering sector. Only a few countries invest significantly in engineering activity.

Beaudreau (2005) stated that the role of engineering had been ignored by the growth theory and discussion on the role of engineering in economic growth does not receive much attention from the past researchers. Although economic theory predicts that engineering appears as an important indicator of economic a few decades ago, there is however lack of evidence of engineering on economic growth from past works of literature. Among the interest variables from researchers in measuring economic growth from past studies are the green economy (Zeb et, al, 2020; Asongu and Odhiambo, 2020); environment quality, health care quality (Bedir, 2016); education (Rivera and Currais, 1999), poverty (Breunig and Majeed, 2020); economic freedom (Mahmood et al, 2021), infrastructure quality (Khan et al. 2020, Scott et al, 2021); corruption (Das, 2020), financial development (Shahbaz et al., 2020; Rahman et al, 2020); energy efficiency (Shah et, al., 2020; Ozcan et. Al., (2020); digital economy (Bulturbayevich and Jurayevich, 2020) logistic performance (Khadim et, al., 2021). Several other economic variables become an engineering component that has been identified by the Royal Academy of Engineering (2016) that to be important to enhancing economic growth (i.e. employment, gender balance, number of business, wage and salaries, human capital investment, quality of infrastructure, quality of digital infrastructure and export). Thus, the objective of this study is to examine the role of finance and engineering play a significant role in economic growth. The structure of this paper is follow with the literature review and conclusion.

LITERATURE REVIEW

Role of Finance in Economic Growth

The concept of connecting finance and growth stretches back almost a century, thanks to two fundamental contributions. Finance, according to Bagehot (1873), was crucial to the English Industrial Revolution because it allowed money to be mobilized for immense enterprises. Effective financial intermediaries, according to Schumpeter (1912), foster technical innovation by redistributing funding to businesses with the best possibility of successfully implementing breakthrough technologies, a process known as creative destruction. Goldsmith's findings sparked a modern-day revival of empirical interest in the finance-growth nexus (1969).

Assets of financial intermediaries as a percentage of GDP, as well as the sum of net bond and securities issues, as well as changes in loans as a percentage of GDP, are examined as evidence of a favorable association between financial development and economic growth can be discovered for 35 states from 1860 to 1963. There are significant statistical and econometric flaws in this work, including a small number of features, a lack to account for other growth drivers, dubious empirical proxies for capital accumulation, and no attempt to determine process change. It's reasonable to assume that this study's research has mostly focused on resolving these problems.

The work of King and Levine (1993), who in a variety of disciplines, try to improve on the early methodology, is the basic empirical examination of the finance-and-growth nexus. They examine a large number of countries (77) over a long-time span (1960-1989). They also employ Barro's (1991) approach to account for a variety of other country-specific factors that might influence economic development, like as affluence at birth, secondary school enrollment, and population increase They also utilize a variety of financial development proxies, such as the financial system's liquid liabilities divided by credit facilities plus central bank domestic assets, and credit to the private sector divided by GDP.

They estimate that a country shifting from the slowest to the quickest growing quartile of the survey would have raised its yearly growth rate by roughly one percent, minimizing nearly 20 percent of the differential in average growth between the quickest and slowest-growing countries. The authors then employ a post hoc ergo propter hoc technique to try to prove causality inside the finance-and-growth nexus for the first time. They investigate how much the value of financial development in 1960 may explain the variation in average economic growth across nations from 1960 to 1989.

Adarov and Tchaidze (2011) use four financial indicators to examine the financial markets of 4 rising European nations (Poland, Czech Republic, Hungary, and Slovakia) from 1994 to 2008, domestic lending to the private sector, private bond market capitalization, and stock market capitalization. Their findings show that the 4 countries are much shallower than one might show based on their economic growth stage and after accounting for a range of other macroeconomic factors. One possible explanation is that underdeveloped institutions and a lack of external financing impede the growth of local financial markets to some extent. Also, better results are achieved in the stock and private credit markets.

Using a dynamic panel model covering the period 1994–2007, Caporale et al. (2009) find that credit and stock markets are still not developed in the economies of ten new European nations members and that their participation in economic development is impeded by a lack of financial depth. They also point out that a better financial system helps these countries prosper economically. Stojkoski and Popova (2016) use cointegration approaches (such as FOLS and DOLS models) to show that financial development (M2/GDP ratio) has a statistically significant and beneficial impact on economic growth for 16 South-Eastern and Central European nations from 1995 to 2014.

To verify the degree of financial market integration, Kilinc et al. (2017) studied whether EU states' banking and stock market measures have been exposed to a convergence process. Their findings imply that, rather than delaying financial market integration, the process should be accelerated. Finally, Asanovic (2020) provides an analytical explication of the finance-growth nexus, proposing that finance may still help Southeast European nations thrive economically.

Role of Engineering on Economic Growth

Besides that, the lack of study role of engineering on economic growth. Among those economic growth indicators, part of them is categorized in the engineering sector (i.e, infrastructure, digital economy, energy, logistic) but the impact is explained individually on economic growth. There Spillovers from FDI and MNC will enhance R&D activities and innovation development, as indicated theoretically. A new or considerably enhanced product, service, or method is characterized as an innovation when it is introduced to the market. An innovation might be the product of novel combinations of existing technology, the application of other firm expertise, or a new technological discovery. Stakeholders frequently pay attention to innovation since it is usually seen as a vital aspect. Tidd et al. (2002) emphasized the importance of innovation, stating that organizations must be inventive to survive in a competitive market. Innovation, according to Utterback (1994), is a "life or death" 'component' of productivity in every company. The processes of information generation, diffusion, and application have evolved into a key driver of economic growth and a valuable tool for businesses. Innovation is a significant predictor of competitiveness and growth across nations, regions, and clusters of enterprises, according to Morrison et al. (2000). Pioneering economists and policymakers such as Romer (1990) and Solow (1956) emphasized the importance of inventive capability and the ability to replicate new technologies across nations in determining an economy's development rate.

Iwata et al. (2002), Nelson and Park (1999), Rhee et al. (2010), and Sarel (1997) found that several Asian nations were successful in mobilizing other powerful drivers of growth, which contributed to their speedy catch-up process. According to Porter and Stern (2000), innovation is positively connected to R&D human capital and the national knowledge base.

Ulku (2004) found that both developed and developing nations benefit from innovation in terms of per capita production.

OECD countries, on the other hand, may promote their discoveries by leveraging the experience of other OECD countries and so enhance their innovation by investing in R&D. Long-term economic development, according to Rosenberg (2004), is dependent on technical innovation, which is most typically stated in terms of R&D spending.

Lin (2006) claims that the term innovation is derived from the Latin word innovate, which means "to create something new." Drucker (1985) defined innovation as an entrepreneur's specialized tool for the exploitation of change for a variety of businesses or services. He tells that, this creation can be considered a discipline that can be studied and practiced. In other terms, "an idea, activity, or thing that is recognized as a novel by a person or other unit of adoption" is another definition of innovation (Daugherty et al., 2011; Grawe, 2009; Rogers, 1995). Meanwhile, Tidd, Bessant, Pavitt, and Wiley (1998) described innovation as the transformation of an opportunity into new ideas that are widely employed in practice. Quite similar to Bentz (1997), who believed that innovation is defined as the development of a new or improved method, service, or product for marketing purposes. According to Utterback and Afuah (1998), innovation is defined as "the use of new technological and administrative knowledge to provide a new product or service to clients." As a result, many authors concluded that "any practices that are new to organizations, including equipment, products, services, processes, policies, and projects" is what innovation is (Damanpour, 1991; Kimberly & Evanisko, 1981; Lin, 2007). Khazanchi, Lewis, and Boyer (2007) went on to say that innovation is important for businesses because it may generate more income through new goods or services, as well as help save money and enhance the quality of existing operations.

With no precise definitions or theoretical references, Tinbergen (1962) distinguishes between infrastructure (for example, roads and education) and superstructure (for example, manufacturing, agricultural, and mining enterprises). The need for simultaneous realization of three analytic objectives are the formulation of a concept for the term "infrastructure, the incorporation of theoretic approaches, for example, the theory of public goods, and the description of the reality of infrastructure provision is the cause of this unsatisfactory situation. According to Buhr (2003), the broadest economic version of the term "infrastructure" – referring to the works of List (1841) and Malinowski (1944) – dates back to Jochimsen (1966)' the whole of material, institutional, and personal facilities and data that are available to economic agents and contribute to the equalization of payment for comparable inputs in the case of appropriate resource allocation which are perfect integration and maximum efficiency. Okpighe (2010) investigated the influence of mechanical engineering on global economic development. A concerted attempt was made to examine the trend over the course of the global industrial revolution, as well as the contributions made by mechanical engineers and engineering businesses. Mechanical engineering made a significant contribution, according to the findings. According to these findings, mechanical engineers have been able to improve the lives of people all around the world via the successful practice of their profession. As a result, Mechanical Engineering is the Engine of Economic Growth.

According to Stiglitz (2010) to polls on the relationship between financial markets and economic growth, the quantity of both theoretical and empirical research on the subject is only matched by the controversy among economists about the overall result. Some say that a well-developed financial system is a precondition for industrialization and that financial markets have always played an important role in economic expansion.

CONCLUSIONS

The literature review allows us to draw the following conclusion. Important factors for explaining the impact of financial development, innovation, infrastructure, engineering, policy, and regulation on economic growth. However, there is a lack of evidence from the past literature on the impact of engineering on economic growth. The past study had examined the individual impact of engineering on economic growth, but engineering itself had a broad definition with comprised Research, employment, Business, human capital, the quality of infrastructure, digital infrastructure quality, export/trade, and technology. Thus, this study will develop an engineering index and explore the impact of this index on economic growth.

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Financial Constraint, Liquidity risk and Performance of Non-Financial Firms in Nigeria

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ABSTRACT

This conceptual paper examines the effect of financial constraint and liquidity risk on the performance of non-financial firms in Nigeria. Following the review of literature, three streams have been establsihed. First, financial constraint and liquidity risk have been linked to bankruptcy and stock returns. Second, there have been methodological issues on the measures of financial constraint and liquidity risk, buttressing the reasons why there have been mixed findings on the theoretical prediction of agency on financial constraint and liquidity risk. Thirdly, the majority of the studies have focused on financial firms with scanty studies on non-financial firms (e.g., manufacturing, consumer goods, textile). Consequently, this study identified three research gaps; the integration of financial constraint and liquidity risk on the financial performance of non-financial firms, methodological limitations on the measures of financial constraint and liquidity risk using standard deviation, and the lack of suitable corporate mechanisms to attenuate the negative effects of financial constraint and liquidity risk on financial performance. This study however, proposes to explore the empirical relationships between financial constraint, liquidity risk, and financial performance using appropriate and robust measurements, including suggesting mecahnisms to moderate the relationships.

Keywords: Financial constraint; Liquidity risk; Firm performance; Nonfinancial

INTRODUCTION

A healthy and strong non-financial sector is a precondition for sustainable economic growth. The sector consists of industrial goods, consumer staples, consumer discretionary, materials, energy, health care, real estate, information technology, communication services and utilities. Hence the performance of these sector of the country is paramount as it's a key contributor to economic growth and development. Financial performance is a basic process, which provides information on profitability, liquidity position, earning capacity, efficiency in operation, source and use of capital, financial achievement and status of the companies (Bhandari, 2010; Gouvindrajan, 2002).

Over the years, these sectors have been faced with different challenges from both pre covid 19 and post covid 19 periods ranging from the rapid increase in operating cost, low purchasing power by customers, low sales and revenue, leading to rapid decline in profits and profit growth (Faminu, 2021; Ibrahim, 2021; Olusi, 2021; Babatope, 2021). These problems led most of the industry players or firms in to financial constraints or liquidity risk issues. Further, Cole (2022) states that manufacturing firms in Nigeria have suffered lower production output and reduced profitability. These emanates from the rising cost of diesel, logistics, foreign exchange, illiquidity, domestic inflationary pressure, weakening purchasing power, poor public infrastructure, and port-related challenges as these may continue to present as headwinds to the sector's performance. All these issues have led the firms in to liquidity and financial constraint issues. These were also supported by (Faminu, 2022; Babatope, 2022; Kleinjan, 2022; Hamma, 2022). Similarly, Musa, Adetoba, David, Mimiko, Musa, Igweze, and Ita (2021) analyzed major business constraints in Nigeria and found that lack of technical know-how constitute about 37.4% of business constraints in Nigeria, followed by an unfavorable business climate of 12.3% and access to finance 6.5%.

Financing constraint refers to the problem that the internal free cash flow of the firm can't meet all operating and investment activities at the same time, while the cost of exogenous (external) financing is higher. When internal capital can't meet the investment demand at the same time, the development of the company faces different degrees of financing constraints (Li & Ling, 2021). In other words, financial constraints occur when there is substantial disparity between the cost of external financing and the opportunity cost of internal capital (Fazzari, Hubbard, Petersen, Blinder & Poterba, 1988; Whited, 1992; Kaplan & Zingales, 1997). Although, traditional financial constraints theory proclaimed that information asymmetry, agency problems, and transaction costs are the primary source of financial constraints (Myers & Majluf, 1984; Gertler, 1992).

On the other hand, Liquidity plays a crucial role in firm's performance as it smoothens the firms' operation, and it is an indicator of the firms' ability to pay back short-term liabilities (Yameen, Farhan, & Tabash, 2019). Insufficient liquidity makes it difficult for firms to expand and trade profitably. The liquidity problem has forced some Nigerian firms to reduce their workforce leading to an increase in the unemployment market. For example, the Ajaokuta steel complex reduced their staff from 5000 to 1000 in 2007 (Duru, Ekwe, & Eje, 2014). Similarly, the liquidity problem has made it difficult for some manufacturing firms in Nigeria to pay dividends; Champion Breweries has not paid a dividend since 1988, and likewise, Golden Breweries since 1997 (Duru et al., 2014). However, Demirgünes (2016) states that existing studies on liquidity have centered mostly on financial institutions and the financial aspect of liquidity, whereas, much more work is needed in other sectors and the operational dimension of liquidity such as the cash conversion cycle. Hence the reason for adopting non-financial firms for this study.

In view of the above, it can generally be observed that mixed findings exist between financial constraint or liquidity and stock returns, bankruptcy, and firm's growth or performance. Also, most of the findings were directed towards negative relationships. In view of the above, this study examines both financial and liquidity risk on firm performance which is contrary to the previous studies that explored the variables individually. In addition to the literature contribution, some methodological issues also exist that most of these studies were conducted in different countries like; Pakistan, Bangladesh, India, China, Korea, Indonesia, USA, UK, Qatar, Dubai, Australia, Netherland, Jordan Saudi Arabia, Ghana, South Africa, and Kenya. Only very few were found to have been done in Nigeria (Obi, et al, 2017; Akindele, et al., 2015; & Ogunbade, et al., 2020). Also, majority of these studies were done in the financial sector and the few on non-financial focused on subsectors like; manufacturing, Health, Textile, consumer goods, exports, industrial goods and stock markets. Hence this study has examined the entire non-financial sectors of Nigeria.

LITERATUR REVIEW

Performance assessment is part of the framework of management control, which involves activities that include planning decisions, worker execution review and tasks. Performance assessment is the administration technique to choose how far the organization's objective has been cultivated, investigate the organization's business execution, director, division and people inside the organization, and conjecture potential organization desires (Syafa & Haron, 2019). One of the main variables for the success of the company is a successful performance assessment method (Bhagat & Bolton, 2019). Information used to assess or evaluate success is divided into two groups such as financial and non-financial metrics (Al-Deehani, El-Sadi, & Al-Deehani, 2015). Financial performance refers to the monetary measurement of results of a firm's policies, and procedures over a period of time usually by computing Return on Assets or Return on Equity (Akenga, 2017). Financial performance is mostly measured in a traditional and market approach such as return on equity, return on assets, earning per share, dividend per share, profit before tax and profit after tax (Kajola, 2009; Adebayo, et al., 2013; Khaliq & Muhammed, 2013).

The financial constraint has been viewed as the accessibility of funding to undertake desired investments. According to He and Ren (2018) financial constraints represent the amount of fund that is available for firm for financing its selected investments. According to Chen (2016) financial constraints reflect the difficulties a company faces when it has funding needs, but cannot successfully obtain funding. Conversely, managing liquidity enables a company to meet its obligations and increase viability position through a reduction in the probability of adverse financial misfortune (Effiong & Enya, 2020). Similarly, Akenga (2017) defines liquidity as the ability of a firm to meet the short term financial obligations via the conversion of a current asset into cash without suffering any loss and can be measured via the current ratio, quick ratio and cash conversion cycle.

Many studies have been conducted on the relationship between financial constraints and performance of firms. Some of such researches shows that financial constraints influence, and are influenced by, investment decisions, financing, dividend policy, firm performance and corporate value (Chen, 2016). Some of these studies includes; Tian and Lin (2019), Li and Ling (2021), Zang, et al. (2019), Harris and Traino (2005), Lei and Ni (2014), Altaf and Ahmad (2019), Ullah, et al. (2014), Hennesy and Whited (2007), Bavarsad, et al. (2013), who examined financial constraints and stock returns, performance, dividend policy, investment, and growth. Most findings revealed that financial constraints have negative and significant effect on the performance of firms. Only very few studies found positive relationship between financial constraints and other variables. These include; Ahmeda, Houqebi and Zijka (2022), Kima, Yang, Yanga and Kovesc (2021), Wetzel and Hofman (2019), Akhbar, Jiang, Qureshi Akhbar (2021), Stikkelman (2010), Whited and Wu (2006).

Further, Carriera and Silva (2010) examined financial constraint against export or foreign market participation and found a negative relationship. Kaplan and Zingales (1997) found that financing constraint would promote firms to improve their liquidity to enhance financial performance. Kaushik and Chauhan (2019) studied the regulating effect of five forms of financing constraint on the financial performance of firms, and found that the regression of five forms was all positive, and discovered that companies with a large degree of financing constraint tended not to delay the payment of interest and dividends. Similarly, Musso and Sciavo (2014), Carpenter, et al. (2002) explored financial constraint against firm survival and growth. The results revealed a negative but significant relationship between financial constraints and firm growth and survival. In addition, Kawk, Min and Choi (2015), and Takehara (2014) also investigated financial constraint and corporate social responsibility and found negative relationship. Further, Alsahlawi, Kaouther, and Muhammad (2021) also assess the moderating effect of financial constraint on the relationship between environmental sustainability and stock returns and found that financial constraint strongly moderates the relationship between the two variables.

Conversely, liquidity risk and performance of firms have also been examined by Rudhani, Ahmeti and Rudhani (2016) who investigates the impact of internal factors on bank profitability in Kosovo treated liquidity risk as an internal factor determining banks performance. They confirmed a negative correlation between liquidity risk and the profitability of banks. The result was also supported by (Chen, Shen, Kao & Yeh, 2018). Similarly, Bari, Gosh and Kabir (2021), Rudhani and Balaji (2019), Alnuaimi and Nobanee (2020), Khan, et al. (2020), and Njure (2014) found positive relationships between liquidity and liquidity risk and the performance of firms. Also, some other studies on the same variables found negative and significant relationship exist between liquidity, liquidity risks and performance. Some of such researches include; Ogunbade, Adekoya and Akeredolu (2020), Effiong and Enya (2020), Khan, et al. (2020), Pervan, et al. (2017), Akindele and Odusina (2015), Almazari (2014), Garanina and Belova (2015), Li, et al. (2020), Sultana, et al (2019), Sing, et al (2017), Ren, et al. (2019), Dhole, et al. (2019), Kokodey, et al. (2020), Marova (2015), Obi, et al. (2017). However, some studies found no relationship between liquidity risks and the performance of firms (Assey, et al., 2020; Dioha, et al., 2018; Islam, et al., 2018; Amir Sharif, 2018).

The *agency cost theory by* (Jenson & Mecling (1976) was adopted to underpin the relationship between financial constraint, liquidity risk and performance. In relation to this research topic, when managers do not act in the best interest of the firm's stakeholders, issue of conflict will arise and when that happens, it may create financial constraint (in terms of funds needed for investment opportunities to improve profitability and future growth) and liquidity risk (in terms of proper management of short term assets and liabilities) problems. When such conflict of interest happens, it will expose the firm in to financial constraint issues, liquidity risk due to poor management of the liquidity and consequently poor performance of the firm.

CONCLUSION

This study conceptually concludes that financial performance is a basic process, which provides information on profitability, liquidity position, earning capacity, efficiency in operation, source and use of capital, financial achievement and status of the companies. Financial constraint is the problem that the internal free cash flow of the firm can't meet all operating and investment activities at the same time, while the cost of exogenous (external) financing is higher; liquidity risk is the low financial ability of a company to meet its commitments as they remain outstanding or become due, without harming their operations. However, it was observed that while financial constraint limits the capacity of firms to invest in profitable activities that would yield return in the future, liquidity risk portrays the severity of operating activities of the firm as the firm has very weak or limited capacity to finance it short term maturing obligations. These may lead the firms in to illiquidity, insolvency or bankruptcy issue and poor performance.

It is therefore recommended that firms' managers in the nonfinancial sector of Nigeria should act in the best interest of their organizations by ensuring enough funds are available to finance viable investment opportunities as they emerge and meets short term obligations as they become due. These would help in minimizing financial constraint and liquidity risk problems and performance would improve. Also, it is suggested that, this study be extended further to examined the empirical analysis and relationship among the study variables and perhaps adopt some corporate features to attenuates the relationship to compare if the result will hold or improve.

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Literasi Kewangan dan *Maqasid Syariah* dalam Kalangan Isi Rumah M40: Di Kelantan

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ABSTRAK

Kajian ini bertujuan meneroka dan menghuraikan aspek literasi kewangan dengan lebih mendalam yang merangkumi elemen kognitif, afektif dan psikomotor). Selain itu, kajian ini turut memperhalusi aspek literasi kewangan berdasarkan konsep *maqasid syariah* yang merupakan konsep kesejahteraan kehidupan di dalam Islam. Walau bagaimanapun, kajian ini hanya berfokuskan kepada golongan isi rumah M40 di Kelantan sahaja. Hal ini kerana, purata pendapatan isi rumah di Kelantan merupakan yang terendah di Malaysia (DOSM, 2019). Terdapat banyak kajian terdahulu berkaitan literasi kewangan, namun kebanyakannya memfokuskan aspek literasi kewangan dalam kalangan belia, mahasiswa dan perusahaan perniagaan. Lebih-lebih lagi, kajian berkaitan literasi kewangan yang berbentuk kualitatif masih kurang dilaksanakan. Dalam hal ini, kajian ini menggunakan pendekatan kualitatif yang berbentuk induktif generik yang bersifat fleksibel. Maka kajian ini diharapkan dapat meningkatkan lagi kesedaran terhadap kepentingan literasi kewangan dalam kalangan rakyat Mlaysia khususnya isi rumah M40. Selain itu, kajian ini dapat dijadikan sebagai sumber rujukan organisasi kerajaan Malaysia dan institusi-institusi kewangan.

Keywords: Literasi kewangan; *Maqasid syariah*; Isi rumah M40.

PENGENALAN

Literasi kewangan juga dikenali sebagai celik kewangan merupakan kemahiran kewangan yang menjadi keperluan pada masa kini. Hal ini kerana, literasi kewangan merujuk kepada keupayaan individu menguruskan kewangan peribadi dengan baik merangkumi pendapatan dan perbelanjaan (Ahmad, Fazil & Bakar, 2021). Aspek literasi kewangan merujuk kepada pengurusan kewangan jangka masa pendek dalam memenuhi keperluan peribadi semasa dan perancangan kewangan jangka masa panjang untuk mengekalkan gaya hidup (Zhao & Zhang, 2020). Oleh itu, kemahiran literasi kewangan ditekankan sebagai keperluan individu dalam menjamin kestabilan kewangan peribadi apabila menguruskan pendapatan dan perbelanjaan mengikut keutamaan, keperluan dan kemampuan kendiri.

Selain itu, produk dan perkhidmatan kewangan yang dibangunkan dan ditawarkan oleh institusi kewangan semakin luas dan pelbagai mengakibatkan individu dan isi rumah menghadapi cabaran dan kesukaran dalam membuat keputusan kewangan (Bapat, 2020). Dalam hal ini, individu memerlukan pemahaman kewangan yang betul dan tepat untuk membuat keputusan kewangan yang menepati dengan keperluan peribadi semasa (Chun, Fenn & Al-Khaled, 2021). Walau bagaimanapun, literasi kewangan tidak terbentuk berdasarkan pengetahuan kewangan semata namun dipengaruhi oleh sikap kewangan dan gelagat kewangan individu (Ramalho & Forte, 2018). Pengetahuan kewangan yang tinggi tanpa sikap yakin diri atau disiplin mempengaruhi gelagat dan tindakan individu dalam membuat keputusan kewangan secara negatif (Shariff & Naghavi, 2020). Oleh itu, kajian literasi kewangan secara menyeluruh merangkumi elemen kognitif, afektif dan psikomotor.

Menurut kaji selidik Agensi kaunseling dan Pengurusan Kredit (AKPK) (2018), seramai 24% individu yang bekerja di Malaysia berhadapan dengan aspek literasi kewangan yang rendah dalam menguruskan kewangan peribadi. Tambahan lagi, 60,000 isi rumah berpendapatan sederhana di Malaysia telah bertukar kepada golongan isi rumah berpendapatan rendah (DOSM, 2019). Hal ini kerana, perancangan kewangan jangka masa panjang yang lemah dalam menghadapi kejutan kewangan (FEN, 2019). Oleh itu, kajian ini bertujuan mendalami faktor-faktor yang mempengaruhi aspek literasi kewangan dalam kalangan isi rumah M40 yang mempu menggugat kestabilan dan kesejahteraan kewangan peribadi isi rumah.

Walau bagaimanapun, kajian ini mendalami aspek literasi kewangan yang merupakan faktor kesejahteraan kewangan berasaskan kerangka konsep *maqasid syariah*. Hal ini kerana, konsep *maqasid syariah* memelihara kesejahteraan kehidupan secara menyeluruh melangkaui kesejahteraan kewangan sahaja (Yusof et al., 2019; Ahmad et al, 2021). Tambahan lagi, setiap objektif *maqasid syariah* dalam memelihara kesejahteraan kehidupan saling berkait dan terhubung antara satu sama lain. Bahkan, konsep *maqasid syariah* menekankan pemeliharaan kesejahteraan kehidupan ummah dan manusia sejagat (Toriqudin, 2013).

OBJEKTIF KAJIAN

a) Mengetahui secara mendalam pemahaman literasi kewangan berasaskan maqasid syariah dalam kalangan isi rumah M40 terhadap pengurusan pendapatan.
b) Mengetahui secara mendalam pemahaman literasi kewangan berasakan maqasid syariah dalam kalangan isi rumah M40 terhadap pengurusan perbelanjaan.
c) Mencadangkan kerangka pemahaman literasi kewangan berasaskan maqasid syariah dalam kalangan isi rumah M40 dalam pengurusan pendapatan dan perbelanjaan.

SOROTAN LITERATUR

Literasi Kewangan

Menurut kamus dewan bahasa dan pustaka edisi keempat, literasi membawa maksud kebolehan membaca dan menulis atau celik huruf. Oleh itu literasi kewangan merujuk kepada celik kewangan iaitu kebolehan untuk memahami konsep kewangan dan mengaplikasikannya dalam membuat keputusan kewangan (Lusardi & Mitchell, 2011; Sabri & Alavi, 2019). Walau bagaimanapun, literasi kewangan ditakrifkan secara terperinci sebagai pengetahuan dan kefahaman berkaitan konsep dan risiko kewangan, serta kemahiran dan keyakinan dalam mengaplikasikannya dalam membuat keputusan kewangan yang efektif (OECD, 2014b).

Keputusan kewangan yang baik dan tepat menjamin keselamatan kewangan semasa dan jangka masa panjang dalam mengekalkan gaya hidup (Sabri & Alavi, 2019). Manakala, keputusan kewangan yang kurang memuaskan adalah apabila perancangan dan simpanan persaraan tidak mencukupi untuk mengekalkan gaya hidup kelak (Bruggen et al., 2017; Netemeyer et al., 2017;Chen, Fenn & Al-Khaled, 2021; Tahir, Ahmed & Richards, 2021). Oleh itu, literasi kewangan merupakan faktor yang mempengaruhi kestabilan dan kesejahteraan kewangan individu dan isi rumah (OECD, 2017). Dalam hal ini, masalah dan tekanan kewangan yang dihadapi oleh inidividu dan isi rumah mengakibatkan kemerosotan tahap kesihatan rentetan kemurungan dan gangguan emosi (Montalto et al., 2018).

Literasi kewangan terdiri daripada lima komponen yang membentuk anatomi literasi kewangan degan sempurna iaitu kesedaran, pengetahuan, sikap, kemahiran dan gelagat kewangan (OECD, 2011; FEN, 2019). Walau bagaimanapun, institusi kewangan dan organisasi kerajaan menekankan tiga komponen utama literasi kewangan iaitu pengetahuan, sikap dan gelagat kewangan (Lusardi & Mitchel, 2011; Coskun & Dalziel, 2020). Hal ini kerana, ketiga-tiga komponen ini boleh dipengaruhi, diperbaiki dan dipertingkatkan oleh pengaruh luar. Oleh itu, Jaringan Pendidikan Kewangan (FEN) telah melancarkan pelan 'Strategi Literasi Kewangan Kebangsaan 2019-2023' untuk memperkukuhkan lagi aspek literasi kewangan dalam kalangan rakyat Malaysia.

Pengetahuan kewangan merujuk kepada pemahaman terhadap konsep-konsep kewangan yang dapat dibentuk melalui pendidikan rasmi dan tidak rasmi (Xiao & Porto, 2017; Aladdin & Ahmad, 2017; Aydin & Selcuk, 2019). Seterusnya ialah sikap kewangan merupakan elemen afektif yang merujuk kepada perkara-perkara yang melibatkan emosi (Fitri & Idris, 2019). Akhir sekali, gelagat kewangan merupakan tindakan dan tingkah laku individu dalam membuat keputusan kewangan untuk menguruskan dan merancang kewangan peribadi (Bongomin et al., 2018). Dalam hal ini, individu yang mempunyai tahap pengetahuan yang tinggi dan sikap kewangan yang positif lebih cenderung merancang kewangan peribadi dengan lebih baik.

Walau bagaimanapun, literasi kewangan dalam kajian ini memfokuskan kepada pengurusan pendapatan dan perbelanjaan isi rumah M40. Pengurusan pendapatan merujuk kepada tindakan individu memperuntukkan sejumlah bajet untuk sesuatu perkara sejurus menerima gaji atau upah. Dalam hal ini, terdapat beberapa perkara yang diperuntukkan bajet dalam menguruskan kewangan peribadi antaranya ialah simpanan kecemasan, simpanan persaraan, pelaburan, insurans atau takaful, bayaran balik pinjaman dan banyak lagi (Aladdin & Ahmad, 2017; Asokumar & Jais, 2020; Shu & Shuaib, 2021; Ouchani, Belnassine & Kammoun, 2021). Manakala, pengurusan perbelanjaan merujuk kepada merancang perbelanjaan mengikut keperluan, keutamaan dan kemampuan. Perancangan perbelanjaan mengutamakan keperluan kehidupan asas iaitu makanan dan minuman, tempat tinggal dan kos pengangkutan (Jasmi, 2012; Song & Zhang, 2021).

Maqasid Syariah

Secara dasarnya, *maqasid syariah* terbentuk daripada dua patah perkataan iaitu *maqasid* dan syariah. *Maqasid* merupakan perkataan jama' daripada *maqsud* yang membawa maksud tujuan dan objektif. Manakala, syariah membawa maksud 'jalan menuju sumber air' yang merujuk kepada menuju ke jalan yang benar (Abidin, Mokhtar & Sungit, 2016; Alias et al., 2018). Oleh itu, *maqasid syariah* adalah makna, hikmah, tujuan dan sebagainya yang digunakan sebagai panduan untuk menentukan hukum dan tidak bertentangan dengan syarak yang bertujuan memelihara kesejahteraan dan kemaslahatan manusia (Ali et al., 2018). Dalam hal ini, ulama' menekankan konsep *maqasid syariah* sebagai memelihara kesejahteraan *(maslahah)* dan menolak kemungkaran *(mafsadah)* (Rahman & Azis, 2016).

Konsep *maqasid syariah* dalam mengukur kesejahteraan kehidupan diimplementasikan dalam pelbagai konteks dan industri seperti kesihatan, kewangan, kekeluargaan, pemakanan dan banyak lagi (Noor & Noor, 2020; Ahmad et al., 2021; Aziz & Mustafar, 2021; Fazli et al., 2021; Harun, 2021).Hal ini kerana, konsep *maqasid syariah* merupakan panduan dalam mencapai kesejahteraan kehidupan secara menyeluruh. *Maqasid syariah* dibahagikan kepada tiga kategori mengikut kepentingan sesuatu keperluan iaitu *daruriyyah*, *hajiyyah*, dan *tahsiniyyah*. *Daruriyyah* merujuk kepada keperluan asas, *hajiyyah* merujuk kepada pelengkap keperluan dan *tahsiniyyah* merujuk kepada kemudahan dan kemewahan (yahaya et al., 2020). Selain itu, terdapat lima objektif utama *maqasid syariah* dalam mencapai kesejahteraan kehidupan iaitu memelihara agama (*ad-din)*, nyawa (*al-nafs*), akal fikiran (*al-aql*), keturunan (*al-nasl*) dan harta (*al-mal*) (Atikah et al., 2020; Monawer et al., 2021).

Dalam hal ini, objektif *maqasid syariah* saling mempengaruhi dan melengkapi antara satu sama lain (Nizam & Larbani, 2017). Menurut Alam et. al. (2015), penglibatan individu dalam Skim Amanah Ikhtiar Malaysia dalam memelihara harta (*al-mal*) dapat menjana dana untuk menunaikan haji (*ad-din*), menambah ilmu pengetahuan dalam bidang ekonomi (*al-aql*), meningkatkan tahap kesihatan (*al-nafs*) dan menaiktaraf ekonomi hidup untuk jangka masa panjang (*al-nasl*). Pengabaian salah satu objektif *maqasid syariah* akan menganggu keseimbangan kesejahteraan kehidupan indidvidu mahupun ummah.

Isi rumah M40

Isi rumah merujuk kepada sekumpulan individu yang tinggal di dalam sebuah rumah yang sama. Dalam hal ini, terdapat tiga klasifikasi isi rumah di Malaysia iaitu isi rumah berpendapatan rendah B40, sederhana M40 dan T20. Klasifikasi ini ditentukan berdasarkan pendapatan bulanan keseluruhan isi rumah yang bekerja (Camhuri et al., 2019). M40 merupakan singkatan kepada *middle 40* yang menujukkan 40 peratus rakyat Malaysia tegolong dalam klasifikasi isi rumah berpendapatan sederhana (DOSM, 2020).

Walau bagaimanapun, isi rumah M40 terbahagi kepada empat kumpulan iaitu M1, M2, M3 dan M4. Hal ini bertujuan memudahkan pihak kerajaan merancang bantuan kewangan bersasar. Kumpulan M1 merupakan isi rumah yang berpendapatan di antara RM 4,851 sehingga RM 5,880, kumpulan M2 merupakan isi rumah berpendapatan di antara RM 5,881 sehingga RM 7,100, kumpulan isi rumah M3 merupakan isi rumah berpendapatan di antara RM 7,101 sehingga RM 8,700 dan kumpulan M4 merupakan golongan isi rumah berpendapatan di antara RM 8,701 sehingga RM 10,970.

KONSEPTUAL KAJIAN

Dalam hal ini, literasi kewangan mempunyai pelbagai bentuk teori yang pelbagai dan berbeza-beza mengikut perspektif sesebuah kajian tersebut. Walau bagaimanapun, kerangka konseptual kajian ini merupakan gabungan teori literasi kewangan, konsep maqasid syariah dan konsep Revised Taxonomy Bloom.

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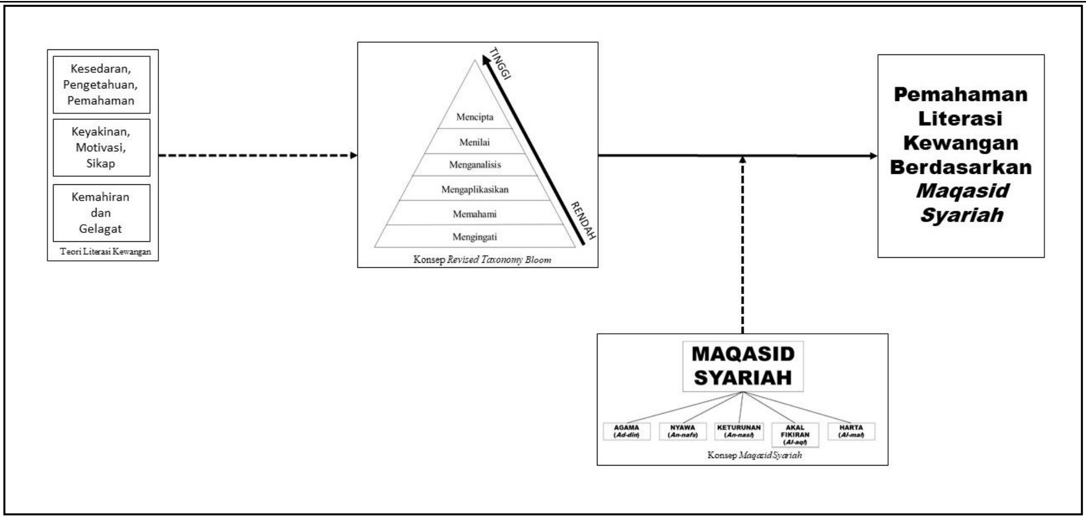

Gambar rajah 1: Adaptasi teori literasi kewangan, konsep *maqasid syariah* & konsep Revised Taxonomy Bloom.
(Sumber: Penyelidik)

Gambar rajah 1 menunjukkan kerangka konseptual kajian ini yang mengadaptasi teori literasi kewangan, konsep *maqasid syariah* dan konsep *Revised Taxonomy Bloom*. Dalam hal ini, konsep *Revised Taxonomy Bloom* merupakan teori asas kajian ini dalam menilai aspek literasi kewangan isi rumah M40. Manakala teori literasi kewangan dan konsep *maqasid syariah* merupakan teori utama kajian ini yang ingin diselami dan diteroka dengan lebih mendalam.

METODOLOGI

Metodologi merupakan penyelesaian masalah kajian secara saintifik dengan menggunakan kaedah kajian yang yang paling bersesuaian dan relevan berdasarkan objektif kajian (Kothari, 2009). Dalam hal ini, jenis kajian ini ialah penyelidikan asas (*applied reesearch*) yang bertujuan meneroka dan mengembangkan pengetahuan berkaitan literasi kewangan. Oleh itu, kajian ini menggunakan pendekatan kualitatif yang bersifat intepretivisme. Hal ini kerana, kajian kualitatif meneroka dan membangun pemahaman yang mendalam terhadap sesuatu fenomena seperti sikap, pendapat dan tingkah laku secara subjektif tanpa terikat dengan teori atau hipotesis seperti kajian kuantitatif (Kothari, 2009; Cresswell, 2014).

Dalam hal ini, instrumen temu bual separa berstruktur digunakan dalam kajian ini untuk mencungkil maklumat dan pengalaman informan dengan lebih mendalam dan terperinci. Kaedah temu bual dalam mengumpul data membuka ruang dan peluang kepada peyelidik untuk meneroka dan mengkaji kualiti kehidupan sosial manusia yang meluas (Weiss, 1994). Lebih-lebih lagi, temu bual separa berstruktur mengajukan persoalan rawak yang berbentuk ‘apa’ dan ‘kenapa’ yang membuka ruang kepada penemuan pengetahuan baharu dengan mengikut trajektori perbualan antara penyelidik dengan individu yang dikaji (Adams, 2010; Adhabi & Anovie, 2017; Magaldi & Berler, 2020).

Seterusnya, kajian ini menggunakan teknik persapelan ‘*snow ball*’ dalam memilih informan kajian kerana terdapat kekangan maklumat isi rumah M40. Persampelan ‘*snow ball*’ digunakan apabila penyelidik mempunyai sumber maklumat yang terhad
untuk mendapatkan informan berdasarkan cadangan dari informan yang lain dengan syarat memenuhi piawaian yang digariskan oleh penyelidik (Snijders, 1992). Manakala saiz sampel kajian ini tidak ditentukan secara spesifik kerana persampelan kualitatif adalah berbeza dengan kuantitatif (Marshall, 1996; Walker, Cooke & Mcallister, 2013). Walau bagaimanapun, saiz sampel minima kajian ini adalah lima informan bagi setiap daerah di Kelantan dan saiz

sampel maksima adalah apabila data yang diperolehi mencapai titik tepu (*saturation*) (Walker, Cooke & Mcallister, 2013; Saunders et al., 2017; Constantinou et al., 2017).

RUMUSAN

Hasil pengumpulan sumber data sekunder, penyelidik mendapati bahawa aspek literasi kewangan adalah menjadi satu keperluan kepada individu. Lebih-lebih lagi, rentetan kemelesetan ekonomi global yang berlaku bakal memberikan impak kewangan yang ketara (Alias, 2022). Dalam hal ini, rakyat sesebuah negara khususnya isi rumah merupakan individu yang paling terkesan dengan perkembangan dan perubahan ekonomi. Lebih-lebih lagi isi rumah yang berpendapatan rendah dan sederhana yang lebih cenderung terdedah kepada risiko kewangan yang pelbagai.

Selain itu, literasi kewangan berasaskan *maqasid syariah* memperlihatkan bahawa memelihara kesejahteraan kewangan turut mememelihara kesejahteraan kehidupan dari aspek lain khususnya meningkatkan tahap kesihatan. Hal ini kerana pengurusan kewangan yang baik dapat mengelakkan individu dan isi rumah daripada mengalami tekanan dan gangguan emosi secara tidak langsung meningkatkan tahap kesihatan individu tersebut.

Oleh itu, kajian ini diharapkan dapat disempurnakan oleh penyelidik dengan sebaiknya dalam mengenal pasti faktor dan pemboleh ubah yang mempengaruhi aspek literasi kewangan dalam kalangan isi rumah M40 di Kelantan. Maka, sebuah strategi untuk merperkukuhkan dan mempertingkatkan kelemahan aspek literasi kewangan dalam kalangan isi rumah M40 dapat dirangka. Kesejahteraan kewangan dalam kalangan isi rumah turut memacu kewangan dan ekonomi negara yang lebih sejahtera.

PENGHARGAAN

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Foreign Direct Investment, Minimum Wage And Economic Growth In Developing Countries: A Review Of The Literature

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ABSTRACT

Economist have long debated the nature and empirical importance of the relationship between foreign direct investment (FDI), minimum wage and economic growth that has attracted major attention from academician and the governments of developing countries. Some argue that FDI has a positive impact but even though some research suggests FDI has mixed results when the determinant variable is wage. Therefore, the goal of this paper is to discuss about the effect of FDI and minimum wage on economic growth. Articles is a comparison analysis studies from various research about the effect of FDI, minimum wage and economic growth retrieved from various database.

Keywords: Foreign Direct Investment; Minimum wage; Economic Growth.

INTRODUCTION

Foreign direct investment (FDI) is an important driver of growth and an essential component of an open and functioning international economic system. However, the advantages of FDI are not distributed uniformly and automatically among nations, industries, and local populations. National policies and the international investment architecture are important in attracting FDI to a greater number of developing nations and realising the full development advantages of FDI. For numerous decades, the connection between Foreign Direct Investment (FDI) and economic growth has been a source of discussion. According to the new growth theory, FDI is an essential component that helps to economic growth through knowledge transfer and efficiency improvement. FDI has a variety of effects on economic growth. It is stated that FDI has been a main pathway for recipient nations' access to modern technology and hence plays a central role in these countries' technical advancement (Borensztein, E., Gregorio, J.D., and Lee, J.W. (1998)). According to Findlay (1978), host nations might profit from the "contagion impact" associated with innovative technology, management methods, and marketing abilities utilised by foreign enterprises. Outputs from FDI operations are frequently exported primarily to third-country markets outside of the host and source nations. FDI activities have employed capital goods and other intermediate inputs supplied by host and other foreign nations as inputs. Foreign Direct Investment (FDI) not only provides nations with much-needed money for domestic investment, but it also creates employment opportunities, assists in the transfer of management knowledge, and contributes to the progress of the economy (Mishkin & Eakins, 2009). Most governments recognise the essential role that FDI plays and have devised various strategies to attract it (Adam & Tweneboah, 2009). To seek growth and development, several LDCs, notably in Africa, South America, and parts of Asia, are now prioritising the potential of FDI in their economies. Many countries clearly see FDI as a source of additional foreign resources that can help to economic progress (World Bank, 2015). Babatunde (2011) hypothesised that better access to improved infrastructure services is one of the components of a favourable investment climate for foreign investors and an important engine for long-term economic growth, whereas Dinh, Vo, and Nguyen (2019) contend that macroeconomic factors may play a role in attracting FDI, thereby influencing economic growth.

FDI and economic growth in developing countries

Methodological variations and the operationalization of the study variables may be the cause of the disparity in findings between the researchers. Since most of the research have concentrated on developing economies, contextual variations may potentially be a factor in the conflicting results. The study identified prerequisites in the host nation that aid in leveraging FDI and have an impact on economic growth. These conditions include established financial and legal institutions, suitable infrastructure, favourable monetary and fiscal policies, and a supportive macroeconomic and structural environment that directs FDI to profitable investments. (Otieno, O. W., & Aduda, J. (2022).

Other than employment, common observations by many studies have concluded that FDI inflows cause growth within the given country, in which it may be transferred through economic changes in human capital, skills, employment, export trade, and import trade. FDI flows can also have transferred through institutional changes, market integration, innovations of technology transfer, and spatial agglomerations (Fuangfoo A. M., 2016).

Looking into the research from developing countries, a study of Fuangfoo A. M., (2016), consider the indicator of FDI (Foreign Direct Investment) for the impact of minimum wages in Thailand. The result from the study found that minimum wage and Inflation positively affect FDI Inflows; however, they are not statistically significant. The other indicators such as Aggregate Demand (GDP), Trade Openness (export/import ratio), and Internet Users (per 100 people) negatively affect FDI Inflows but are not statistically noteworthy.

Most empirical analyses find that FDI boosts host-country factor productivity and income growth over and beyond what local investment would ordinarily cause. However, assessing the degree of this influence is more challenging, not least because substantial FDI inflows to developing nations sometimes coincide with extremely high growth rates caused by unrelated variables. It is unclear if, as some argue, the good impacts of FDI are tempered by a partial "crowding out" of local investment. Some academics have discovered signs of crowding out, while others believe that FDI might help raise domestic investment. Even if crowding out occurs, the net effect is often positive, not least because the replacement tends to free up scarce domestic money for other investment goals. Adusah-Poku (2016) revealed that foreign capital inflows had a favourable and significant impact on economic growth. The study used total factor productivity to simulate the impact of endogenous growth.

In the past, Forte (2013) studied the relationship between foreign direct investment and economic development in various industrialised and developing nations. To obtain additional samples, information from several nations is compiled into a single database. The influence of foreign direct investment, however, was noted to rely on the internal situation of the host nation in the conclusion. Another study on the same topic was conducted by Kastrati (2013), and the findings showed that while overall, foreign direct investment had a favourable influence on economic growth, it wasn't completely positive or negative because there was still a chance that it may have negative effects. Furthermore, Iqbal et al. (2014) carried out the same investigation in Pakistan and established that foreign direct investment has an impact on economic growth. In the last section of their report, they also noted that the effect may vary depending on cultural differences, suggesting that the research of economic growth should be carried out each nation.

Is minimum wage in developing countries attract FDI?

It is commonly considered that there is a negative relationship between wage rate and FDI inflow, that is, more FDI will flow into a nation with a low wage rate. In this scenario, the Least Developed Countries (LDC) are confident that they would be able to attract more FDI due to their low wage rates. It is extremely difficult in low-income nations to improve the savings-to-GDP ratio to achieve quick economic development. Foreign direct investment (FDI) is an essential source of private cash for LDCs and developing nations to meet their investment requirements. With low levels of domestic savings and loans to developing countries falling, the importance of FDI as a source of private capital for low-income countries is growing (Asiedu,2002). FDI not only creates jobs, but it is also considered as a method of obtaining new technology, improving firm management techniques, and gaining market access in the developed world (Noorbakhsh, Paloni and Youssef, 2001). However, as compared to nations with high wage rates, LDCs struggle to attract a significant quantity of FDI. The article stated that low wages are not a competitive advantage for attracting FDI, but rather a barrier to attracting FDI. Developing country FDI outflows made for 21.1% of all FDI stocks in 2015, up from 9.9% in 2000, according to the 2016 World Investment Report (UNCTAD, 2016). Meanwhile Fang & Tang (2018) discover that higher minimum wages for businesses are positively correlated with a higher likelihood of executing external FDI. According to their first findings, a 10% rise in the minimum wage increases the likelihood of external FDI by 0.0289 percentage points. Given that just 0.222% of the businesses in our sample engage in any outbound FDI, this is a significant effect.This study's main goal was to examine the established link between foreign direct investment, minimum wage and economic growth.

RESEARCH METHODOLOGY

This study conducted a review of the literature to find, collect, and analyse relevant published articles on foreign Direct Investment, minimum wage and economic growth. The authors started the review by outlining the search strategy, which was divided into three stages: identification, screening (inclusion and exclusion criteria), and eligibility.

Identification

Identification is the process of looking for synonyms, related terms, and variations of the study's main keywords, which are to foreign direct investment, minimum wage, and economic growth. It aims to broaden the database options available for searching for additional relevant articles for the review. The first step was to choose the keywords that would be used in the search. Following that, based on previous research and a thesaurus, similar keywords related to foreign direct investment, minimum wage, and economic growth were used. Finally, the authors improved existing keywords and created an entire search string (using phrase searching, wild card, truncation, Boolean operators, and field code functions) for the database, google scholar (Table 1). The primary databases used in this review were google scholar. After using this database, the search yielded 516 articles.

Table 1: The Search String

Databases	Keywords used
Google scholar	TITLE-ABS-KEY (("foreign direct investment" OR “FDI”) AND ("economic growth*" OR “minimum wage*"))

Screening

To screen all 516 selected articles, this study used automated criteria selection based on the database's sorting function. Furthermore, to ensure the review's quality, only articles with empirical data that have been published in a journal are included. Furthermore, to avoid reader misunderstandings, articles published in English are included in the review.

Eligibility

The authors' eligibility refers to how they manually screened the retrieved articles to ensure that all the articles that passed the screening process met the criteria. This was accomplished by reading the titles, abstracts, and conclusions/discussions of the articles.

DISCUSSION

FDI and Minimum Wage

Fang & Tang (2018) discover that higher minimum wages for businesses are positively correlated with higher likelihood of undertaking FDI abroad. According to the method used by Dube et al., they continue to find that a rise in the minimum wage has a sizable and statistically significant impact on a firm's likelihood of attracting foreign direct investment (2010). While Haepp, T., & Lin, C. (2017). find that the minimum wage has a considerable negative impact on rates of human capital investment while having no overall impact on rates of fixed capital investment. According to the degree of development, Figini, P., & Go¨ rg, H. (2011) discover that the impact of FDI varies. They provide two distinct patterns, one for OECD (developed) nations and the other for non-OECD (developing) countries. The findings point to the existence of a nonlinear impact in developing nations; pay inequality rises with FDI inbound stock, but this effect decreases with further FDI growth. Pham, A., Poole, J. P., & Santos-Paulino, A. U. (2021) findings generally imply that a widening gender wage gap at the top of the pay scale may be a result of foreign investment. However, Tintin, C. (2012) estimates' findings indicate that FDI raises worker income in OECD nations. FDI benefits people on minimal pay as well as the average salary. The benefits of FDI, however, do not equally benefit those who make minimum wage and those who make more than the average income. It means that FDI might exacerbate the pay gap between those making the minimum wage and those earning the average salary in OECD nations.

FDI and Economic Growth

Most empirical analyses find that FDI boosts host-country factor productivity and income growth over and beyond what local investment would ordinarily cause. However, assessing the magnitude of this influence is more challenging, not least because substantial FDI inflows to developing nations sometimes coincide with extremely high growth rates caused by unrelated variables. It's unclear if, as some argue, the good impacts of FDI are tempered by a partial "crowding out" of local investment. Some academics have discovered signs of crowding out, while others believe FDI may promote domestic investment. Regardless, even where crowding occurs, the net effect is generally positive, not least because the replacement tends to result in the freeing of scarce domestic money for other purposes. Even if crowding out occurs, the net effect is often positive, not least because the replacement tends to free up scarce domestic money for other investment goals. FDI appears to have a considerably reduced influence on growth in the least developed nations, which has been linked to the presence of "threshold externalities." Imperfect and weak financial markets may also prohibit a country from receiving the full advantages of FDI. Weak financial intermediation hurts domestic businesses far more than global corporations (MNEs). In other situations, it may result in a lack of financial resources, preventing them from capitalising on commercial possibilities created by the foreign presence. Participation of foreign investors in physical infrastructure and financial sectors (subject to sufficient regulatory frameworks) can help on these two fronts.

CONCLUSION

According to the empirical research analysed, foreign direct investments, minimum wage can impact economic growth in a favourable, negative, positive, or even neutral manner. As a result, the findings show that raising the local minimum wage has a significant impact on the likelihood of undertaking external FDI. The results for developing nations indicate the presence of a nonlinear impact; pay inequality rises as FDI inward stock rises, but this effect lessens as FDI rises further. According to Tintin, C. (2012) results, the beneficial effect of FDI on labour income is unevenly divided across average and low wage earners. Although FDI raises the labour income of minimum wage employees, it may have a detrimental impact on the relative pay. Because FDI has a substantially lesser cumulative effect on minimum wage earners, they may believe that FDI damages their real income when it does not.

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The Necessity of CHINA YUAN (CNY) Internationalization From the Perspective of Currency Internationalization

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ABSTRACT

Firstly, this paper defines currency internationalization. Currency internationalization is a

process in which the currency of a country crosses the national border, is freely convertible, traded and circulated around the world, and finally becomes an international currency. Then it studies the necessity of currency internationalization, including theoretical research and case study of dollar internationalization. Secondly, it discusses the advantages and disadvantages of currency internationalization, what benefits it will bring to the RMB, and what adverse effects it will have on the RMB. And the final conclusion is that RMB needs to further promote the internationalization process.
Keywords: Currency Internationalization;CHINA YUAN(CNY); Necessity

INTRODUCTION

1. Currency internationalization

1.1 The meaning of currency internationalization

The International Monetary Fund (International Monetary Fund) defines currency internationalization as the process in which a country's currency crosses the country's borders, is freely convertible, traded and circulated around the world, and finally becomes an international currency. Specifically, currency internationalization means that on the basis of the functions of a country's currency, with the expansion of domestic goods and services in foreign markets, it flows abroad through the current account, capital account and free exchange of foreign currencies, and gradually assumes the role of foreign countries. The currency function of the country, and thus the process from the national currency to the regional currency, and then to the international currency. The IMF's definition of currency internationalization is basically similar to that of Cohen (1971), the earliest scholar who began to study currency internationalization, both from the perspective of currency functions.

Subsequently, Kenen (1983) and Hartmann (1971) conducted a deep excavation of Cohen (1971)'s definition of currency internationalization with the three functions of currency as the starting point, as shown in Table 1-1:

Table 1-1 definition of currency internationalization from the perspective of currency function

Monetary function	Official Perspective	private angle
Means of payment	Balance of payments and intervention in foreign exchange markets	Direct currency exchange or indirect currency exchange in international transactions
Value reserve	It is used as official reserves by non resident official departments	Used to represent the value of stocks, bonds, deposits, etc. when selecting financial assets
Unit of measure	Determination of exchange rate parity and stabilization of exchange rate	Units of Account in International Transactions

Li Daokui and Liu Linlin (2008) believe that currency internationalization includes three aspects: first, the currency of the currency enjoys a certain degree of circulation abroad; second, the financial products denominated in the currency of the country have become international, including the central bank. Therefore, the scale of the financial market denominated in the currency of the country continues to rise; third, the transactions settled in the currency of the country in international trade reach a certain proportion.

Generally speaking, currency internationalization is the formation process of international currency, and international currency is the final development form of currency internationalization. As an international currency, it should have the following three characteristics: (1) similar to the function of metal currency;(2) The function of being freely held by the government; (3) The function of intervening in the foreign exchange market.

1.2 Basic conditions for currency internationalization

1. Economic strength is the foundation supporting currency internationalization

Observing the process of the internationalization of the currencies of various countries, no matter in which period, when their currencies go abroad to the world, the country plays a very important role in the world economy, and their economic strength is dwarfed by other countries in the same period, Therefore, strong economic strength is the basis for the internationalization of a country's currency. Only when the strength of the economy supporting the issuance of currency reaches a certain quality and quantity of accumulation, will the currency issued by it have a reliable foundation.

Eichengreen (1996) pointed out through quantitative research that if the proportion of the GDP of a currency issuing country in the global GDP increases by 1%, then the proportion of the currency's central bank currency reserves will also increase by 1.33%. In other words, an increase in the global share of GDP can significantly increase the level of currency internationalization. Figure 1-1 shows the share of major countries' GDP in world GDP.

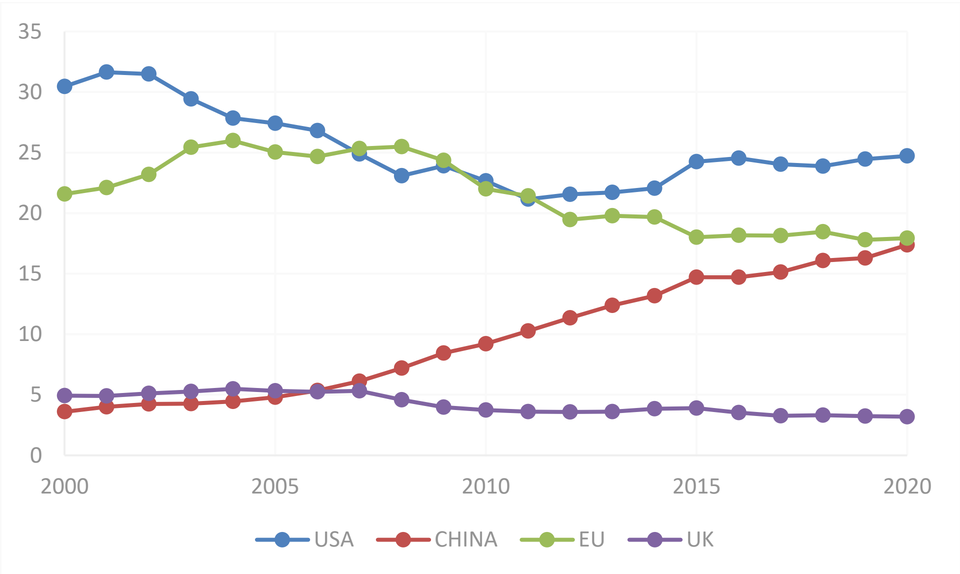

Figure 1-1 Global share of GDP of major countries

2. Developed financial market is the carrier of currency internationalization

Currency internationalization means that the country will have a large amount of currency circulating in the overseas financial market, which means that the country's financial market needs to have the function of providing currency circulation services for the international market. Only with the backing of a highly developed and free financial market can money circulate freely around the world. A developed financial market should have two characteristics: first, openness. Openness means freedom and unrestrictedness. Funds can flow in and out freely, and various financial transactions can be completed without restrictions, especially for non-restricted transactions. Residents provide value storage and investment value-added services; followed by high efficiency, high efficiency means a variety of financial products, an active secondary market and the ability to quickly adjust prices in response to emergencies. Williams (1968) studied the cross-border flow of currency and proposed that the liquidity of currency in the international market mainly depends on the financial market and the development level of the financial sector of the currency issuing country. and centralized international banking system.

3. Stable currency value is the help of currency internationalization

The stability of a country's currency value is conducive to the internationalization of the currency. If a country's currency is accepted by the international community as a currency for settlement and reserve, its currency value must be stable and have a tendency to appreciate, and the currency value fluctuates sharply or has a tendency to depreciate significantly, which will be detrimental to its international currency status.

LITERATURE REVIEWR

2. The necessity of currency internationalization

2.1 Theories related to currency internationalization

The first half of the 20th century was a period of rapid development of currency internationalization ideas and a period of theoretical framework formation. During this period, economists began to conduct in-depth discussions on the world currency or currency internationalization. At this stage, currency internationalization gradually began to rise from thought to theory.

1. Cohen's Monetary Geography

Benjamin Cohen (Benjamin Cohen) is a famous American economist, author of a special theoretical monograph on currency internationalization - "Monetary Geography". Cohen clearly defined currency internationalization, defined the functions of international currency, and further studied the relationship between currency internationalization and national currency sovereignty.

In the introduction to Monetary Geography, Cohen wrote, "In the beginning all currencies had a national character: one currency per country." But as the economy developed, "the use of money was no longer confined to the territorial boundaries of countries. "There are many currencies that have been used as a tool of exchange outside the home country".

Cohen believed that money is something that has three functions: an intermediary of exchange, a unit of measurement, and a store of value. The world currency, like currency, also has these three functions accordingly. Cohen's definition of the functions of the world currency is also a classic description of the functions of the world currency that can be generally accepted by the academic community today.

Cohen's "Monetary Geography" is an important achievement of the early research on currency internationalization theory. It systematically and clearly expounds related issues about currency and currency internationalization, and provides important theoretical support for the development and development of subsequent currency internationalization theory. .

2. Friedman's floating exchange rate theory

Milton Friedman is the founder of the Monetary School. Monetary school held high the banner of "liberalism" again, and put forward a series of policy propositions such as stabilizing the currency and opposing inflation, which complied with the needs of the capitalist economic development at that time and won official recognition and appreciation. Friedman's greatest contribution to the theory of currency internationalization is his predictive theory of floating exchange rates.

After absorbing and drawing on Fisher's modern transaction quantity theory, Friedman established the modern monetary quantity theory on the basis of the Cambridge equation of Marshall and Pigou's cash balance quantity theory. It is by borrowing from Friedman that he was able to break free from the shackles of the previous "fixed exchange rate" theory and put forward the floating exchange rate theory, which has become an important theory that still dominates the international exchange rate system today.

At that time, the international financial system was in the period of the Bretton Woods system, and the fixed exchange rate system was in the ascendant. However, Friedman was keenly aware of the drawbacks of the fixed exchange rate system at that time and predicted that the fixed exchange rate system would end. He believes that "a rigid fixed exchange rate will cause serious unnecessary difficulties." "I believe that the results of monetary policy will be better implemented with a fixed law and a fixed rate of growth in the quantity of money." From the perspective of currency internationalization, Friedman has long foreseen that the fixed exchange rate system will come to an end, and the floating exchange rate will become the currency exchange system used by most countries in the world.

In the second half of the 20th century, the Bretton Woods system centered on the US dollar disintegrated, and the mark, the yen and the euro became international currencies successively, and the international monetary system gradually showed a state of diversification. The research perspective of currency internationalization is no longer limited to the study of a single national currency, and began to explore the possibility of integrating multiple sovereign currencies into a single regional currency or world currency, which was verified in the birth of the euro.

2.2 Currency internationalization case -- internationalization of the US dollar

The internationalization of the U.S. dollar is a path that relies on the background of war and the arrangement of the global monetary system to achieve internationalization. It has experienced the historical transition from the gold standard to the credit currency system, and has achieved historical transcendence over the British pound. After the disintegration of the Bretton Woods system, it still maintained its dominant position in the international monetary system by relying on its first-mover advantage and stock strength, and occupied the core pricing position of international bulk commodities through the petrodollar strategy. Figure 2-1).

The internationalization of the dollar can be divided into three stages. The first is the preparation stage for internationalization. After the end of the Civil War in 1865, the establishment of a unified domestic market and monetary system was the starting point for the internationalization of the US dollar. In 1879, the United States implemented the gold standard. In 1900, the Gold Standard Act was formally passed. In 1913, the establishment of the U.S. Federal Reserve System made the liquidity of the U.S. dollar a lender of last resort, and the stability and convertibility of the U.S. dollar currency were effectively guaranteed, providing a foundation for the development of the U.S. dollar-denominated financial instrument market. During the First World War, the United States relied on the trade of military supplies and became the world's largest trade exporter. At the same time, it provided loans to Britain, France and other countries to purchase war materials and became an international lender. The rapid transition of the United States from a net debtor to a net creditor has resulted in increasing demand for the dollar, which has gradually become a hard currency. In 1919, the United States ranked first in the world in foreign direct investment. During World War II, U.S. exports rose sharply, while Britain continued to decline. The United States continues to lend to its allies to provide dollar liquidity abroad.

The second is the development stage of dollar internationalization. The two world wars have reshuffled the global economic and political structure, and the United States has become the world's number one power with its complete manufacturing base and large gold reserves. In 1944, the establishment of the Bretton Woods system made the US dollar the only international unit of account and the same international reserve currency as gold, and the trade finance field gradually formed a dependence on the US dollar. In 1947, the United States initiated multilateral tariff reduction negotiations and signed the General Agreement on Tariffs and Trade in Geneva. It objectively reduces tariffs and other obstacles in international trade, integrates the world economy, and further consolidates the position of the US dollar in international trade. In July 1947, in order to alleviate domestic excess production capacity and stimulate economic growth, the United States launched the Marshall Plan for Europe and carried out a series of donations, grants and loans. The Marshall Plan expanded dollar output and injected funds into the reconstruction of Western Europe. Driven by the Marshall Plan, the US dollar has become the main currency for trade settlement in Western Europe, and European countries have obviously relied on the US dollar. Under the Bretton Woods system, the US dollar has achieved great success, but at the same time, it also has hidden worries as an international currency. The shortage of international liquidity supply and the serious imbalance of international payments have brought about the "Triffin Dilemma". In 1960, the United States was in financial distress, and countries around the world questioned the purchasing power of the dollar. In 1969, the International Monetary Fund created the super-sovereign currency SDR in the hope of restoring the unfavorable situation, but the contradictions have been accumulating, and the dollar crisis has occurred frequently. In 1971, Nixon was forced to decouple the dollar from gold, and the Bretton Woods system collapsed. In 1976, countries reached a new consensus that the dollar's monopoly on foreign exchange reserves of various countries no longer existed.

The third is a new stage in the development of the internationalization of the US dollar. After the disintegration of the Bretton Woods system, due to the loss of the inherent arrangements of the international monetary system and the absence of gold as the basis for currency issuance, the international status of the US dollar has loosened to a certain extent. However, the U.S. dollar relies on the first-mover advantage and stock advantage to form the inertia and dependence of currency use, and maintains its dominant position in the international monetary system. As time goes by, the dollar has formed the dominance of the U.S. dollar in the international monetary field pattern.

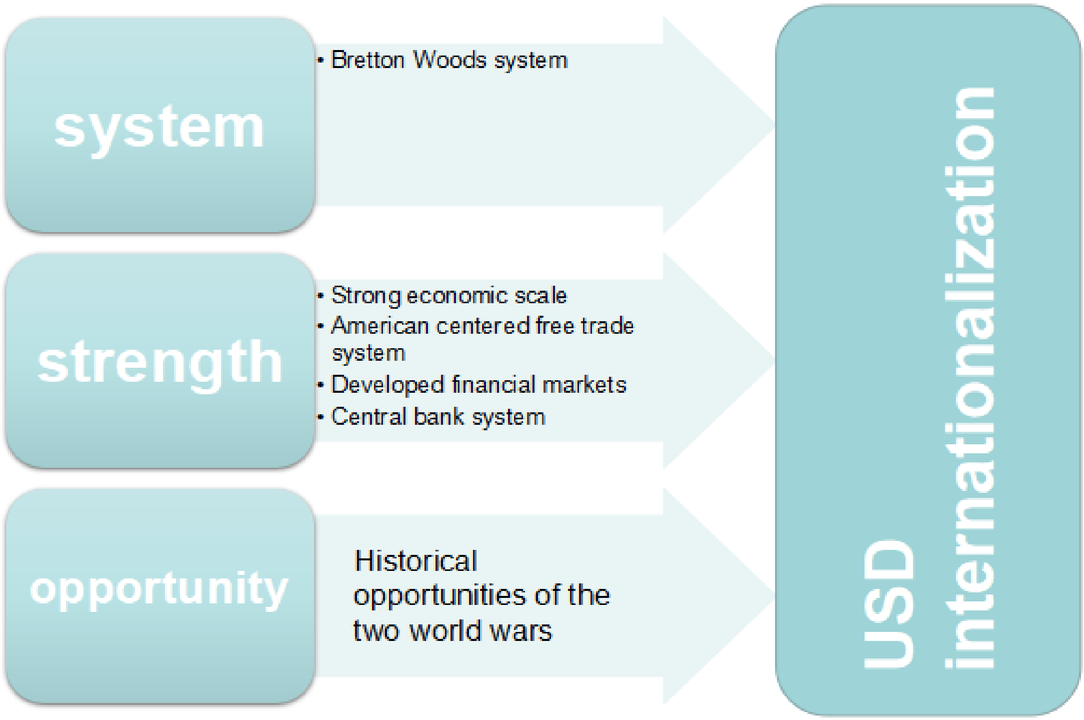

Figure 2-1 USD internationalization path

DISCUSSION

3 Analysis of the advantages and disadvantages of CNY internationalization

3.1 The benefits of CNY internationalization

Why did the Chinese monetary authorities decide to promote the internationalization of the CNY so vigorously? What specific results does the Chinese government hope to achieve by promoting the internationalization of the CNY? First, the internationalization of the CNY will reduce the exchange rate risk of Chinese companies. The internationalization of CNY means that more foreign trade transactions and financial transactions will be settled and paid in CNY. Therefore, the exchange rate risk of Chinese enterprises will be reduced or offset accordingly. The pressure on CNY appreciation has been steadily increasing since early 2003 due to the persistent double surplus in China's current account and capital account. Many believe that if exports are settled in renminbi, Chinese exporters can avoid currency risk while the renminbi is appreciating, so the momentum of Chinese exports can be maintained.

Second, the internationalization of the CNY will reduce China's transaction costs in trade, including trade financing costs, and enable more flexible, convenient and low-cost allocation of required resources on a global scale, while further expanding international resources. The rapid increase in the use of the renminbi as a settlement currency (payment currency) has greatly boosted China's outbound trade.

Third, the internationalization of the CNY is conducive to improving the financing efficiency of Chinese financial institutions, thereby enhancing their international competitiveness, and contributing to the expansion of China's financial services sector. At the same time, it is also conducive to China's efforts to develop Shanghai as an international financial center . The internationalization of the renminbi means that China has become the issuer of a world currency, which will enable China to gain a higher status and greater influence in the international financial system, and gain greater access to formulating and revising international affairs rules. big voice.

Fourth, the internationalization of the renminbi means that the frequency with which China uses the U.S. dollar as a medium of exchange will be greatly reduced and the need to use the U.S. dollar as a store of value will also decrease, which means that China will be able to pay less seigniorage to the U.S. than the seigniorage It will also be a major benefit for our country. At the same time, the internationalization of the CNY can alleviate the problem of excessive foreign exchange holdings to a certain extent. After import and export transactions are settled in local currency, China's demand for other international reserve currencies will decrease, and the currency substitution effect of foreign exchange reserves will reduce the scale of my country's foreign exchange reserves, which will help my country alleviate the problem of excess liquidity.

Fifth, it is conducive to the improvement of my country's international influence and currency discourse power. Currencies such as the US dollar, the euro, the Japanese yen and the British pound constitute the current international monetary system, of which the US dollar is the dominant international currency. This is an unbalanced system controlled by developed countries. In the international monetary system, developing countries have always been in a dominant position. The impact of this defect on my country's economy will decrease with the continuous development of CNY internationalization. Once the CNY is internationalized, my country will have the right to issue and regulate a world currency, which will enhance my country's influence and voice over global economic activities.

Sixth, it will help reduce China's dependence on other international currencies. After the realization of internationalization, CNY can perform the function of settlement currency, so my country's use of other international currencies in international settlement will gradually decrease, and more and more foreign businessmen will conduct settlement through my country's domestic financial institutions. The rapid development of institutions can also promote the further growth of foreign direct investment and the enhancement of the international competitiveness of products. At the same time, it is also conducive to enhancing my country's position in international finance, promoting the coordination of the international financial order and stabilizing the international monetary system.

Seventh, to promote the increase of net income from financial operations of overseas reserve assets. When renminbi becomes an international currency, foreign central banks will hold renminbi in the form of deposits or bonds as reserve assets. On the one hand, my country is responsible for interest compensation for the renminbi held by foreign central banks, and this part of the cost will reduce seigniorage income. On the other hand, my country's banking system and government can provide a huge source of funds through the overseas reserve assets held by foreign central banks. my country's banking system and fiscal expenditure mechanism effectively convert this part of funds into loanable funds that can generate income . At the same time, after the internationalization of CNY, functions such as "transaction medium" will be implemented, which will be realized through payment and settlement in the domestic banking system, thereby obtaining a certain income from intermediary business.

3.2 Disadvantages of CNY Internationalization

First, the lack of independent monetary policy. Under the conditions of an open economy, a country's fixed exchange rate system, free capital flow and domestic monetary policy cannot be satisfied at the same time, and a country can only achieve at most two of the three goals. This is Krugman's "The Trinity Paradox". Therefore, a country can only choose two of the three: exchange rate stability, free capital flow, and domestic monetary policy independence. The internationalization of CNY requires a free exchange rate system and open capital controls. If China chooses the first two, the process of CNY cross-border circulation and gradual internationalization will bring unpredictable problems and problems to the formulation and implementation of domestic monetary policy. Constraints are also likely to affect the effectiveness of monetary policy, resulting in the lack of an independent monetary policy.

The internationalization of the renminbi will complicate the factors affecting the renminbi, weaken the monetary authorities' ability to control the base currency and regulate the domestic economy, and have an impact on the effectiveness of the PBOC's monetary policy. The central bank of China will face a more prominent problem of "internal and external equilibrium conflict" when formulating monetary policy, because the amount of CNY held overseas will limit the implementation of domestic monetary policy. The more the effect of implementation deviates from ideal expectations, the greater the deviation. In addition, after the internationalization of the renminbi, when the spot exchange rate of the renminbi deviates from the expected exchange rate, or the spot rate deviates from the expected interest rate, or the actual exchange rate deviates from the nominal exchange rate, there will be arbitrage opportunities. It will stimulate the short-term speculative demand of foreign investors for the purpose of arbitrage, resulting in the frequent flow of short-term speculative capital, which is not conducive to the sound development of my country's financial market. At the same time, due to the disappearance of currency barriers, economic crises, inflation, etc. can be quickly transmitted to the country to affect my country's economy, and the stability of China's financial system will be weakened.

Second, a major problem that my country will face after the internationalization of the CNY is the "Triffin Dilemma". The "Triffin Dilemma" refers to the difference between the trade deficit required to ensure that the international currency circulating in the market is sufficient to meet the needs of international trade and reserves and the trade surplus required to maintain the stability and strength of the international currency. the contradiction. That is to say, if the CNY is internationalized, other countries must net export goods to China in order to obtain CNY, and exchange the goods for CNY. With the development of the world economy, the renminbi required for international trade continues to rise, so China must continue to net import goods, thereby exporting renminbi to the world. On the other hand, in order to maintain the stability of the currency value of the renminbi, China cannot continue to maintain a net import status, otherwise it will lead to the devaluation of the renminbi. Because the above two points are contradictory, this constitutes the Triffin Dilemma. There is a "Triffin Dilemma" when any currency acts as an international currency.

Third, the issue of currency substitution. Currency substitution is a phenomenon in which foreign currency partially or fully replaces local currency in various functions of currency in the process of economic development, when the domestic market loses confidence in the stability of the currency value of the domestic currency or the rate of return on currency assets is relatively low. Free convertibility is one of the important prerequisites for the internationalization of CNY. Only freely convertible currencies can be held by foreign countries. At present, my country has started the conditional free convertibility under the capital account, and the free convertibility under the current account has been realized. While realizing the free convertibility of CNY, my country also faces the problem of currency substitution. Although currency substitution shows that the country's currency is willing to be held by foreign non-residents, which is a popular market performance of currency, currency substitution will also have many negative effects on a country's economy: first, due to the constant currency exchange between domestic residents and foreign residents. exchange, which increases the difficulty of determining the exchange rate and exacerbates the instability of the exchange rate; secondly, due to the huge amount of domestic currency circulating abroad, it increases the difficulty of measuring the money supply, thereby increasing the difficulty of determining the domestic interest rate and The effectiveness of central bank monetary policy implementation. Finally, currency substitution reduces the country's seigniorage benefits.

CONCLUSIONS

From the above analysis, it is not difficult to find that in the process of CNY internationalization, risks and opportunities coexist. How to better complete the internationalization requires us to have better policies and ideas. The details are as follows:

The internationalization of CNY is related to China's voice and long-term economic interests in the international monetary system. It is not only the inevitable requirement but also the inevitable result of the rise of China's great power. However, the reform of the international monetary system is not a day's work. The internationalization of CNY is a long-term, gradual and uneven process. This process needs to be based on the improvement of China's comprehensive national strength in economy, politics, military and culture, driven by the innovation and progress of science and technology, and supported by the sound development and gradual opening-up of the financial system. Therefore, the internationalization of CNY should not be rushed. At the same time, we should see that although Britain, the United States, Germany, Japan and other countries did not take it as the main goal at the initial stage of the internationalization of their currencies, the internationalization process of sterling, US dollar, Deutsche mark and Japanese yen has always been inseparable from the shadow of the government, and the differences in government policies and measures have indeed had a differentiated impact on the internationalization process of their currencies. In conclusion, to promote the internationalization of CNY, we need to focus on both long-term strategic measures and grasp the phased window period in the process of CNY internationalization, and launch some specific promotion measures in due time.

4.1 Continuously improve China's economic strength and financial development level

Currency internationalization is the inevitable requirement and result of the deepening of the international division of labor system brought about by economic globalization and the world unified market. From the perspective of the internationalization process of sterling, US dollar, Deutsche mark and yen, a country often first realizes its economic rise, and then gradually improves its status and voice in the process of in-depth integration and participation in the international economic system, accompanied by the gradual internationalization process of sovereign currency. After the internationalization of currency, especially after occupying the dominant power of the international monetary system, it plays a counter complementary and reinforcing role in the improvement of a country's economic strength. Fundamentally speaking, the internationalization of a country's currency is the reflection of the country's strong comprehensive economic strength in the form of currency. A country's economic strength is strong, its position in the global economic club is high, its voice is large, and its influence coverage is large. Naturally, the internationalization degree of its currency will rise. A country's currency internationalization process must be dynamically unified with its national economic strength, size up the situation and act according to its ability. In addition, the development level of a country's financial system is also a key factor affecting the degree of currency internationalization. After currency internationalization, a country's financial system will no longer only face domestic investors, but provide public investment goods to the world, which puts forward higher requirements for a country's financial system Please. First of all, a country's financial system itself should be healthy enough and have strong immunity to external shocks in order to play the role of global financial stabilizer. Secondly, a country's financial system should have strong innovation and service capabilities and be able to provide leading and sufficient financial products for global investors.

The internationalization of CNY is fundamentally a reflection of China's comprehensive economic strength and openness. Without the strong support of national economic strength, the internationalization of CNY is difficult to be stable and far-reaching. Although China's economy is facing complex environmental constraints at home and abroad, the supply side structural reform has reconstructed the foundation of China's sustainable economic development, and the internationalization of CNY has also provided a good driving force for China's economic transformation and the construction of a more stable international monetary system. At present, China's economy is in a critical period of transformation of "superposition of three periods". Further promoting reform can create a good domestic environment and foundation for the internationalization of CNY and change the bottleneck of weak voice in CNY pricing in trade and investment. We should further promote the transformation of economic growth mode, adjust economic structure, promote scientific and technological innovation, and improve the quality and efficiency of economic development.

4.2 Promote the opening of financial markets and the construction of offshore and onshore monetary centers

CNY internationalization is closely related to financial reforms such as financial market opening, capital account convertibility and exchange rate marketization. They promote and influence each other. Mature financial markets can provide overseas investors with channels for asset appreciation and hedging. The internationalization of CNY has also objectively accelerated the reform and opening up of China's financial market. Therefore, we should actively promote the two-way opening of domestic financial markets and develop a multi-level financial market system. At present, market opening has become an irreversible trend. The internationalization of CNY should be combined with the gradual, prudent and controllable opening of financial market and capital account. It can still solve the difficult problems such as capital account convertibility in accordance with the principles of liberalizing long-term, then short-term and local currency transactions before foreign currency transactions. At the same time, we should vigorously develop the bond market, improve the price formation mechanism such as exchange rate and interest rate, and promote the direct listing and trading of CNY with more national currencies. Enrich market participants, form an inclusive and open capital market, constantly reduce the threshold for overseas institutions to invest in inter-bank bonds, foreign exchange market and stock market, and provide good channels for overseas CNY asset holders to maintain and increase value.

Both onshore and offshore markets are an important part of the internationalization of CNY. Shanghai is the forefront of China's economic reform and innovation and has the potential to become an international financial center. Building Shanghai into an onshore CNY center can effectively radiate the domestic CNY market and help lead the inland region to continuously broaden the pace of opening up. The Shanghai free trade zone can also make a pilot for the convertibility of capital account and the free use of CNY. As an important CNY offshore center, Hong Kong can radiate other CNY offshore markets around the world. We should actively develop the offshore and onshore markets of CNY, take Shanghai and Hong Kong as the center, open up the interconnection mechanism between the two markets in the fields of financial transactions, form a circular channel of CNY cross-border funds, and guide market players to make full use of domestic and foreign markets and resources to provide effective support for the internationalization of CNY. In the exploration of CNY internationalization in Shanghai, we should continue to vigorously improve the construction of spot and futures markets for commodities such as gold and crude oil, encourage foreign investors to participate in domestic market transactions, and enhance the influence of CNY in the international commodity pricing market. Develop CNY bond and foreign exchange trading markets and further relax trading restrictions on overseas entities. Build a more open and free financial environment based on the development of free trade account, and form a competitive international financial center through the construction of free trade port. In promoting the internationalization of CNY in Hong Kong, we should constantly enrich the products of CNY pricing and settlement and form an open, free and active offshore currency trading center.

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Electricity Consumption and Economic Growth: The Impact of Demographic Transition

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ABSTRACT

This study aims to investigate the economic growth concerning electricity consumption in the demographic transition of population ageing. The direction of the framework was to expand the basic neoclassical growth model. The investigation discussed the relationship between electricity consumption and economic growth; population ageing on electricity consumption; and population ageing on economic growth. Demographic transition alters the consumption structure within the population, which potentially affects economic growth. Meanwhile, electricity consumption is core to the development process. Investigation of electricity consumption and population ageing seems crucial in the production sector. The proposed model can be used in ways that give us new insights into the relationship between energy and population growth, especially in developing countries. The developed framework is primarily focused on the linkages between electricity consumption and economic growth. This study was lacking in real data application and further work will be implemented. This paper is among the first to contribute to the debate on electricity consumption and economic growth from a population ageing perspective. It has the value of enlightening the complexities of the economic system and the current social changes of the global demographic transition.

Keywords: energy consumption; neoclassical production function; population ageing; sustainability

INTRODUCTION

There are numerous research and literature that focus on the relationship between energy especially electricity consumption and economic growth. The increase in the number of studies is mainly due to the rise in global demand for the energy consumption (i.e., oil and gas). The upsurge in this demand can be linked to the rapidly growing economies (Salahuddin et al., 2018). Economic growth leads to an increase in electricity consumption especially due to industrialization, urbanization, and improved standard of living. Furthermore, rising price of crude oil, ever-growing of emission level and climate change have added the momentum to the deliberation of the economic growth (Lawal et al., 2020). U.S. Energy Information Administration (2022) highlighted that economic output and energy consumption specifically electricity consumption positively correlate with each other. Karanfil and Li (2015) stated that the nexus between electricity consumption and economic growth are highly dependent on the country's income level as well as regional differences. The influence of energy consumption in the model of an economic growth was first established around 1970s after the oil crisis in 1973. Energy plays a vital role in the economic growth of a nation whereby almost all production of goods require energy to process the raw materials (Azam et al., 2015). Since then, the relationship between energy consumption and economic growth has become a major focus in the economic literature (Aslan, 2014; Tang et al., 2016; Hayat et al., 2018; Danlami et al., 2019).

The real economic system greatly depends on the physical energy consumption (i.e., electricity) as well as on the capital and labour. According to Barro and Sala-i-Martin (1995), technological progress can always be expressed as labour-augmenting and consistent with the existence of a steady state in the production function. Sardadvar (2011) highlighted that labour-augmenting is also known as *Harrod-neutral*. If the technological progress evolves to capital-augmenting, it is defined as *Solow-neutral*. A progress is considered to be *Hicks-neutral* when the technological progress acts as a direct multiplication between increasing scale factors with the production function. In addition, the study mentioned that aggregate output increases with population and technological progress. One of the issues related to the population is the ageing process that is taking place worldwide. In most developed countries, the average age of people in the labour market has been gradually increasing (Dixon, 2003). According to Balsalobre-lorente et al. (2021), population ageing may contribute to the shortage of the labour supply which will undermine the potential of an economic growth.

Mačiulytė-Šniukienė et al. (2019) discussed that the direct economic impact of population ageing is through labour force. Despite numerous forethoughts that discussed labour in the context of population ageing and economic growth, the interrelated focus on electricity consumption within the same context is still lacking. In an economic growth model, technology innovation can be substituted by energy. Thus, the main aim of this study is to propose a new model of the economic growth with respect to the energy particularly electricity consumption in the context of population ageing. The neoclassical production function will be employed as a basic model for this study. This paper contributes to the new insight towards an economic growth model in the context of ageing nations, intending to complete several gaps from the previous studies including the future of energy consumption arising from economic activities and the fundamental role of the demographic development along with technology. This paper is divided into several main sections. Section 2 provides overview of production factors include electricity consumption, the relationship between population ageing, electricity consumption and economic growth. In Section 3, research methodology is explained. Model development is discussed in Section 4. Lastly, Section 5 provides the concluding statements.

LITERATURE REVIEW

Overview of the production factors: Electricity consumption

The complexity of the relationship between energy consumption and economic growth has attracted a lot of debate over the past years which was initiated by the seminal work of Kraft and Kraft (1978). The role of energy in the economic growth has always been clearly highlighted in the empirical studies either for a single country or multiple countries simultaneously. However, the empirical evidence was still considered to be controversial and has sparked a lot of argument in the topic of economic growth. Based on the traditional neoclassical growth model, energy is introduced as an intermediate input next to the basic factors of labour and capital contributing to the economic growth both directly or indirectly (Balsalobre-Lorente et al., 2018). Higher economic growth requires greater energy consumption which will in turn promotes more energy efficiency applications. Instead of energy in general, a study carried out by Azam et al. (2021) discovered a stable long run relationship between electricity consumption and economic growth. Churchill and Ivanovski (2020) investigated the dynamics of electricity consumption and economic growth which highlighted that electricity consumption, labour, and capital have significant positive impact on the economic growth. Hamdi et al. (2014) in their study found electricity consumption, foreign direct investment and capital significantly influenced the GDP growth while labour was assumed to be constant and was not included in the empirical analysis.

Azam et al. (2015) showed that energy consumption has significant long run relationship with the GDP. Besides, Dogan (2015) examined the short and long run estimation as well as the relationship between electricity consumption and economic growth for Turkey. The other variables included in the model estimation were capital and labour. The results indicated that all variables were co-integrated. Electricity consumption, capital, and labour have statistically significant positive effects on the economic growth. Osman et al. (2016) also investigated the energy-growth nexus that included the GDP, electricity consumption, and capital in the model estimation. Labour was excluded due to the data limitation. Based on the study, a long-run equilibrium relationship existed among the variables and has a positive relationship with the GDP as expected. In general, most of the previous studies that focused on energy or electricity consumption were based on the neoclassical growth framework. Electricity consumption positively give impact on the economic growth. Most of the studies included labour and other several production factors in the model estimation. In the relationship between electricity consumption and economic growth, mostly element of demographic transition was overlooked which is visibly indispensable in the production process. Population ageing tend to alters the labour force which means it will probably impact the energy-growth relationship.

Population ageing and electricity consumption

The global demand of electricity continues to increase with the growth of modern economics and lifestyles. In addition, the industrialisation process promotes electricity consumption to continue hike up. It was pointed out by York (2007) that population size and age structure have clear effects on energy consumption. There are also different in the allocation of private consumption expenditure across various sectors includes consumption of energy or electricity among household. Romanach et al. (2017) mentioned that older people greatly rely on electric appliances particularly air conditioners to achieve thermal comfort. The situation prompts the elderly to resort high electricity consumption and creates potential loss of adapting low-cost measures. Population ageing affects consumption structure in which special requirements exist from older people (Li and Li, 2014). They have different expectation in terms of spending and consumption especially in leisure activities, services, and goods. Deutsch and Timpe (2013) stated that consumer behaviour and socio-demographic seems as a push-factor for energy consumption. Different age group have varying lifecycle demands including the way people live in their dwellings, awareness towards energy efficiency measures, and income level. According to Barnicoat and Danson (2015), the elderly tend to spend longer in homes thus demonstrates alteration in consumption which changes the use of energy-intensive mix.

Valenzuela et al. (2014) focused on small geographic areas of Texas in their study about demographic, socio-economic and housing characteristics on household energy consumption. The age factor was considered in the study and found that elderly-led households consume less energy compare with non-elderly households. Study done by Ota et al. (2018) provides useful detailed description of the ageing on electricity consumption. The result was concluded that population ageing decreases the electricity consumption with several other determinants was also considered in the empirical investigation. In addition, the study highlighted that household size influence the demand for electricity. Nevertheless, contradict finding shows in study done by Otsuka (2017) which mentioned that ageing society have a limited relationship with electricity savings. This means that electricity savings is not possible or ageing population tend to have high electricity consumption. Aslam and Ahmad (2018) also found that population ageing implies increased in the energy demand. In addition, electricity expenditure is almost linearly increasing with age. Similarly, Kim et al. (2019) investigate the impact of the population age structure on electricity demand found increase in youth and people aged 65 to 80 raises the electricity demand in short and long term while no strong relationship among people aged over 80. Study by Estiri and Zagheni (2019) evaluated the age in energy consumption profile highlighted that there is a slight decrease in energy consumption between ages 60 and 80. Meanwhile, in the oldest cohort (i.e., people age above 80) shows an increasing concave micro-profile.

In general, most of the past studies take into account age factor with other determinants to investigate the impact on energy or electricity consumption. However, the main focus is on demographic variables itself not due to the situation of population ageing. Population ageing is accelerating in recent years and puts high pressure on economic growth indirectly via electricity consumption which is vital to investigate. Prior works existed mostly applied household level data in the empirical works. Since electricity is also crucial for economic growth in the long term, exploration on demographic transition of ageing in energy-growth relationship at aggregate level also require vigorous attention. In keeping more closely with population ageing, the suitable variables will be used as a proxy. The electricity consumption tends to change as there are alteration in the population age structure which will redirect the contribution on the economic growth.

Population ageing and economic growth

Population ageing presents many challenges to the government spending, labour force and energy consumption which is caused by dramatic reduction in birth rate and high life expectancy. In general, York (2007) highlighted that the changes of the age structure in a population correspond to higher energy consumption. Moreover, the demographic transition is likely to influence the economic structure of production and consumption. With reference to the production aspect, Maestas et al. (2016) simulated that predominantly, the increase in the population ageing proportion can reduce the economic growth which may be driven by the shift in the share of labour force. Note that as population ageing progressed, the growth rate of the effective labour supply declined as shown in Table 1 except for high income countries which showed inverse relationship. In addition, Figure 1 illustrates the trend of the labour force participation rate according to the age group from the year 1990 to 2019. High income countries rose in labour force participation rate for all age groups except for group 15 to 24. Upper middle-income countries have increased in the labour force participation rate of working age of 55 to 64 while another group showed declining pattern. Nonetheless, participation rate for age 15 to 24 reduced for countries of all income groups implying that lower fertility rate impacted the ageing process.

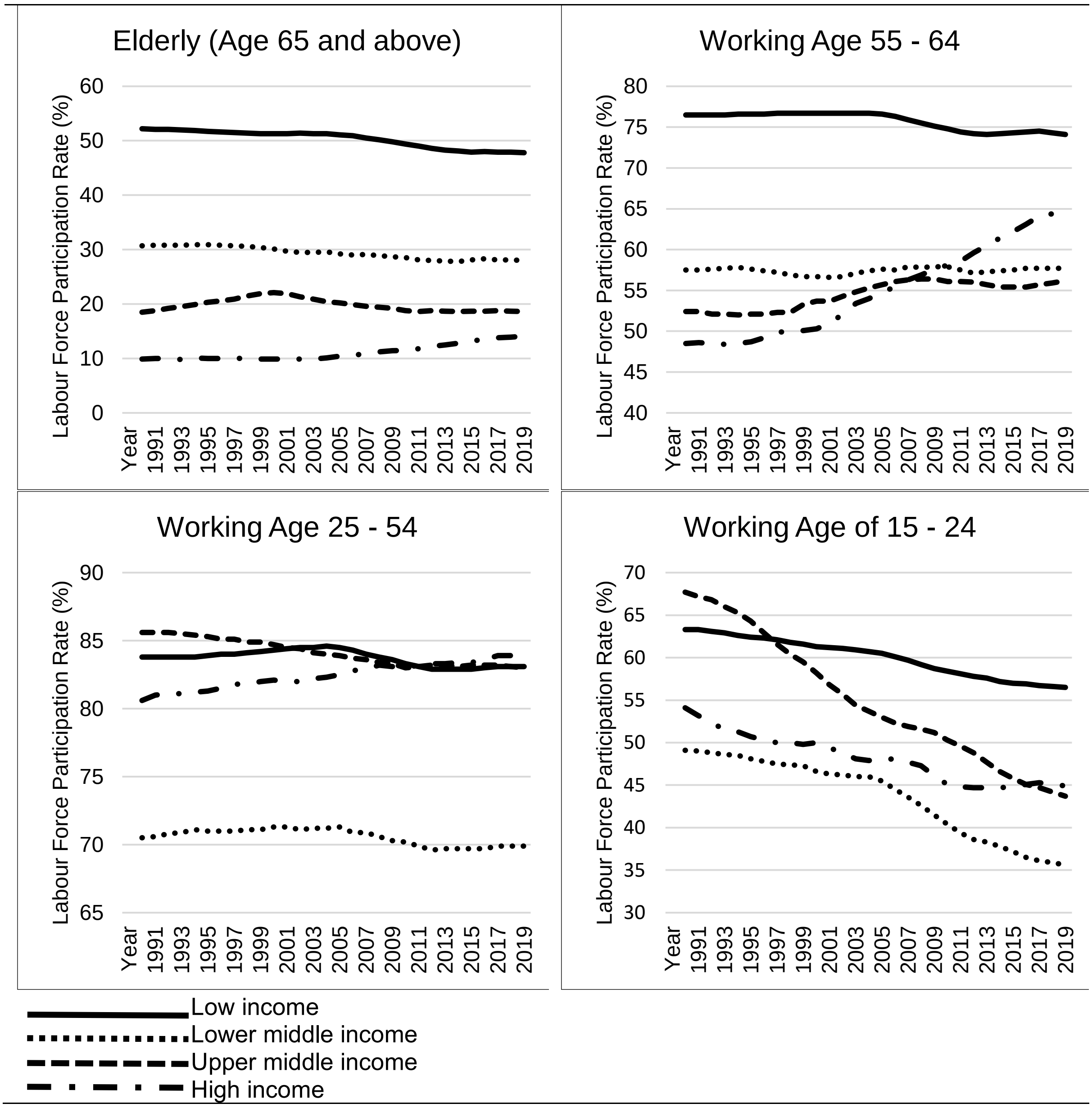
Table 1: Percentage of population age ≥ 65 and labour force participation rate according to

countries' income group

	High Income				Upper Middle Income			
Year	1990	2000	2010	2018	1990	2000	2010	2018
PA (%)	12.2	13.66	15.33	17.98	5.69	6.84	8.05	10.14
L (%)	69.95	70.86	71.53	73.29	76.13	74.50	71.33	71.28
	Lower Middle Income				Low Income			
Year	1990	2000	2010	2018	1990	2000	2010	2018
PA (%)	3.99	4.46	4.89	5.53	3.09	3.16	3.28	3.40
L (%)	62.10	61.89	59.94	59.05	75.95	75.49	73.64	73.03

Notes: PA is population ages 65 and above (% of total population), L is labour force participation rate (% of total population ages 15-64)
Source: World Development Indicator (2019)

Figure 1: Trend of labour force participation rate among countries divided into four income groups according to the age group



Notes: Labour force participation rate is defined as the labour force as a percent of working-age population
Source: International Labour Organisation Statistics (ILOSTAT) (2019)

Marešová, et al. (2015) stated that economic prosperity is highly dependent on the size and quality of the labour force. Shortage of the labour supply leads to a higher wage which will then promote innovation in investment and capital stock accumulation (i.e., physical and human capital) to ensure economic growth. Kolasa and Rubaszek (2016) in their study discussed the ageing scenario under non policy changes. Other glaring problem of population ageing within the labour supply, another related issue is aggregate consumption which alters the economic structure. Choi and Shin (2015) explored the effects of population ageing on economic growth without discussing about electricity consumption in the context of the study. Simulation results concluded that population ageing may significantly undermine the economic growth potential. Further, Maestas et al. (2016) also investigated the impact of ageing on the per capita output without acknowledging electricity consumption in the model.

The aggravating impact of population ageing on the economic growth can be initially minimised when the elderly or post retirement community are absorbed into the labour sector. When older people work longer hours, they tend to alter the consumption pattern which may lead to different level of economic dependency crucial for higher economic growth. Since the slower growth of labour force is inevitable in an ageing nation, the impact of ageing through labour needs to be investigated in the energy-growth nexus. Taking accounts of labour and population ageing in a production side will provide a closer look on how to improve the plan for a sustainable future. Most studies so far have ignored the impact of population ageing in the energy-growth relationship. This study shows that both energy consumption and labour market are important when considering the impact of population ageing on economic growth.

RESEARCH METHODOLOGY

This study was based on a review of the existing literatures on a few specific topics related to electricity consumption, economic growth and population ageing. Due to population ageing, there are greater need to sustain economic growth by knowing that the impact of electricity consumption is vital. The relationship between electricity consumption and economic growth previously has been studied and there may not sufficient relevant literature on the effect of demographic transition of ageing. A model of neoclassical economic growth was extended and previous literature were used to clarify and support. This study devised a conceptual framework for analysing economic growth with consideration of electricity consumption and demographic transition. The econometric technique was used to present a model of economic growth. In order to proceed with econometric analysis, this study plan to utilise panel ARDL econometric approach with consideration of several countries according to the demographic dividend status by World Bank classification.

DISCUSSION AND MODEL DEVELOPMENT

Electricity consumption affects an economic growth directly and indirectly as a complement to the other input factors of production such as capital and labour in the production side. The existence and importance of electricity to the economic growth can be proved by the majority of the country-specific and cross-countries studies. Electricity consumption positively influences the economic growth. Normally, labour is assumed as a constant variable in economic growth model and was not thoroughly discussed. However, in regards to the demographic transition of ageing, labour force inevitably indicates the possibility of inconsistency. The neoclassical growth framework has been used extensively in the energy-growth studies which will be initiated as a basic model to explore energy-growth relationship in the demographic transition.

Electricity consumption, Economic growth and Demographic Transition

The economic growth is highly dependent on an uninterrupted energy supply which resulted in sharp increase of electricity demand. Investment in energy infrastructure is vital to ensure sufficient electricity supply combined with better innovation to curb wastage and stimulate long term economic growth especially in the population ageing. The transition of ageing may boost or harm economic growth with regards to the electricity sector as well as labour force. Many past studies have discussed that higher numbers of older population causes shrinkage in the labour force. The reduction in the share of the working-age population is considered as a demographic burden which possibly to have a downward effect on the economic growth. Pertinent to the electricity consumption in the population ageing, longer life expectancy influences the consumption pattern. Electricity can be considered as an intermediate good in the production side. It is required to produce goods and services specifically generated from a combination of the production factors which affect the economic growth.

Population consumes goods and services and at the same time supplies production factors (i.e., labour and capital) to the economic system. Non-working population specifically the elderly tends to spend more time as consumer. In general, rather than being involved in any production of economic activities, comprehensive discussion with respect to electricity consumption and population ageing on economic growth found that these two elements were previously discussed in separate strands by the past researchers. Thus, the next section proposes a new conceptual model for economic growth via the combination of electricity consumption and the element of ageing via labour under the same framework.

Development of the model

According to the past literatures, study related to energy or electricity consumption and economic growth prominently utilised neoclassical growth theory (Ghali and El-Sakka, 2004; Hamdi et al., 2014; Adebola and Shahbaz, 2015; Sriyana, 2019). Mainstream economic growth model highlighted that the economy output fundamentally is produced from two input factors which are capital and labour (Solow, 1956). Barro and Sala-i-martin (1992) mentioned that convergence is also predicted by the neoclassical growth model with exogenous technological progress in a closed economy. If technology is similar, the capital market tends to speed up the convergence of production. The main objective of this study is to investigate the economic growth concerning electricity consumption in the demographic transition of population ageing. Thus, the basic theoretical framework is extended and modified to achieve the objective of this study. The framework underlines the relationship according to the augmented neoclassical growth theory. The general form of model specification using Cobb-Douglas production function is given in the following way:

$$Y = AK^{\alpha} L^{1-\alpha} e^{u} \tag{1}$$

Y is output, *A* represent technology, while *K* and *L* stand for capital and labour respectively. Error term, *e* assumed to have normal distribution. According to Solarin and Al-Mulali (2018), technology can be determined by the function of energy consumption, and foreign direct investment. Respective to the demographic transition of ageing, this study assumed that the focus needs to be centered on the component of labour because changes of the age structure probably impact the labour supply.

Gruescu (2007) introduced a new indicator in the economic growth model with respect to the population ageing known as dependency ratio to substitute labour. In addition, the inclusion of the dependency ratio is appropriately representing the age structure of the population (Uddin et al., 2016; Li & Zhou, 2019; Bawazir et al., 2020). Therefore, from equation (1), this study substituted technology, *A* with electricity consumption, *ELC* and foreign direct investment, *FDI*. Meanwhile, old age dependency ratio, *OADR* substituted the labour, *L* expressed in the equation (2) as:

$$\ln Y_{it} = \alpha_0 + \beta_1 \ln ELC_{it} + \beta_3 K_{it} + \beta_2 FDI_{it} + \beta_4 OADR_{it} + \varepsilon_{it} \tag{2}$$

It was assuming that the electricity consumption *(ELC)*, foreign direct investment *(FDI),* old age dependency ratio *(OADR*) and gross capital formation *(K)* have cumulative effects on economic growth. Y_{it} is the per capita real GDP, α_0 represent country specific fixed effect, ELC_{it} is the per capita electricity consumption, FDI_{it} is the foreign direct investment, K_{it} is gross capital formation*,* $OADR_{it}$ is old age dependency ratio and ε_{it} is the random error term. The subscript of *i=1,2….N* refers to each country and *t=1,2…..T* for time period. Long-run elasticities estimates are represented by the β in the equation. The formulation of *OADR* is shows in the equation (3).

$$OADR = \text{[People age 65 and above / Working age population (15 - 64)] x 100} \tag{3}$$

According to equation (2), electricity consumption was expected to have a positive relationship with per capita real GDP. Each increase in the electricity consumption level posits that the per capita GDP will increase shows good indicator of economic growth. This assumption has been supported by many empirical studies such as Churchill and Ivanovski (2020), Lawal et al. (2020) and Azam et al. (2021). Foreign direct investment and gross capital formation also expected to have positive relationship with economic growth (Tang et al., 2016). The relationship between old age dependency ratio and economic growth is uncertain either positively or negatively related. Bawazir et al. (2020) found old age dependency ratio is positively affect the economic growth. Meanwhile, Uddin et al. (2016) proved dependency ratio is negatively impacted the economic growth.

CONCLUSION

The current and future demographic trends have inspired this research to review and explore the impact of demographic transition in electricity and economic growth relationship. Based on the past literature and empirical findings, the role of electricity consumption in economic growth is very important and cannot be neglected. The model framework developed in this study were based on the basic neoclassical growth theory. Taking the demographic transition phenomenon globally, both labour force and consumption of electricity are the focus in this new framework. The salient point in this study is to explore the importance of production factors in terms of powering the economic growth by measures of electricity consumption and overcoming population ageing issues within the labour force. It has to be emphasized that most governments have attempted to solve the demographic issues by introducing a series of public policies in order to assure economic growth. One of the suggestions to enable and empower the labour sector is reemployment of older workers by legally binding the appropriate policies and practices like flexible work systems and age-friendly workplace. Investment in human capital formation through educational and training programme was also discussed to secure economic growth in demographic transition. However, the proposed model focuses more on linking the electricity consumption and ageing impact through labour factor. All of these considerations are crucial for a sustainable economy and society. This study lack of intention in investigating the impact of human capital investment on economic growth.

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Pawah System Through Mudharabah Concept at Individual's Level

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Abstract

Pawah system is an informal agreement between breeder of livestock (entrepreneur) and capital provider has been practiced from generations to generations in Malaysia. However, it is not realized that pawah system is embedded in Mudharabah concept. On the other hand, Mudharabah is also facing some problems to be implemented in the Islamic banking context. Thus, this study aims to investigate how pawah system can be used through Mudharabah concept. The objective is also to analyze the similarity between pawah and Mudharabah in term of concepts and features. The qualitative method was adopted where the data were collected to the present study by in-depth interview and library research. By the end of this study, it is found that pawah system can be used through Mudharabah concept and also penetrate at individual's level by reintroducing pawah system. The result of this study attempts to put forward suggestions in improving the pawah system through Mudharabah concept and also propose ideas of having pawah system through Mudharabah concept at individual's level between the capital provider and the entrepreneur.

Keyword: Pawah; Mudharabah; System; Individual; Animal breeding;

INTRODUCTION

Animal breeding industry in Malaysia has been the backbone of agriculture for years. It helps two billion people and supports the human living of 500 million smallholder farmers globally (World Bank, 2016). At the present time, animal breeding becomes one of the fastest growing agricultural subsectors in developing countries making its shares of agricultural GDP 33% (Thornton, 2010). Animal breeding systems are divided into two systems which are firstly breeding system in a shelter and secondly, letting go the animal to have food by their own within one time in one place. Animal breeding in Malaysia has been practiced since 16th century known as pawah system (Nelly et al, 2017). However, the farmers do not realize that pawah system is embedded in Mudharabah concept which has been introduced since the period of Prophet Muhammad S.A.W.

Pawah is defined as dividing the profit gained from animal breeding between the capital provider and the entrepreneur (Kamus Dewan Edisi Keempat). The capital provider is the one who will provide the capital for instance buying an animal and asks the entrepreneur to take care of the animal therefore once they gain the breeding, it will divide between both parties. The first born child of the animal, will be the capital provider's share and the next child of the animal will be the entrepreneur's share. Pawah system has been practiced over a long period of time. Therefore, the agreement must be mutual between two parties to avoid any misunderstanding in the transactions of partnership between the capital provider and the breeder (entrepreneur) to look after the animals.

Next, Mudharabah is a contract between parties who are involved in the business transaction called the capital provider which provide the capital and the entrepreneur who provide the expertise and management in managing the business. At the end of the business, parties will share the profit (Sapuan, 2016; Mohd Ma'sum Billah, 2019). Both capital provider and the entrepreneur will share the business profits upon the agreed ratio between both parties. However, if the business fail, the losses are borne by the capital provider, while the entrepreneur would bear losses in time and effort which has been contributed during the business transaction.

Thus, the similarities of both pawah system and Mudharabah are found where it involves two parties – the capital provider and the entrepreneur, the profits are shared upon agreement between them and the losses are borne by the capital provider and the entrepreneur losses the time and effort given during the transaction happens. However, the generations do not realize that pawah system has been embedded in Mudharabah concept over a long period of time. Also, Mudharabah always focuses on the financial institutions and it is less accepted to the public due to its asymmetric information issues that lead to agency problems such as moral hazard and adverse selection (Abdul-rahman & Mohd Nor, 2016).

Hence, the objectives of this study are two folds: first, to investigate how pawah system can be improved and used in Mudharabah concept, and second, to evaluate and reintroduce pawah system through Mudharabah concept into the penetration at individual's level. The rest of this paper proceeds as follows: Section 2 discusses on ways of pawah system can be improved through Mudharabah concept. Section 3 highlights the implications and recommendations to reintroduce Mudharabah concept into individual's level.

RESEARCH METHOD

This study used primary and secondary data collection. The required data was collected by having an in-depth interview with the informants. It was conducted on the farmers who have been practicing pawah system to be studied by interviewing them. This study is a case study with an emphasis on analysis using qualitative method.

Primary data was collected through in-depth interviews with 6 informants which are 3 capital providers and 3 entrepreneurs and the interviews was conducted in Tumpat, Kelantan. The in-depth interviews can help the researcher with the information directly. Information retrieved was based on the fact that the pawah system is still being practiced these days.

In addition, theme analysis was analysed by using atlas.ti software to obtain 4 themes of the study and resulted in the results and discussion. This help the researcher to found out that pawah system actually can be improved and used in Mudharabah concept.

RESULTS AND DISCUSSION

1. The Similarity between Pawah system and Mudharabah concept

Mudharabah is defined as an agreed contract approved by Sharia, whereby one party, the capital provider or lender gives the capital while the other party, the entrepreneur gives the entrepreneurship and effort to run the business. The profits from the business are shared by the two parties as indicated sharing proportion. All the losses are born by the capital provider if it is not due to the entrepreneur carelessness. In contrast to the agreement, the entrepreneur is obligated the entire business thus, the capital provider is not permitted to interfere (Diaw & Mbow, 2011). Therefore, Mudharabah is a contract which involves two parties to earn profits and the profits will be shared according to agreed ratio where one party will provide investment capital and another party will work on the investment capital in the business. However, at some point if the business is having losses, the one who provides investment capital would lose the money and another party would loss the efforts and time while running the business.

Shafiai and Moi (2015) state that pawah is a system where the landlord and farmer agree to share the crop according to an agreed proportion for instance sharecropping in livestock, paddy fields and etc. In addition, pawah also known as profit sharing system from the agricultural activities, animal farming and others between capital provider and farmers (Dewan Bahasa dan Pustaka. Hence, it can be concluded that the profit sharing contract can be adapted in pawah farming system once related terms, rights and responsibility of capital provider and entrepreneur, profit distribution, risk and cost are assessed. The distributions for this farming are estimated from the breeding produced upon on the consent of both parties during the agreement. If the capital provider asks the entrepreneur to breed the female breed, the first and second cow would be returned to the capital provider while the third child would be the entrepreneur's. Then the fourth and fifth children will return to capital provider and the sixth cow becomes the entrepreneur's and so on.

Therefore, both Mudharabah and pawah have the similarity of concept which involve two parties; capital provider and the entrepreneur and profits are shared upon the agreement between two parties. Moreover, Mudharabah can be adopted into pawah as the entrepreneurs and capital provider have been practicing this concept without realizing the true Mudharabah concept and do not realize pawah system is actually embedded into Mudharabah concept. Thus, by approaching pawah as the resemblance of Mudharabah can actually help to reintroduce and improve Mudharabah using pawah. Moreover, these similarities are more focused on intermediate financial therefore the study is to focus at individual transaction level between a single capital provider and entrepreneur.

As well as introducing the real Mudharabah, it can help both the capital provider and the entrepreneur to stay competitive in livestock industry. Besides, the study suggests and recommend new initiatives for capital provider and the entrepreneur to sustain in livestock pawah such as a pure and the real Mudharabah contract involving one to one participant can be reintroduce and reapply and reuse by the capital provider and the entrepreneur in doing the business transactions together with agreed proportion of profits and loss either having profits or loss during the business happening.

2. Reintroduce Mudharabah concept through pawah system

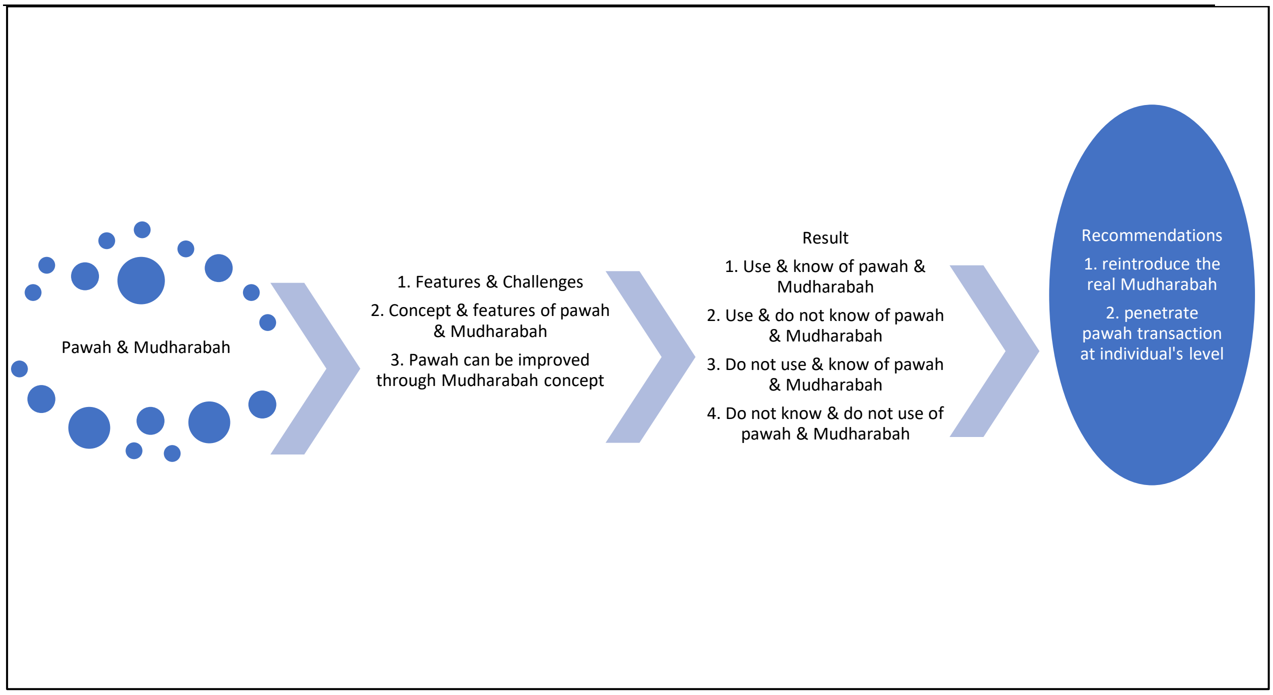
From the previous studies, it is found that there are several reasons why the entrepreneurs do not realize that pawah system has been embedded in Mudharabah concept due to low awareness of Mudharabah and most of the Mudharabah concept is more focus on financial institutions instead of individual. Hence, moral hazards and adverse selection became the basic problems to the financial institutions that needs serious attention to monitor and also financial institutions do not want to take the opportunity on this highly risky business hence to prevent losses (S.Nur & Nur, 2018; Munawar, 2007; Iqbal & Molyneux, 2005). Therefore, there are a few ways need to be taken to minimize the risks which do not rely on the cost in spite of that by having faith for both parties during the on-going transaction.

As recent studies recommending penetrate individual's level, pawah system received high attention from the entrepreneurs and also the capital provider. The unused land can be utilized for the breeding animal as for the entrepreneurs (Abdul Hamid et al, 2020). The animal breeding can be raised on the unused land and it can help both capital provider and the entrepreneur in the form of animal breeding. It also can help the entrepreneurs with the opportunity to promote and reintroduce Mudharah concept through pawah system. Based on the previous studies, generally there are ways on how to penetrate pawah system through Mudharabah concept in individual's level.

Firstly, improve pawah system through Mudharabah concept by having in-depth of the knowledge and understanding are the basic of pawah system to be accepted among the capital provider and the entrepreneur. Therefore, it is proven that majority of the entrepreneurs and capital providers have the knowledge on how to pawah system works. Indeed, it is related to Allah said that if someone is full of knowledge, he will be more clever in making decision and be more faithful also will get huge reward in the afterlife. Moreover, understanding towards pawah system is crucial. New ideas and suggestions that are easier to understand can be accepted to improve the system itself compared to innovation that need the acceptance to use the skills and new understanding (Rogers, 2003). The level of understanding in basic knowledge need to be explored and learned among the capital provider and the entrepreneur.

Next, the awareness of how importance pawah system is still in the low level among the informants. Therefore, the need of awareness to them is needed to ensure they have the proper information and procedure to make the pawah system more accurate and right way compliance to Sharia. It can be improved by reintroduce the real Mudharabah practice through pawah system by introducing and practicing the real Mudharabah into pawah system and also penetrating individual transaction level such as one to one participant or between capital provider and the entrepreneur. It can be adapted as Mudharabah is famous with its transparency when dealing in business transactions.

From the theme analysis, the study found that there are four categories of comprehend the uses and knowledge of pawah system through Mudharabah between the capital provider and entrepreneur. First thing first, the capital provider and entrepreneur know and use the actual Mudharabah concept in pawah system. Next, they use pawah system but do not know they are actually follow the real Mudharabah concept. Then, they do know the real Mudharabah concept but do not use and follow the concept in pawah system. Last but not least, both of informants do not know and do not use Mudharabah concept in pawah system. Hence, the summary of the research is shown as below;



Framework 1.0: The result of pawah system can be improved through Mudharabah concept.

3. The implications and recommendations of pawah system through Mudharabah concept

As discussed above, before pawah system becomes the alternative to profit and loss sharing contract, they need to truly understand the features and concept of pawah and Mudharabah. Nonetheless pawah system is still widely used, however the entrepreneurs could even try to improve and use the correct way in using pawah system through Mudharabah concept. The need of clarification and exposition of pawah have to be attended to ensure that the capital provider and the entrepreneur truly understand the importance of Mudharabah concept in pawah system. Pawah system has its own history and uniqueness therefore the passion need to be cultivated and nurtured in every capital provider and the entrepreneur.

It can be recommended by reducing the risk of breeding the animals as the entrepreneur mentioned that to reduce the risk by taking a good care of the animals especially when they are sick as the animals are rarely to get sick. By taking care of the animals, it can help the capital provider and the entrepreneur not to bear the losses as the capital provider would loss its capital and the entrepreneur would loss its effort of taking care of the animals and also time. At the same time, it can attract more members to be in the community once they gain the support and confidence from the community. Along the way, it can help to gather ideas on how to improve more on pawah systems through Mudharabah concept in individual transaction without any prohibited elements in Islamic contract.

Next, a system called fixed-lock system is recommended by the entrepreneur to have a maximum profit which means breed the animals for commercial. It is a place like one stop center for pawah where the capital provider and the entrepreneur can meet and have business transaction. At the same time, it can attract more members to be in the community once they gain the support and confidence from the community. By doing so, Mudharabah will be used among the capital provider and the entrepreneur as the replacement of profit and sharing loss concept in conventional financial contract. Therefore, Islamic financial can grow in the future as Mudharabah concept is reintroduced back to pawah system. Hence, the community of entrepreneurs as the main role support in this transaction to keep the effort to enhance of pawah system through Mudharabah concept in individual level transactions.

In addition, it is recommended to have an umbrella system like a center place which a group of people breeding the animals for sales. Besides, the implementation must be in a systematic system and very well-planned procedure for this to happen. For this to be successful, security system is also needed to avoid the moral hazard, asymmetric information between involve parties and also to keep the business transparent. Therefore, the cooperation parties involved are necessary to encourage the community to keep using pawah system through Mudharabah system in individual perspective. Both parties play an important role to entrust this implementation to the new capital provider, community and also financial institutions so that pawah system can be improved through Mudharabah concept in individual perspective. Hence, Mudharabah concept can be reintroduce and reuse again in Islamic economy thus help to grow tremendously in the future.

CONCLUSION

There are a few recommendations have been said in this research by the researcher with the hope to ensure the entrepreneurs, capital provider, community and also the government to aware on the importance of pawah system through Mudharabah concept on individual perspective. Pawah system is indeed has the specialty and uniqueness in Islamic financial as it also being used during the Prophet Muhammad S.A.W period. Therefore, they have been practicing one of the principal of Maqasid Shariah which is to take care of the property and to guarantee the peace and well-being.

The uses of pawah system through Mudharabah concept on individual level of transaction widely becomes the expectation of the researcher as they have been practicing this in daily activity and also help to use the real pawah system through Mudharabah concept. Hence, this can enhance the transaction with Sharia compliance. Transaction with full Sharia compliance can avoid the riba, gharar and maysir. The recommendations by the study is to encourage the entrepreneurs, capital provider, community and the government to accept the transactions positively and use it for its benefit together in the future.

The mechanisms use are suitable and appropriate for the capital provider and the entrepreneur need to be implemented immediately to ensure reintroducing Mudharabah contract in Islamic financial economy. The effort is not only beneficial to one party but all the entrepreneurs, capital provider, community and also the government. Thus, all the parties have to work together and in agreement to continue this in the future.

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Practice in Credit Cards Debt Management

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ABSTRACT

The existence of broad financial facilities assists consumers' in shortages and needs, especially credit cards. However, the impact of high indebtedness has caused problems in managing it. Therefore, the author explores debt management practices among credit card users. Credit card users are informants with experiences in managing debt and self-assessing financial knowledge. A qualitative thematic analysis was used to analyse debt management, specifically amongst credit card users. This study finds one noticeable theme: financial behaviour that promises best practices or not. The study contributes to the knowledge by exploring practices among credit card users.

Keywords: Debt management; financial behaviour; debt practices.

INTRODUCTION

The usage of credit cards is becoming an indispensable medium of payment and credit facility among today's consumers. Statistics from Bank Negara Malaysia display that total credit card usage was worth RM149.9 billion in October 2018 from RM 143 billion in November 2017 (CEIC, 2019), and it is growing (Khalid, 2022). Although credit cards facilitate credit to users with numerous benefits and convenience, they may also have adverse effects, particularly in debt management. Moreover, credit cards are complicated to use and understand financial facilities (Majamaa, Lehtinen, & Rantala, 2019).

Credit card users efficiently manage their spending due to quick and convenient purchasing. However, at the end of each month, high outstanding balances can lengthen the repayment schedule and increase the amount of interest (Zainudin, Mahdzan, & Yeap, 2019). Thus it increases the problems because the excessiveness of accruing debt attracts many other issues such as delinquent accounts, bad debt or even bankruptcy (Rahman, Azma, Masud, & Ismail, 2020). All the issues indicate the consumer experiences debt problems (AKPK, 2017) and will compromise the consumer's financial well-being at every level (AKPK, 2018).

Various literature on debt management has been published in several fields comprising discussion of the impact of consumer debt in terms of health (Clayton, Liñares-Zegarra, & Wilson, 2015), mental (Dackehag, Ellegård, Gerdtham, & Nilsson, 2019) and personal financial survival (Daud et al., 2019). Correspondently, some studies focus on factors in debt management among credit card users, namely demographics, financial literacy, financial attitude and financial behaviour (Rahman et al., 2020; Azma et al., 2019; Agarwal et al., 2020).

The lack of knowledge of credit cards conventionally exposes the users to misuse and involvement with high indebtedness. Financial knowledge and education play an essential role for an individual in making wise decisions in a modern and unique financial situation (Jennings, Quinn, Ly, & Rehman, 2019; Maswati, Abdullah, & Yee, 2015). Furthermore, understanding the facts about debt or finance will reduce anxiety about individual indebtedness (Harrison, Agnew, & Serido, 2015).

Financial knowledge indeed plays a crucial role in debt management. Still, it is insufficient to guarantee to enhance debt management because it needs to be accompanied by beliefs and attitudes (Hancock, Jorgensen, & Swanson, 2013). This derives from the attitude that debt management is better than mastering financial knowledge alone (Xavier, Ferreira, & Bizarrias, 2020).

Other than that, financial behaviour factors, i.e. materialism, emotion and risk perception, will likely spice up the burden of repayment among credit card users (Zainudin et al., 2019). Risk perception is how a person sees chance when making decisions and actions that will overcome uncertainty in managing debt (Rahman et al., 2020). A study by Cloutier & Roy, (2020) found that risky use of credit cards will increase credit card debt among undergraduate students, difficult in managing debt and exposing more risk of excessive debt. At the same time, it causes individuals in debt to risk not being ready to accept financial shocks, such as job loss and so on (Abrantes-Braga & Veludo-de-Oliveira, 2020).

However, there is still a lack of study on debt management practices among credit card users. This study intends to understand how credit card users manage their debt.

RESEARCH METHOD

This pilot study applies the qualitative method as a research methodology. Thus, semi-structured interviews were conducted. However, a pilot study is a small-scale methodological test run before the researcher performs the survey at large (Kim, 2011). Initially, in-depth interviews were

The study's objective is to explore the debt management practice among credit card users. Fundamentally, informants acknowledged they prefer using credit cards as a credit facility to alleviate any financial hardship. The data set in this study is the Interview transcripts. The researcher followed basic research ethics proposed by Fouka & Mantzorou, (2011). The basic ethics is to inform the purpose of the study, respect for anonymity, confidentiality and informant's privacy. Moreover, the researcher observed the acts such as the Personal Data Protection Act 2013 (PDPA 2013), that protect the consumer from sharing data because this research is simply based on the credit card holders' feedback on their default accounts (Yan Ping, 2021).

Next, the researcher analysed the data by adapting the repetition strategy, which is one of the easiest ways to identify themes (Ryan & Bernard, 2003). By scrutinising interview scripts, the researcher concludes the themes (Yin, 2018).

RESULTS AND DISCUSSION

Data analysis established one prominent theme, 'financial behaviour'. This theme consists of three sub-themes: financial knowledge, financial attitude and risk perception. Financial behaviour is incited by financial knowledge, attitudes, understanding, and basic skills (French, McKillop, & Stewart, 2020). In this study, financial knowledge means that the informant can elucidate the credit cards in general and at least possess minimum knowledge about managing a credit card account and the charges imposed by the credit card provider. Unfortunately, based on empirical data, informants affirmed that they do not understand the basic concepts of credit cards, such as costs and charges, if they do not manage the account correctly. Lack of knowledge associated with credit cards undoubtedly causes them to be penalised by financial institutions. Thus it is understandable that financial knowledge is a fundamental determinant in improving a person's capacity to understand financial problems (Rahman et al., 2020).

This study corroborates previous studies on which users who lack knowledge about credit cards effects have an impact on misusing and abusing credit cards (Awanis & Chi Cui, 2014; Wang & Xiao, 2009; Zainudin et al., 2019) and one's financial health (Ahmad, White, Hiller, Amini, & Jeffe, 2017). Furthermore, consumer without money management skills inclines more toward indebtedness than those who are financially literate (Adzis, Bakar, & Shahar, 2017; Xavier et al., 2020). It is crucial to have the knowledge and financial education because, with knowledge, one is guided to play prudently in decision-making in a unique financial situation (Jennings et al., 2019; Maswati et al., 2015). Moreover, possessing the correct information about debt or financial information will prevent excessive indebtedness (Klapper & Lusardi, 2020).

The empirical data further show that the informants neglect their responsibility and discipline toward credit card accounts instead of lacking financial knowledge. The 'attitude' towards paying credit card loan instalments should be paramount because an issuer may impose a late payment charge if no payment is received after the due date (Bank Negara Malaysia, 2019). Without the correct 'attitude', the informant may end up making lower repayment (minimum payment) and, therefore, incur higher financing costs and fees (Sahul Hamid & Loke, 2021). Financial attitude is one of the reasons leading to a disproportionate debt burden among consumers (Magli, Sabri, & Abdul Rahim, 2020).

The sub-themes of 'knowledge' and 'attitude' also influence informants on other matters, including 'risk perception'. The sub-theme 'risk perception' emerged when the statements from informants were found to lack understanding of the function of credit cards and lack of knowledge of the current economic situation, causing them to be unable to anticipate bad problems that may be happening. This affects credit card debt management. Risk perception is an essential element in financial decisions; thus, it affects individual indebtedness since it is significantly correlated with financial behaviour, such as emotion and materialism (Rahman et al., 2020). One with a low-risk perception tends to have a high level of debt (Azma et al., 2019).

Table 1: Theme, sub-themes and Segments

Theme	Sub-Theme	Informants	Interview Segment
Financial behaviour	1.1 Financial literacy	IF1	*“the period for credit card repayment is very short. It is as short as we use it for this month, then next month we have to settle everything at once. So that's why I have credit card problem.”*
		IF2	*“Initially, I overlooked this thing. The credit card interest is very high.”*
		IF3	*"I don't know the real cost. I don't know how much it costs. Firstly, the credit card limit was only five or six thousand. The usage did not even reach the credit limit, but it feels like a lot more when we pay. When we want to settle, it becomes a problem."*
	1.2 Financial attitudes	IF1	*“Ironically, the bank's attitude is a bit sarcastic when we can pay the full amount. They force again and again to assure payment.”*
		IF2	*“Because of working overseas, it is difficult to deal with everything. So when I return to Malaysia, I will make the payment before this*
		IF3	*Sometimes I do not pay the credit card account even though overdue.*
	1.3 Risk perception	IF1	*"The unstable economy affected everyone, including us, similar to the high-interest credit card. Consequently, when the interest rate is high, the payment also increases. That's where the problem began."*
		IF2	*“I started there with financial problems. I’m in the oil & Gas industry, so I know the salary offer. So I can’t anticipate the future economic situation.”*

IF3	*"Paying the minimum payment is, "we think it is enough, but it is not". It means that when it reaches the due date, we are still in debt. Even though we have already paid five thousand more.."*

CONCLUSIONS

The recent credit card debt management study exposes a basic understanding of how credit card users practise debt management through thematic analysis. The finding revealed one prominent theme representing the credit card user's practice in personal debt management was identified based on the empirical data gathered from in-depth interviews. Financial behaviour is considered the reason that causes indebtedness. Thus, card credit users must engage in good financial behaviour to ensure healthy financial management. This study could probably help other researchers develop knowledge in financial behaviour, particularly in credit cards.

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The Economic Effect of Digital Inclusive Finance in Shanghai, China

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ABSTRACT
Currently, poverty is widespread worldwide, with some people having difficulty accessing effective financial services and a serious gap between the rich and the poor. With the promotion of government and private forces, digital inclusive finance will play a greater role and can contribute to the growth of the world economy.Shanghai a s one of the most economically developed regions in China, Although the development of digital inclusive finance started early but the pace of development is slow, and a set of overall and orderly process has not been formed. Financial institutions in Shanghai have been exploring and developing online financial products for small and micro enterprises in order to solve the problem of difficult and expensive financing for small, medium and micro enterprises and smooth the virtuous cycle of the financial system and the real economy. Starting from the inclusive finance development in Shanghai, this paper sorts out its development process, analyzes its development model, points out the existing problems and puts forward some suggestions accordingly, which can provide reference for the development of digital inclusive finance in other cities.

Keywords: inclusive finance, economy growth, small and micro enterprises

INTRODUCTION

The world is fully entering the digital society and the digital economy and finance is the focus of the future competition and cooperation in the global economy. With the explosive growth of data volume, data as a key productive factor has attracted high attention. The new generation of information technologies, represented by the Internet, artificial intelligence, big data and cloud computing, the Internet of Things and 5G are highly integrated and complementary, with a wide range of application fields, which can quickly promote productivity and activate new drivers in various fields. With the continuous development of digital technology, inclusive finance are further combined to become a new type of inclusive digital economy. The development of digitalization further improves the scope and depth of inclusive finance, thus promoting the upgrading of the whole industry. Digital inclusive finance is the perfect integration of data and the advantages of inclusive finance. Digital finance relies on the technological progress of big data and artificial intelligence. In the process of continuous iterative progress, applications such as mobile payment, Internet insurance, online wealth management and online loans have gradually matured. Compared with traditional tools, it has obvious advantages in terms of user experience and service accuracy. Inclusive finance originated from the initiative of the United Nations and developed in the livelihood projects of various countries, especially China. Inclusive finance allows more people to use financial tools such as insurance and loans to meet their daily and production needs faster and more conveniently. It also enhances market vitality and promotes the high-quality development of the real economy.

This article will be divided into 4 sections. The first section starts with the discussion of digital society and its connection with information technology and inclusive finance, the definition of digital inclusive finance as well as the growth and the aim of digital inclusive finance (Jiao et al., 2015). Next, this paper will focus on the characteristics and also the importance of digital inclusive finance. Lastly, a conclusion on digital inclusive finance is discussed as a wrap up (Yunus, 2010).

1.1. The Definition of Digital Inclusive Finance

"Digital Inclusion" was first proposed at the G20 summit in 2016. Through this meeting, the development of digital financial inclusion has been greatly promoted. Digital financial inclusion" can be defined broadly as digital access to and use of formal financial services by excluded and underserved populations. Such services should be suited to customers' needs, and delivered responsibly, at a cost both affordable to customers and sustainable for providers. There are three key components of any such digital financial services: a digital transactional platform, retail agents, and the use by customers and agents of a device – most commonly a mobile phone – to transact via the platform.

Digital financial inclusion is an important way for the financial industry to improve its service coverage of the real economy and enhance the level of services provided by the financial industry. The essence of digital inclusive finance is to provide financial services of an inclusive nature to all sectors of society with the help of today's advanced electronic information technology (Pang, 2020). Through the use of electronic information technology, financial services can effectively break through the barriers of time and space and reduce the overall cost of financial services, thus promoting the development of the financial industry itself and the social economy (Wang 2020).

1.2. The Development and Growth of Digital Inclusive Finance in China

China in January 2016, The State Council first issued the Plan for Promoting the Development of Inclusive Finance (2016-2020), emphasizing that promoting the development of inclusive finance through innovative financial products and services, which is the first time that China has promoted inclusive finance to the height of the national strategy. In 2018, Internet financial giants all said that they would no longer only do financial services, but return to technical services. Among them, Du Xiaoman was independent from Baidu, JD Finance was renamed JD Digital Division and 360 Financial was spun off from 360 Group and listed.

Highly similar strategic shift includes a new consensus among fintech innovators that future empowerment and collaboration will bring more value than competition. In April of the same year, CCB even launched the "first shot" for big state-owned banks to set up fintech companies, and since then, major banks have joined the ranks of digital inclusive finance. Power from large industry participants, financial institutions, regulation and other aspects are driving the further integration of the industry. On the one hand, the large Internet giants accelerate the layout (Chen & Yang, 2021). Early Internet companies directly enter the service market with technology, customers, data, platform, scene and brand support; at the same time, they quickly acquire emerging fintech platforms and continuously expand the scale. On the other hand, traditional financial institutions are beginning to enter. More and more traditional financial institutions are starting to incubate fintech subsidiaries (Ma et al., 2021). With its deep understanding of the banking business, its market-oriented mechanism and service advantages, the fintech subsidiaries of the financial departments have grown rapidly. By the end of 2019, CCB Shanghai Branch had granted a total of RMB 38 billion in "Small and Micro Express Loans", serving 26,600 small and micro enterprises. In particular, the total amount of credit granted exceeded RMB38 billion, serving 26,600 small and micro enterprises; benefiting 17,600 small and micro enterprises. The total amount of loans disbursed was RMB17.5 billion, benefiting 17,600 small and micro enterprises. From the 2019 Inclusive Finance Report released by Shanghai banks have improved the availability of credit to farmers and the scope of collateral has been expanded from (Li, 2021). The scope of mortgages has been further expanded from the right to operate rural land with clear property rights to the mortgagee's ownership of the land As at the end of 2019, the total number of mortgages issued was over 1,000. As at the end of 2019, a total of 113 loans had been issued. As at the end of 2019, a total of 113 mortgage loans for rural land management rights had been issued, with a cumulative amount of RMB 145 million disbursed (Tang et al., 2021).

1.3. The Development and Growth of Digital Inclusive Finance in Shanghai, China

As one of the most economically developed regions in China, there are many of the above two types of financial companies in Shanghai. Although the development of digital inclusive finance started early but the pace of development is slow, and a set of overall and orderly process has not been formed. Financial institutions in Shanghai have been exploring and developing online financial products for small and micro enterprises in order to solve the problem of difficult and expensive financing for small, medium and micro enterprises and smooth the virtuous cycle of the financial system and the real economy. Among them, small and micro enterprises have high data compliance collection cost, uneven data quality and great difficulty in multi-dimensional data integration, which are the main challenges faced in inclusive fintech services. Based on this, in 2019, Shanghai issued my country's first local government regulation specifically aimed at data opening, "Shanghai Interim Measures for Public Data Opening", actively opening public data resources to the society in a "safe, compliant and efficient" manner as a digital financial to promote the socialized utilization of data resources and form the social value of digital inclusive finance.

As at the end of 2019, the balance of loans granted to micro and small enterprises by banking financial institutions in the Shanghai banking sector was RMB 133,5168 million, of which RMB 385,916 million was the remaining balance of micro and small loans with single-account credit of less than RMB 10 million, representing a year-on-year growth of

25.96%; the balance of loans to micro and small enterprises with single-account credit of less than RMB 10 million by Chinese legal entities was RMB 63,465 million, representing a

year-on-year growth of The balance of loans to small and medium-sized enterprises with a total credit amount of less than RMB 10 million per household was RMB 63.465 billion, representing a year-on-year growth of 31.99%, higher than the growth rate of loans by 17.66 percentage points.

The credit structure continued to be optimised. In terms of security methods, as at the end of 2019, credit loans, guaranteed loans, mortgages and pledged loans accounted for 16.52%, 20.40% and 57.60% of loans to micro and small enterprises respectively. By institution, large banks saw a large increase in inclusive micro and loans, with a year-on-year increase of 90.62% at the end of 2019, while medium-sized banks and local banks saw

year-on-year increases of 20.56% and 31.99% respectively at the end of 2019 (Li & Wu, 2021).

1.4 The Aim of Digital Inclusive Finance

At present, poverty is widespread in the world, some people are unable to obtain effective financial services and the gap between the rich and the poor is serious. Improve Digital inclusive finance will help improve the ability of finance to serve rural revitalization, help small and medium-sized enterprises to integrate into the global value chain, narrow the gap between the rich and the poor and achieve the goal of common prosperity; improve digital financial inclusion will play a greater role and make more contributions to world economic growth.Inclusive finance is the reflection and sublation of the existing financial system. The disadvantage of the current financial system is that the services are more and more inclined to serve large enterprises and high net worth people, which means that a large proportion of

low-income people and micro and small enterprises can only obtain the financial services they need through informal financial channels. Of course, these Financial services are not just unsustainable. Financial inclusion can rely on technological innovation and policy support to promote the opening of financial markets to those poorer and more remote areas and to provide a wider variety of financial products with more reasonable value. At the same time, to develop micro-finance, expand financial coverage as the country's overall development strategy so as to maximize the provision of financial services. The core of an inclusive financial system is to allow all people, especially the poor and vulnerable, to enjoy equal financial rights, and to allow financial services to benefit all classes. It is an important determinant of promoting social inclusion of the poor and vulnerable. In fact, it is also one of the necessary conditions for reducing poverty and socioeconomic inequality (Meng, 2021).

LITERATURE REVIEW

2. The Characteristics of Digital Inclusive Finance

First, economic characteristics. The economic characteristics of digital finance are highlighted in four aspects: inclusiveness, marketability, long-tailedness and scale. In terms of inclusiveness, the digital economy provides equal financial services to areas and users not covered by traditional finance through Internet technology, so that everyone can benefit from the development of digital finance; in terms of marketization, digital finance reduces the degree of information asymmetry in the market through technologies such as big data, blockchain and artificial intelligence, and uses information technology to improve the efficiency and quality of information flow; from the perspective of long-tail From the perspective of long-tailedness, traditional financial institutions only focus on those with large, credit-qualified financial services needs, while neglecting those with small, non-credit or poor credit financial needs. From the perspective of scale, Moore's Law enables the financial industry to generate economies of scale based on the development of Internet technology.

Through the carrier of information network, digital finance breaks through the constraints and limitations of time and space to maximize the coverage of users and regions under the established resource conditions, thus generating the effect of diminishing marginal cost and economies of scale.

Second, technical characteristics. The express iterative development of digital finance has made has become an important engine for financial innovation and development. The technical characteristics of digital finance are mainly reflected in digitalisation and intelligence. Digital finance first transforms financial elements into digital elements with the help of digital technology, and forms financial productivity through big data, artificial intelligence and other technologies. In a finance where everything is digitised, smart terminals and devices are used to smarten up financial behaviour through artificial intelligence and other internet technologies.

Third, compatible features. Compared to traditional finance, digital finance highlights the characteristics of compatibility with other businesses. Digital finance relies on the relationship between traditional finance and industry through channels such as capital flow and information flow. For example, the integration between digital finance and the supply chain has led to the rapid development of digital supply chain finance today.

Fourth, regulatory features. The process of digitisation of finance will inevitably give rise to digital security and regulatory issues. It is because digital finance is developing at a faster pace of iterative innovation than traditional finance in any previous era that it is forcing the process of digitisation and technology in the regulatory system. The previous regulatory system and rules under traditional finance cannot function effectively in the context of digital finance, especially for digital financial practices in the capital markets, where traditional regulation, etc. may fail. Technology regulation has become a prominent feature in the context of the digital finance era (Yuan, 2021).

3. The importance of digital inclusive finance

Digital inclusive finance implemented with technologies such as the Internet, cloud computing, and big data has changed the development path of traditional inclusive finance and has become the commanding heights of future financial competition. Digital inclusive finance is widely inclusive, helping to solve investment and financing problems in key areas such as small and micro enterprises and providing new ideas for solving the balanced development between regions. Digital inclusive finance will help improve the ability of finance to serve rural revitalization, help small and medium-sized enterprises to integrate into the global value chain, narrow the gap between the rich and the poor and achieve the goal of common prosperity. At the same time, digital inclusive finance contains the financial concept of a community with a shared future for mankind. On the basis of promoting balanced global development, it will bring rare development opportunities to developing countries and backward regions, promote the reform of the international financial system and allow countries and all walks of life can share the fruits of digital finance (Wang, 2022). From a global perspective, digital financial inclusion embodies the principle of people-oriented and is in line with the direction of global inclusive development. At present, poverty is widespread in the world, some people are unable to obtain effective financial services and the gap between the rich and the poor is serious.

Driven by governments and non-governmental forces, digital financial inclusion will play a greater role and make more contributions to world economic growth (Wu 2015).

CONCLUSIONS

Digital inclusive finance is of great significance in promoting the coverage of financial services and enhancing the role of finance in promoting the real economy. However, due to various practical factors, the development of digital inclusive finance at this stage still suffers from problems such as personal information being easily leaked and the difficulty of comprehensively integrating customers' credit information. For this reason, the relevant government departments should strengthen the cooperation with financial institutions, enhance supervision and protect the legitimate rights and interests of consumers (Yan, 2020). Inclusive finance and green development are important directions for China's financial innovation and are strategic paths to realise China's five major development concepts of "innovation, coordination, green, openness and sharing". With the injection of new technologies, I believe that in the future, digital inclusive finance can make a greater contribution to the development of China's economy (Lou, 2014).

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Assumption of Unlimited Want in Islamic Economics in Islamic Tasawur Context

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ABSTRACT

The purpose of this research is to determine if the assumptions of Islamic economics are compatible with the concept of Islamic Tasawur. The assumption here is an unlimited human wants. Islamic economic philosophical pillars have been borrowed from Western or conventional economics, then Islamized and converted into an Islamic philosophy. This research is using qualitative method and the data will be analyze using ATLAS.ti software. As a result, mainstream Islamic economic scholars' assumption of unlimited human wants can not be generally accepted because it differs slightly from the core of Quran and Hadith. In conclusion, it is important to discuss the Islamic economic assumptions that are parallel to the Islamic Tasawur.

Keywords: Economic Assumptions; Mainstream; Islamic Tasawur; Scarcity of Resources; Unlimited Human Wants.

INTRODUCTION

The Islamic tasawur represents the primary form of Islam and explains the accurate and complete principles of Islam in its entirety so that the person who understands it is instilled with them (Hanapi, 2020; Noor Hisham & Burhan, 2019). The essential elements of the Islamic tasawur are Allah SWT as the Creator, human beings as creatures, and natural resources as creatures (Mohd Zulkifli, 2020). According to previous scholars, Islamic law is derived for justice, peace, and goodness for humanity's benefit. Also, Islamic law is divided into several categories, including worship and muamalat. Muamalat is divided into several sections, one of which is economical. According to previous scholars, Islamic law is derived for the sake of justice, peace, and goodness for the benefit of humanity (Ika Yunia & Abdul Kadir, 2018; Sarmiji, 2020). Islamic economics is a study of human behavior concerning the diversity of desires and scarcity of resources with alternative uses to maximize falah, human well-being, both in today's world and in the hereafter (Zubair Hasan, 2020). Eventually, the Islamic economic system began to evolve, and the rule of Khulafa'ar-Rasyidin continued (Addi Arrahman, 2020). Economic problems are not so prominent at this point, and Islamic economic theories are still undeveloped. The diverse contributions of these Islamic scholars have also led to the development of Islamic economics and its use in dealing with society's economic problems. These scholars also develop a better understanding of knowledge or theory on economic and non-economic matters. Thus, the emergence of different views and assumptions to find answers to economic problems, but there are still theories and assumptions of Islamic economics that are still bound up with the Western economy, or conventional economics, and are slightly in conflict with Islamic principles and values. Moreover, current Islamic economics is said to have no theory of its own, instead of relying on borrowed mainstream worldviews, where Islamic ethics and morality are not incorporated into Islamic economic methods and models (Choudhury, 2018; Rafikov & Akhmetova, 2020). This study will therefore identify the Islamic economics that is in line with the Islamic tasawur.

The Concept of Economics According to Islamic Tasawur

Islamic and Western scholars often discuss the origins of things. Similarly, the meaning of the tasawur and 'worldview' in specific terms has yet to be discovered in the tradition of classical Islamic thought. Even so, this does not exclude the use of the tasawur as a systematic basis for the understanding of reality by classical Islamic scholars. However, it differs from the use of specific terms by Islamic scholars in the twentieth century to describe the meaning of this tasawur (Mohd Shukri Hanapi, 2014). The Islamic scholars which are Al-Faruqiy (1995) and Al-Attas (1995) had define the tasawur. Definiton of tasawur by Al-Faruqiy (1995) is more inclined to the concept of Allah SWT's power and oneness in shaping all aspects of human life, while definiton of tasawur by Al-Attas (1995) is inclined to philosophical and epistemological meaning.

The difference in these Islamic scholars' terms is due to a lack of more appropriate and accurate definitions. Islamic scholars, therefore, use the terms "tasawur" and "Worldview" to describe a way of life that encompasses both worldly and eternal realities within its scope, as well as Islamic adjectives. With the combination of the word tasawur and Islamic values, then the existence of the Islamic tasawur means a full or accurate picture of Islam, which seeks to explain the basic principles of Islam properly and comprehensively, to become the basis for a life-view and to be instilled in a person (Mohd Zulkifli, 2020). It is, therefore, necessary to determine the correct term tasawur in order to play a role in the formation of civilization because it affects the beliefs, opinions, and actions of society.

The Qur'an, Hadith, Ijma (agreement between jurists), and Ijtihad (analogy and creative reinterpretation of legal issues) have been established as sources of reference in the Islamic era, which began in the 7th century (Aan Jaelani, 2018). Islamic economics is a term that refers to Islamic commercial law based on Islamic Sharia law (Al Harethi, 2019). The application of Islamic values to the Muslim community's economy is crucial, as it serves as a guide to success in this world and the next and gains the pleasure of Allah SWT. The difference between the conventional economic tasawur and the Islamic economic tasawur is that the conventional economic tasawur is based solely on conventional tasawur and epistemology. In contrast, the Islamic economic tasawur is based on Islamic tasawur and epistemology, including the Qur'an, Hadith, ijmak, and qiyas (Mohd Shukri Hanapi, 2014). As a result, the application of economics based on conventional economic philosophy will produce conventional economic concepts and theories. In contrast, the application of Islamic economic philosophy-based economics will produce Islamic economic concepts and theories.

As a result of this mixing, the Islamic economy is still linked to the conventional economy and thus not classified as a true Islamic economy. Moreover, mainstream Islamic economists who are influenced by Western values of neglect or Eurocentrism argue that conventional economic theories can be used as long as they are not incompatible with Islamic beliefs and sharia (Mohd Shukri Hanapi, 2014). Moreover, Islamic economics assumptions are said to be inconsistent with the genuine concept of Islam because philosophy has not been adopted from the outset. Therefore, this research is crucial to the resolution of the parallelism of Islamic economics theories based on the Islamic tasawur. It is said that Islamic economics assumptions, such as unlimited human needs and scarcity of resources, have been derived from conventional economic theory. Since its nature is a premise, this means that the assumption can still be debated and disputed (Mohd Zaid & Mohammad Taqiuddin, 2018). The use by mainstream Islamic economists of two dominant thought streams is responsible for the assumptions of Islamic economics that are said to be linked to conventional economic theory (Muhammad Syukri Salleh, 2011). These are accommodative-modification and eclectic-methodological thought streams.

On the other hand, because of their acceptance of conventional economic philosophy, Mohd

Shukri Hanapi (2014) and Muhammad Syukri Salleh (2011) are opposed to the method. This clearly shows that mainstream Islam is changing only in terms of its implementation, while the core of mainstream Islamic economics remains rooted in conventional economic theory (Mohd Haidzir, 2017; Mohd Shukri Hanapi, 2017). As explained in the previous study, this research is necessary to propose an appropriate theory of Islamic economics assumptions.

Unlimited Human Wants

Previous studies on the assumption of unlimited human wants have not been discussed in depth by previous Islamic economic scholars, most of them focusing solely on the assumption of the scarcity of resources. Human wants or desires may be defined as inherent desires and maybe temporarily fulfilled either on their own or in more complex combinations through the use of appropriate goods in appropriate quantities, and desires to satisfy desires that are driven by other activities (Mohd Zulkifli, Hanudin Amin, Dzulkifli Mukhtar, Shah Iskandar & Noormariana, 2020). In addition, Yan dan Spangenberg (2018) argue that wants can be unlimited, changeable, grow along with income, social position, and advertising stimulus, while needs are being continuously analyzed as anthropogenic and essential. Komala (2019) explains the difference between needs and wants from al-Ghazali's point of view: needs are all basic human needs for life, while will or desire is a human will come in every matter.

It is clear from the arguments of Mohd Zulkifli et al. (2020), Komala (2019) and Yan dan Spangenberg (2018) that human will is something continuous and will not end because it is instilled or has become part of a human being. It can also be attributed to the human attitude of never being satisfied with the desire for something (Sloman, Garratt & Guest, 2018) and the onset of this unlimited human wants. The basis of unlimited human wants to be rooted in the will of human lust alone. Human wants to follow desire is a will that is difficult to control because it seems ungrateful to what it has and always feels dissatisfied with. In Islam itself, the importance of prioritizing needs over desires to take care of human maslaha (goodness), such as following the maqasid sharia, has been emphasized and can at the same time help control lust. The three (3) categories of maslaha, which are stressed in maqasid sharia, are daruriyyat (basic needs), hajiyyat (complementary needs), tahsiniyyat (luxury). The philosophy of unlimited human will be slightly contradictory to the Islamic tasawur because a good Muslim will keep within the limits of his relationship with Allah the SWT will always try to control his will and lust while at the same time fulfilling his wishes. Therefore, this study is essential for identifying the assumption of unlimited human desires that are compatible with Islamic tasawur economics.

RESEARCH METHOD

This study uses a qualitative method research methodology. The use of these qualitative research methods can provide a more detailed understanding of the field under study (Ronzani, Da Costa, Da Silva, Pigola & De Paiva, 2020). Qualitative research uses an inductive logic approach that allows researchers to form concepts, hypotheses and theories from the data collected (Othman Lebar, 2018). An inductive approach is needed because this study requires an in-depth process of understanding and observation to form the theory from observation or thought in general to something more specific (Bernard, 2017). Furthermore, researchers use exploratory and descriptive research design methods because they are suitable for studying the phenomena being studied.

Data collection was based on documentation studies. The documents referred to are related to the assumptions of unlimited want in Islamic economics. Researchers use database search methods and also reading materials such as Hadith translation, journals, articles, books and proceedings. Moreover, researchers are an important research tool in the data collection process (Othman Lebar, 2018). Additionally, triangulation methods are used by researchers to enhance the quality and accuracy of the data studied. Furthermore, the data in this research study is analyzed using the ATLAS.ti software.

RESULTS AND DISCUSSION

Consumerism in Islam is consumerism based on Tawheed guided by the Quran and Sunnah. The concept of consumerism in Islam is also a way to educate consumers to follow the guidelines that have been set by *Sharia* in seeking the pleasure of God at the same time being able to fulfill their needs and wants in a halal way. Guidelines based on *Sharia* include things such as not going beyond limits, not being excessive or extravagant, clean and halal. In addition, consumerism in Islam is not only based on material things and self-interest but rather it is more inclined to seek the pleasure of Allah SWT. The concept of needs differs from wants because wants are determined by the concept of satisfaction while needs in the Islamic perspective are determined by the concept of maslahah (Fahlefi, 2021). In the concept of maqasid shariah, al-Syatibi (t.t) has established three (3) components of the need to protect human welfare (Abdurrahman, 2020; Adnan, Endut & Ismail, 2019; Betawi, 2019; Fahlefi, 2021; Ridzuan et al., 2018). First, *daruriyyat* which is a component of basic human needs or also known as primary needs. Second, *hajiyyat* which is a component of common needs or efficiency or referred to as secondary needs. Third, *tahsiniyyat* which is a component of needs that are ornamental or luxurious and also as a tertiary need.

Daruriyyat is the most important level of consumerism or basic needs because if these needs are not provided, it will be a threat to human safety (Fahlefi, 2021; Ridzuan et al., 2018). This first level of need is very important to be fulfilled in order to preserve human welfare which covers five (5) needs. Among them are preserving life, intellect, lineage, religion and even wealth (Betawi, 2019). Examples of needs for this stage are food, drink, shelter, and clothing. Next, *hajiyyat* is a common need that must be provided, but without its presence it has not become a threat to human safety and can still continue to live even if human life is not complete (Adnan et al., 2019; Ridzuan et al., 2018). In other words, a consumerism can be inefficient and can still cause hardship or difficulty in human life if this hajiiyat is not fulfilled. Examples of requirements for this stage are such as flexibility for travelers to perform *rukhsah* such as *qasar* and *jama'* prayers, and also comfortable clothing. Lastly, *tahsiniyyat* according to Fahlefi (2021) is refers to luxury items while according to Ridzuan et al. (2018) on the other hand, it is a need that provides comfort, convenience and spaciousness to humans. Both opinions show that the *tahsiniyyat* stage is more directed towards the needs that perfect and beautify human life when used. However, without fulfilling the requirements of *tahsiniyyat*, it will not affect the human life and if it is fulfilled it will not be an offence. The examples that can be described for this level of need are luxury bungalow houses and luxury cars. The level of need for *tahsiniyyat* is also described as a wants which if it uncontrollable the wants will become unlimited and beyond the line (Mohd Zulkifli, 2020). If *tahsiniyyat* is not controlled and being influence by evil lust, it will become unlimited wants. The influence of evil lust will cause people to do things that are against Islam .

Therefore, the level of *daruriyyat* can be seen as a pillar to the level of *hajiyyat* and *tahsiniyyat* (Fahlefi, 2021). This is because if it is not fulfilled in first place, it will cause exigent because it can harm human life. Besides, the level of *hajiyyat* is a normal requirement which if it not met, it does not pose any threat to human life, but will only cause difficulty and discomfort. The level of *tahsiniyyat* is tends to luxury wants and needs that bring pleasure which if not fulfilled, it will not lead to any harm. However, if *tahsiniyyat* is not controlled and being controlled by evil lust, unlimited human wants will happen. The influence of evil lust (*nafs Ammarah*) will cause people to do things that are against Islam.

Next is the discussion of *nafs* based on previous studies by contemporary Islamic economic scholars and Islamic scholars. The word *nafs* comes from the Arabic word *al-Nafs* which means soul. *Nafsin* means having a soul (living or breathing). While *nafsun* means life, self, spirit, blood and wants (Bakri, 2020; Rahmatiah, 2017). According to Al-Ghazali (2011) lust can lead to two (2) meaning. First, *nafs* is the gathering place of anger, *syahwat* and extreme wants that exists in humans. The meaning of *nafs* is used because it is a gathering place for the reprehensible qualities that exist in humans (Rosly, Ali & Hashim, 2018). Second, it is subtle (*latifah*). Yogi Imam (2019) added two more meanings of *nafs* based on discussions by Tasawwuf scholars, namely *nafs al-Syai'* (*nafs* from something) in the form of the essence and nature of things, and *nafs al-Nathiqa al-Insani* (rational human *nafs*) which is called as a man nature and an excellence bestowed upon him from the glory of the human soul. *Nafs* is also called as libido. According to Ibn Arabi (1165-1240) on the other hand, *nafs* is the strength of libido that connects with the whole body. Libido is an evil lust and include of extreme desire possessed by humans. If the libido is not controllable, it will affect human thinking and actions. In the context of this study, *nafs* and wants carry the same meaning, which is the desire for something in excessive way. *Nafs* in the concept of Islamic tasawur is a wants or a desire granted by Allah SWT whether the desire is good or bad. The stages of *nafs* consist of seven (7) stages namely *ammarah, lawwamah, muthmainnah, mulhamah, radhiyah, mardhiyah* and *kamilah* (Rosnaaini Hamid, 2019).

As a result of the interview of the informants, it can be concluded that *nafs* is a human nature bestowed by Allah SWT, which is subtle (invisible) and needs to be encouraged using intellect and human faith to maintain survival. *Nafs* also drives the direction of a person's desire, either towards good (good lust) or towards bad (evil lust). *Nafs* is likened to a hidden impulse in a human being and can only be shown through by the implementation of his wants. In terms of *tahsiniyyat*, people whose *nafs* are not controlled will tend to need expensive and luxurious items. Another example, in terms of *daruriyyat* and *hajiyyat*, when influenced by evil lust (*nafs ammarah)*, individuals tend to take the rights of others or steal. It is the same for lust for debt, sometimes people go into debt to get the necessities of life and there are also those who have money but go into debt to get more luxury. Therefore, the level of *nafs* control is important in influencing human behavior and actions. The strength of faith based on the Quran and Sunnah is the main key in controlling evil passions to free oneself from the slavery of lust.

Next, based on the comments from the informants, it can be concluded that lust and wants have similarities. Therefore, the human unlimited wants that was studied has the same relationship with the level of evil lust such as *nafs ammarah* while good wants is based on the level of good *nafs*. In addition, the application of consumerism based on Islamic teachings can prevent Muslim users from being affected by evil lust that lead to unlimited human wants.

CONCLUSIONS

The philosophical origins of Islamic economics assumptions are said to have been taken from Western philosophy or conventional economics, which was then Islamized and transformed into Islamic philosophy. In conclusion, the assumption of unlimited human wants cannot be universally accepted, as it is a little contradictory in the Quran. This is because human wants can be control with faith by following needed of *maslahah*.

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Determinants of Emergency Fund Savings Among Millennial

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ABSTRACT

The COVID-19 pandemic is a worldwide unpredictable condition thus pandemic given huge impact on global either individual or organisation. These papers include focus on emergency fund savings among millennials. Emergency savings were a barrier toward economic instability, especially among millennials. Many people struggle financially because they lack literacy of how to plan and manage money in order to make good financial decisions. Although these funds are crucial to minimize financial stress, numerous millennial still not yet set aside emergency funds. Consequently, financial literacy plays important role in determinant efficiency emergency funds preparedness among millennial during pandemic crisis. Hence, this study aims to examine whether the financial capability is correlated with emergency funds. These papers include focus on emergency fund savings among millennials. Therefore, using capability approach model by Amartya Sen's as the conceptual framework. This conceptual research will be benefit for policy maker on how to educate millennial start to build a aside their emergency funds saving.

Design/methodology/approach – This study applies a quantitative approach, where primary data was acquired through online surveys.

Keywords: Financial Literacy; Emergency Fund Saving; Millennial

INTRODUCTION

The COVID-19 pandemic did shake its economies of nations all over the world, including

Malaysia. Economically, the Indonesian people are unprepared to deal with the financial paralysis(Yuesti et al., 2020).This unpreparedness is largely caused in part by people's especially millennial nowadays lack of financial literacy. Most of the time, individuals would rely on money in hand rather than effective saving or investing planning. Inadequate planning can result from a lack of financial knowledge and literacy. The millennial generation is classified among those born between 1980 and 2000, and it applies to people with various cultures and backgrounds(Lee, 2019). In Malaysian why millennial can't save enough due to low wages and high cost of living and main factor is low financial literacy too(JALIL, 2021). According Malaysian Department of Insolvency (2020) report found that the number of bankruptcy cases for the period of 2016 to December 2020 was 74699 people which is among millennials .

The purpose of this study is to examine whether financial capability is significantly associated toward having emergency fund savings among millennial or whether there are other factors that determine millennials emergency fund savings preparedness. Almost over two-thirds (71.4%) of self-employed survey participants seemed to have sufficient savings for less than 1 month there are seriously problem(Department of Statistics Malaysia, 2020).Second is determinant level of financial literacy of millennials is significantly associated with millennials savings for emergency during pandemic crisis . Millennials who have high level of financial literacy the outcome is they are prepared their emergency saving while dealing with economic shock. The third purpose is financial capability and institutions are significantly associated toward having emergency savings.

LITERATURE REVIEW

Financial Literacy

Refering previous research done on Australia millennials showing that their financial literacy is relatively low and upland for their financial(Fessler et al., 2020) Throughout this study, financial literacy is characterized about how owner companies handle and strategize their financial capability and set aside emergency savings funds for future own use when dealing with economic shock such as Covid-19 pandemic global crisis to avoid bankruptcy (Thabet et al., 2019). Financial literacy is defined as the ability of individuals to handle financial details and make the right decisions about financial planning, personal wealth, debt, and pensions(Mohammed Esmail Alekam et al., 2018). A lack of financial literacy, as well known as financial illiteracy, could lead to poor financial decisions, resulting in a negative impact on an individual's financial well-being. Financial literacy month 2020's objectives are to inform, educate, and assistance Malaysians in training prudent financial management, in according to the National Strategy for Financial Literacy 2019-2023. This means giving individuals with the resources and information they need to achieve their financial goals, manage their debts, and avoid financial scams.

Financial Capability

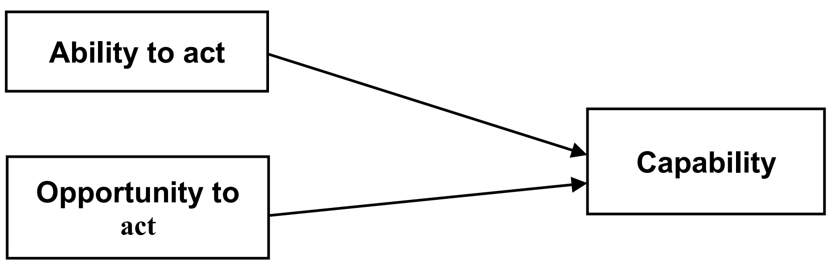
Financial capability is defined as three broad elements in this study. The first, "financial knowledge and understanding," allow individuals to take daily financial decisions; the second, "financial skills and competence," allows individuals to prepare for expected and unexpected situations; and the third, "financial responsibility," discusses the potential effect of fnancial planning for such a household and within a societ(Nam & Loibl, 2020). Individuals who are financially capable should possess both the ability and the option to enhance their financial well-being through effective financial actions and decision-making(Çera et al., 2020). Individual motivational factors like values, living standards, perceptions, and self-efficacy are also captured by financial capability(Jorgensen et al., 2017).

Emergency Funds

Saving for an emergency is somehow one aspect of achieving financial stability, however it can actually benefit with immediate expenses such as vehicle or house maintenance, medical bills not covered by insurance, unexpected income drops such as a job loss, an injury or health condition that limits work, or the departure of a working adult from one's household(Gjertson, 2016).

Theoretical framework

This study is informed by the financial capability framework developed by the Amartya Sen's(Gopinath, 2018). In this framework, there are internal capability and external capability that will influence individual in decision making their personal finance (Aprea et al., 2016). Financial capability can be defined as ability to manage their own finance with the skill they have in order to achieve their well-being in future. Financial capability is an individual's personal capability to execute good financial habits in an organization environment with opportunities available to act. There are two main components of financial capability , financial knowledge and financial inclusion, which are "foundations blocks" of financial capability (Despard et al., 2020). Millennials need to have this to components to build up their financial capability that will be benefit for them. From this financial capability theory, it can motivate young millennials start to take action to achieve their future wellbeing for instance plan for their retirement saving , and build emergency fund for personal purpose(Dewi et al., 2020).



Origin from Amartya Sen's capability approach framework

Source: Develop for the study

METHODOLOGY

This study used quantitative method. The aim of this study is focus on the roles of Financial capability as mediator to produce outcome millennials emergency fund savings. The population of this surveys is Millennials born between 1980 to 2000 in Malaysia. The surveys using online and offline method and questionnaire was developed. The questionnaire was distributed via online google form and some using self collected questionnaire which is near. The data analysis is using Statistical Package for the Social Sciences (SPSS).

The dependent Variable in this study is milliennials having emergency saving funds. Furthermore, the independent variables of this study is financial literacy as a key predictor. This variable was used as indicator of origin construct in Amartya Sen's conceptual model of financial capability which are hypothesis are associated with increasing of probability of millennials having emergency funds savings.

CONCLUSION

During this pandemic outbreak and the as a result there a numerous of the individual declare bankrupt if they are financial literate and set aside their emergency savings this scenario can be reduce (Goh)t 2020).From the previous research mention males' more financial confidence had an effect on emergency saving, whereas females' financial education participation had an effect on emergency saving. The results may assist individuals and organizations who work with young adults understand potential differences in their financial decisions based on individual factors like gender(Lee, 2019).

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Application of Technology Acceptance Model (TAM) in the adoption of Accounting Information System (AIS) among Indonesia Private Higher Education Institutions (PHEIs)

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ABSTRACT

Technology Acceptance Model (TAM) is a broadly defined model used to predict the acceptance of information technology. TAM describes the acceptance of information technology with certain dimensions that can affect the ease of acceptance of technology information by users. The purpose of this model is to be able to explain the main factors of the behavior of information technology users towards the acceptance of the use of accounting information system as a technology itself. This model will illustrate that the use of accounting information systems will be influenced by the perceived usefulness, ease of use of users, and behavioral intentions to use the technology of the system. So that the application of TAM is often grouped into two parts, namely internal variables and external variables. Internal variables are often taken from existing models, while external variables are modified from factors that influence these internal variables. In implementing TAM in higher education institutions, the external variables that are considered the most appropriate are Work Experience (WE), Accounting Training (AT), Task Complexity (TC), Budget Allocation (BA), Accounting Knowledge (AK), and Social Norms (SN). This research is conducted empirically on the current phenomenon in the higher education institutions in Indonesia and is supported by a critical review of previous research. The instrument used refers to the validated and reliable instrument of the TAM adopted by other studies in the past.

Keywords: Technology Acceptance Model (TAM); Higher Education: Ease of Use; Perceived Usefulness; Accounting Information System

INTRODUCTION

In accordance with the definition expressed by previous researchers, TAM, which was first developed by Fred D. Davis in 1986, is a model formulated to measure the basis and benefits of an information technology used (Harryanto et al., 2018), expressed as a model used to predict the acceptance of information technology (Manis & Choi, 2019). In Indonesia, TAM is usually often applied to companies and it is still very rare for research to apply TAM to see the basis of a technology system used in universities, especially private universities related to accounting information systems (Zainudin & Mohd, 2021). Due to the limited studies examine the application of TAM in HEI, the authors are interested in studying more deeply related to the application of TAM in PHEIs in Indonesia. Taking the object of research at private universities in Indonesia is inseparable from the regulations that make private universities treated similarly to the state universities, the similarity is in the scope of management which includes management of institution, human resource management, management of assets and funding management (Citra Ramayani; Siti Afiqah; Nadzirah, 2021). So that when there is a new system applied in the institution, it will affect the four scope of management, and in the application of TAM these four scope of management will be the basis for determining the variables to be measured.

1. THE TECHNOLOGY ACCEPTANCE MODEL

As one of the most influential models in the study of technology acceptance; TAM is formed with two main factors that influence an individual's intention to use a new technology, namely perceived ease of use and perceived usefulness. The TAM is able to explain two main factors that affect human behavior towards the use of technology, known as external variable and internal variable. Figure 1 below shows how the model provides linkages between external variables and internal variable. In specific, external variables are factors that is not caused by the technology and internal variables are factors that mainly caused by the technology (Davis et al., 1989). Among the internal variables, there a series of mediating variables existed before individuals, or an entity actually use the system or technology.

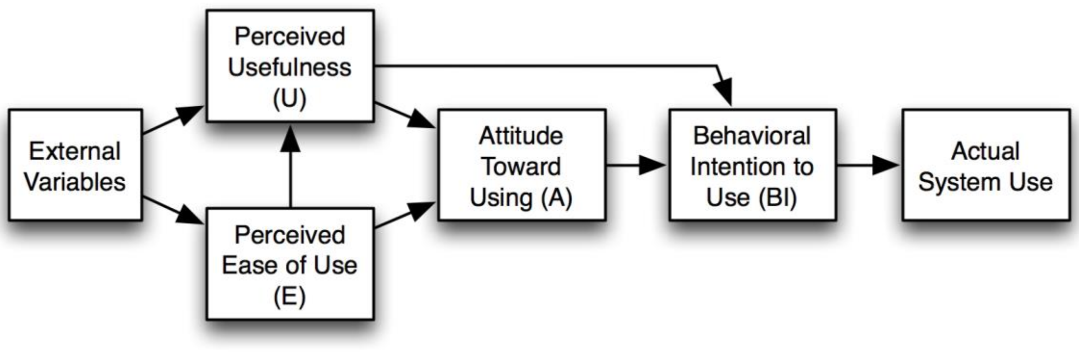

Figure 1. Technology Acceptance Model (TAM)

Source: (Davis et al., 1989)

From Figure 1 above, External variable is a generic element that depends on the condition, environment and phenomenon obtained during the study. The external variable is considered to be the cause or element that influence the internal variables of TAM (perceived ease, perceived usefulness, attitude toward using, behavioral intention and actual use) (Kang et al., 2021).

One internal variable among many in the TAM model is perceived ease of use (E). E is a belief that the accounting information system is easy to use. This variable has an impact on the perceived usefulness (U) when the system is used; then after the system is used and the benefits are felt, the system will often be used so that it will have an impact on behavioral intention and actual use, consistently (Manis & Choi, 2019).

Therefore, the original TAM variable, which refers to the internal variables, may not adequate to capture the key factors influencing attitudes toward accounting information system use intentions and its actual use by the PHEIs in Indonesia. The researcher's argument against the possibility of not being sufficient is based on the many causes that can be used as external variables to influence a person, stating that the technology used is easy (Venkatesh & Bala, 2008). Based on basic assumptions and facts for research on the application of TAM through the application of accounting information systems in several private universities in Indonesia, the researchers expanded the original TAM by including Work Experience (WE), Accounting Training (AT), Task Complexity (TC), Budget Allocation (BA), Accounting Knowledge (AK), and Social Norms (SN) as External variables. Next, it will be explained why these variables were chosen to be external variables.

LITERATURE REVIEW

2. TAM EXPLANATION ON THE ADOPTION OF AIS IN PHEIs IN INDONESIA

Accounting Information System (AIS) consists of 3 basic elements, namely: system, information, and accounting. The system is a unit of two or more components that interact with each other to achieve a goal (Giacomini, 2020). In Indonesia, there are 3 (three) accounting systems required by the Minister of Finance Regulation No. 76/PMK.05/2008, specifically: monetary information system, fixed resource information system, and cost accounting information system (Ramadhan, 2013). An accounting information system is a system that will make monetary reports fundamental to the motivation behind responsibility, executive, and candor (Ramadhan, 2013). The focus of this research is on the financial information system contained in the cost information system. Why this was chosen is based on data and phenomena that occur in Indonesian universities, especially in private universities. Where at first glance the researcher mentioned that in Indonesia there are two types of universities based on management status, namely state universities and private universities. Between state universities and private universities has the same goal to educate the nation's children. However, in its establishment and management, public universities are formed or established by the government, while private universities are established by the community which are managed by the community themselves on behalf of organizations or foundations (Zainudin & Mohd, 2021).

In the daily implementation of this private university, it manages all needs independently, there is no participation from the government, so the government is only responsible as a supervisor of the basic purpose of education, namely educating the nation's children. The form of government supervision is regulated in a forum called the National Accreditation Board (BAN). The BAN itself consists of the University BAN (BAN-PT) and the study program BAN. In carrying out its functions, BAN has its own indicators that will be used as a tool to photograph a university, both public and private, declared superior, very good or good. And if the university cannot fulfill the accreditation that has been set by the BAN, it is at least good, then the operational permit for the management of the university will be threatened with being revoked to the limit that has been set. Although the status of state universities and private universities is different, the assessment instruments by BAN-PT and BAN for study programs are the same.

One of the components that will be assessed by BAN is related to financial aspects; which will be assessed regarding the adequacy of existing funding at the university to finance operational activities of learning, research, student service and the feasibility of the assets owned. And in financial management, the assessment by BAN will be better if universities have used a modern financial system. A modern financial system here that has been integrated with the web or using separate software/applications. However, in practice, not all universities, especially private ones, have used the modern system, in other words, still use a manual financial system or are only assisted by Microsoft Excel; this is caused by many factors.

The search for the reasons or basis for private universities using this accounting information system is considered very appropriate by researchers when studied using the TAM model. Where the TAM developed in this study is a modified TAM by adding several external variables and because the model formed uses path analysis, it is called an exogenous variable; as has been done by previous researchers (Lee et al., 2006). However, the difference between this study and previous research is the selection of exogenous variables used as shown in Figure 2 below.

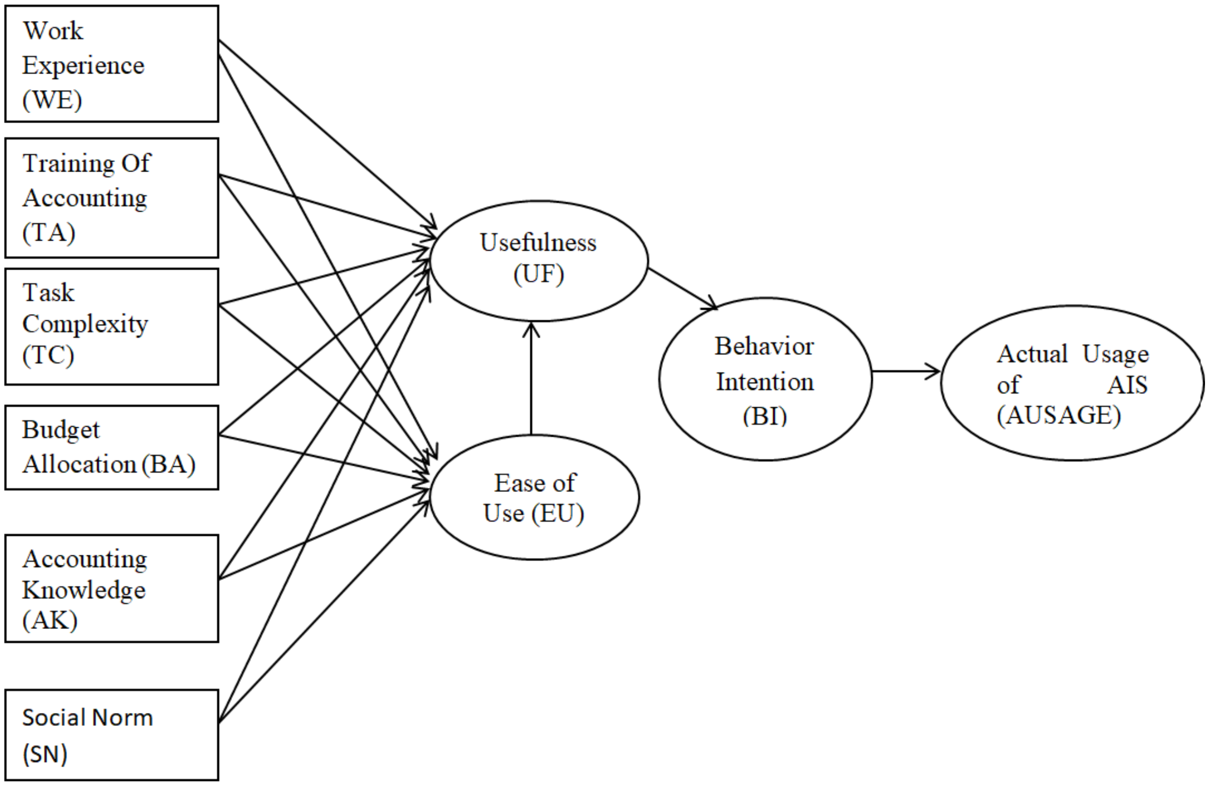

Figure 2 Technology Accepted Model Modification

Based on table 2 above, it can be explained that this study consisted of two groups of variables, namely endogenous and exogenous. Exogenous variable groups consist of Work Experience (WE), Accounting Training (AT), Task Complexity (TC), Budget Allocation (BA), Accounting Knowledge (AK), and Social Norms (SN); where the endogenous variables will explain the internal process, while the exogenous variables are external factors that are thought to affect the acceptance process of the accounting information system used.

CONCLUSIONS

TAM is considered the right variable to reveal the application of financial accounting information systems in universities on the basis of the many factors that may cause universities to use accounting information systems; whether an accounting information system that has been integrated into the web or using certain software, even when private universities in Indonesia persist in using manual systems. On the basis of the flexibility of this model, the researcher calls it the right model. If some previous researchers said that on the basis of convenience and technological developments, universities should use accounting information systems that have integrated web or certain software, but with the TAM model, the basis will be revealed that makes universities choose to use a system.

The basis for selecting a system could be because the system is considered easy to use or considered the system to be very useful. And when it is said that the system is easy to use, there are many factors that make it easy, maybe because they are used to it because of long work experience or because they already understand the training that has been followed, maybe even because their education is in that field. Likewise, when the system is considered useful, many factors may influence it, such as Social Norm, Task Complexity (TC), Budget Allocation (BA) and so on.

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Research on the Construction of Tax Data Comprehensive Analysis System Based on Big Data

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ABSTRACT

In the era of "internet plus", the application of data technology is more and more extensive. Data informatizaton application is becoming an important measure of tax collection and management. It will be discussed how to use Hadoop data processing cluster in this paper, and Javeweb to develop a comprehensive tax data analysis system based on big data. Aiming at the problem of tax data informatization, three main functional modules, data integration, data inspection and data query, are developed to centrally manage the data and provide inspection functions, so as to improve the quality of tax data and effectively help local tax authorities to comprehensively analyze the data of all parties.

Keywords: Big data; Hadoop; tax data; comprehensive analysis

INTRODUCTION

Finance is the foundation and an important pillar of national governance. The tax system is an important part of government financial system. Therefore, it is the general trend and imperative to deepen the reform and development of tax administration. The key point of tax administration reform is to change the management mode and realize the modern management mode with informationization as the core. Tax informatization has now entered the stage of Internet application, and new problems have begun to appear in the process of tax informatization.1

In view of the above description, the author of this paper uses Hadoop big data cluster to ETL data, and applies JavaWeb technology to establish a comprehensive tax data analysis system based on big data technology. With the advantage of big data technology, this system collects tax data of multiple departments, and sets up information data query and data quality check functions. These functions can ensure the accuracy of tax data, and help the staff of tax collection department, inspection department and management department to comprehensively analyze the data of all parties in the integration. So as to further reduce the collection cost, improve the efficiency of collection and management, improve the compliance of tax laws, give full play to the functions of taxation, and promote the healthy development of economy and social fairness and justice.

RESEARCH METHOD

This paper adopts the technical analysis method, and uses different technologies to realize different functions and requirements for the application of big data technology in the tax collection and management system. Follow the following framework:

To find questions. The complex Internet environment and economic environment have prompted the reform of tax collection and management system to meet the needs of massive data growth.

To analyze the problem. According to the demand analysis of tax personnel on the three main functions of tax data integration, data check and data query, the overall design is how to realize these functions.

To solve the problem. Based on the above analysis, it is proposed to process the data through ETL Technology, Hadoop cluster and SSH framework, and to analyse the data from different angles to meet the needs of tax collection and management.

In the reality, due to the comprehensive implementation of a series of tax reforms such as replacing business tax with value-added tax in 2016, the scope of tax payment expanded, which greatly increased the complexity and diversity of the local tax information environment. The tax related data held by local tax departments showed explosive growth, and the existing tax management personnel were insufficient, so it was impossible to scientifically collect and sort out the huge and complex tax data that was rapidly updated. At the same time, because the existing tax data is generated by different departments such as tax collection departments, management departments and audit departments in different jurisdictions, the information can not be fully and effectively shared, and there is a lot of repetitive work among grass-roots units, resulting in low management efficiency and low data quality. There is also a lack of information among the tax, industrial and commercial, and banking departments, which provides an opportunity for tax evasion.

Based on this, in today's society, how to use high-tech methods to provide comprehensive and reliable data basis for local tax authorities to make decisions has become an important issue in the current tax informatization work. The solution to this problem can be to build a tax related big data platform guided by data management and analysis application, collect and sort tax data by using big data technology, so as to help realize tax data sharing and realize tax collection and management quickly and efficiently.

RESULTS AND DISCUSSION

1. Analysis of the Empirical Requirements

I. Functional requirements

According to the users' needs of government tax authorities, this system develops three main functional modules: data integration, data check and data query. The interface should be clear and easy to understand, the inquiry process should conform to the business procedures, and the buttons displayed on the interface should be conspicuous and reasonable.

Among them, the data of the data integration module should be comprehensive, involving the data obtained by various channels such as local industry and commerce, banks, tax authorities at all levels in counties and districts, third-party tax websites and the latest tax policy standards. The data integration module will sort and integrate these data by year. The staff of the collection department of the local tax authorities can browse and use the required data and information intuitively. Moreover, the update function of the latest tax standards and regulations can also facilitate the local tax bureau management personnel to keep up with the pace of the country in time and adjust the local tax collection strategies in a targeted manner. In addition, the data integration module also provides the report downloading function, summarizes all kinds of report information, and provides a unified way to facilitate the local tax authorities to download the required normative reports quickly.

Secondly, in order to facilitate users to quickly find the required data information, the data query function is developed. One-account inquiry is convenient for the tax authorities' collection departments to quickly find the relevant information of taxpayers and speed up the efficiency of the personnel of the collection departments in handling various collection businesses. Departmental inquiry can help local tax administration departments to consult the information and data of various departments of local tax bureaus and help them to carry out various work of inspection and management.

The data check function module can assist tax officials of local inspection departments to check the imprecise defects of tax-related information in the process of tax authorities' work due to the manipulation of the system, so as to quickly correct the wrong information and ensure the reliable and accurate data entry. And the system can compare the same information of local banks, industrial and commercial bureaus and tax authorities at all levels in counties and districts according to the information selected by users, so as to remind the staff of the inspection department of the local tax bureau to carry out targeted verification and inspection of abnormal data information.2

II. Data Running Path

This platform is designed and developed by using MVC-based component framework. The framework design uses hierarchical design model, and the components use recursive structure. Communication between components and components and frames via API.The component framework of the whole system consists of performance layer framework, business layer framework, persistence layer and data layer, as shown in Figure 1.

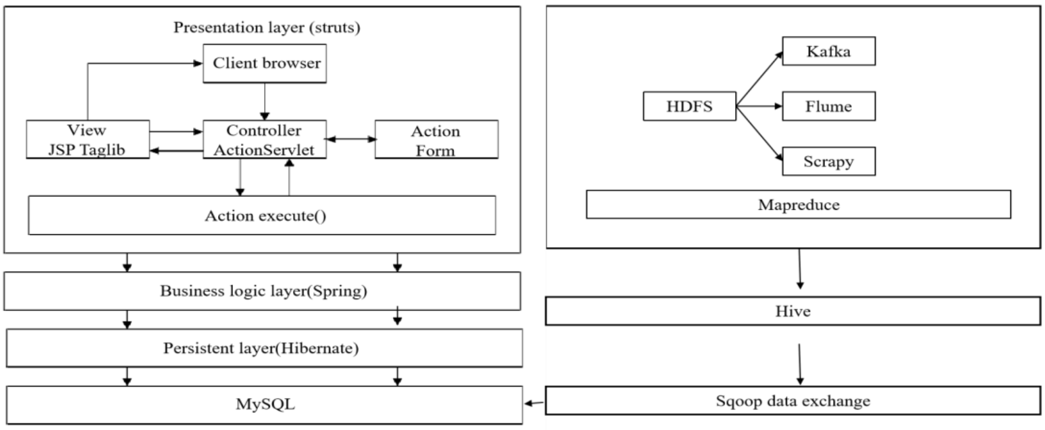

Figure 1 Overall system architecture diagram

The system developer sorts out the tax report data required by various departments of local tax bureaus, offices of regional bureaus and government units at all levels. With the gradual revision of policies and laws, it is allowed to obtain tax-related information and data on taxpayers' production and operation from local industrial and commercial bureaus and local banking institutions. At the same time, they can obtain public tax-related data information from the Internet such as tax house and daily tax news through web crawler technology, and enrich the third-party tax-related data. These third-party tax-related data will be localized and integrated with the existing internal tax system data information, and all kinds of scattered tax-related data will be cleaned, integrated and summarized.

The tax data comprehensive analysis system based on big data must first deal with the ETL process of data extraction, conversion and loading. Flume, Kafka, Scrapy and other data capture tools are used to obtain the source data needed by the enterprise, and the collected data is stored in HDFS distributed memory. The data in HDFS is taken out and the corresponding Mapreduce program is started for distributed calculation and analysis, and the information data useful to the enterprise is extracted and temporarily stored in Hive. Sqoop completes the data exchange between Hive and MySQL, and finally saves it in MySQL database.3

Users access the system through the browser client, and the presentation layer of the system realizes the development of JSP pages by Struts2 framework. The function of the pages is only to transmit data and accept the returned data for display. The presentation layer of the browser needs to be called JSPTaglib by the controller. After receiving the user's request, the controller uses ActionForm to encapsulate the user's request parameters, which are passed through the form field of JSP page. The presentation layer extracts the user's input information and submits it to the controller. After that, the controller decides to hand over the request to the business layer according to some choice. The business layer processes the user's request and returns data according to the code of business logic, and finally shows it to the user by the presentation layer. The business logic layer is developed in Java language of Spring framework, which completes the business logic function setting of the whole system. The hibernate persistence layer framework design adopted by the system facilitates the persistence layer objects to complete the process of self-storage to relational databases, and fills the gap between object relational databases. The realization of business layer needs to access all supporting data in MySQL database through Hibernate to complete the system development.

2. Function implementation

This system designs the functions of this system according to the needs of tax authorities. Firstly, the system is equipped with the option of management authority, which classifies CA numbers according to the professional titles in tax authorities, and performs basic operations such as adding, deleting and modifying tax authorities' users. At the same time, it can limit users' usage functions and access to data. The client that logs in to the system through the CA authentication mechanism of tax personnel. When the client enters the homepage, it can see three main functional modules: data integration, data check and data query.

I. Data integration

Click on the data integration module, and user can see the data information obtained through local industrial and commercial bureaus, banking authorities, tax departments at all levels in counties and districts and third-party tax websites. This system includes personal income tax, enterprise income tax, value-added tax, consumption tax, land use tax, real estate tax, farmland occupation tax, and 17 categories of tax information data, such as newly passed environmental protection tax, tobacco leaf tax and ship tonnage tax. This function module integrates laws and regulations, implementation standards, taxpayers, tax value, tax payment progress, related financial statements and other data according to the year, and the system background managers update these data in time. In addition, the data integration module also provides report downloading function, so you can see the fixed reports of different categories and specifications and download the reports. Normative statements include income tax returns, turnover tax returns, accountants' forms, tax agents' forms, etc., which are submitted to higher management departments and relevant departments for personal use.

II. Data query

Click on the data query module to divide the data query function into two sub-modules: one-account query and one-department query. Household query is the basic information query with a single taxpayer or tax-paying enterprise as the query unit. It can query all relevant data of taxpayers or merchants, and is a collection of tax-related information with individual taxpayers as the unit. Household inquiry covers the basic information of local taxpayers, taxpayers' tax-related information, taxpayers' financial information, withholding fee information, taxpayers' related third-party information and so on. The department query takes the tax department as the dimension, and its main content is to display the relevant tax information of a certain tax department. For the management of statistical information. Select the tax department according to the tax authority code, tax authority name keywords or directly on the interface.4

III. Data check

Click to enter the data check module, and the user can click Start Check, and check the abnormality and integrity of the selected data against the local industrial and commercial bureau, banks, county and district tax authorities and other source data obtained in the whole system. The data quality standard of the system is checked according to the "data integrity" in the performance index of tax data quality assessment of State Taxation Administration of The People's Republic of China and District Bureau in 2021. The audit contents are as follows: whether the information such as tax administrator code, competent local tax department, corporate taxpayer name, legal person, identification number, taxpayer identification number and corporate organization code is missing or wrong. Part of the implementation code of this functional module is shown in Figure 2.5

```
@RequcstIM apping( "towList.do ")
public String towList( @Cure ntUscr User operUsr,Modcl mode,
HtpS crvletRcqucst requcst,SjzlxInfo info,String cwlx) {
info = (SjzlxInfo) PagcToolsgetQue ryCondition(req ucst, info);
List towList =
thissjzlScrvice .qucryTowLitinfo,cwlx);
//Check whether the query data exists in session
if(raq ucst. g: tSessio n0. gtAttribute(operUscrgctd(0+ "towLit'")!=null)
{
rqust.gstScssion).rce move Atribute(operU scr.ge tld (+ "towList ");
rcqucst. gc tScssion0. sctAtribute(operUscr.gc tld)+ "towList",
towList);
}
```

Figure 2 Code implementation of data integrity check

3. Measurements of Implementation

I. ETL technology

ETL is the acronym of Extraction, Transformation and Load, that is, the process of data extraction, transformation and loading, which completes the transformation from business data sources to analysis data results in the data warehouse system. It is an important part of building a data warehouse. Users extract the required data from the data source according to the extraction definition, then dump the data, and finally load the data into the data warehouse according to the predefined data warehouse model.[6]

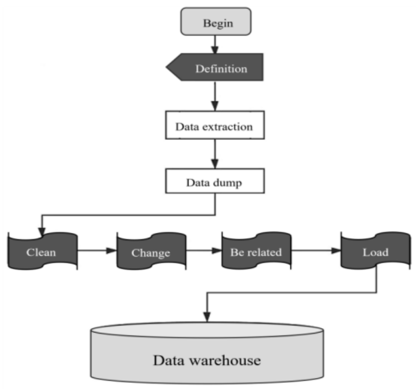

Figure 3 ETL flow chart

II. Hadoop technology

Hadoop cluster is a distributed computing platform, which is used to process massive data. Its two core components are HDSF file system and mapreduce, a distributed computing framework. HDFS is a distributed storage system, and its two sub-projects are namenode and datanode respectively. Namenode manages the namespace of the file system, including metadata and the location of data blocks on datanode. Datanode stores real data locally, and they all run on independent nodes. The two sub-projects of Mapreduce are jobtracker and tasktracker, respectively. jobtracker is responsible for managing resources and assigning tasks, and tasktracker is responsible for executing tasks from jobtracker. In the case of a large amount of data, the processing capacity of a single machine is not competent, so it is necessary to use distributed cluster to process data.

However, the complexity of using distributed cluster to process data increases exponentially. Therefore, under the demand of massive data processing, a general distributed data processing technology framework can greatly reduce the application development difficulties and workload. Hadoop cluster includes the following auxiliary tools besides the main functional components of HDFS, MapReduce and Yarn: HIVE, a SQL data warehouse tool based on big data technology (file system+computing framework); HADOOP-based distributed massive database HBASE: ZOOKEEPER, the basic component of distributed coordination service; Mahout, a machine learning algorithm library based on mapreduce/spark/flink distributed computing framework; Workflow scheduling framework Oozie, data import and export tool Sqoop, log data collection framework Flume.[7]

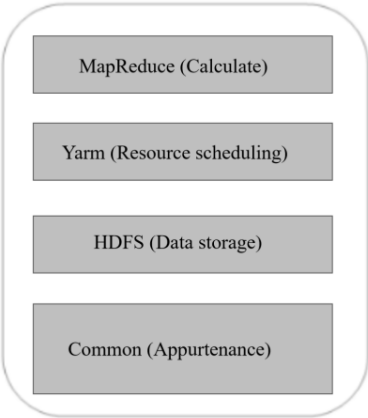

Figure 4 Hadoop composition Figure

III. SSH framework

SSH struts+spring+hibernate is an integrated framework, which is a popular open source framework for Web applications. SSH framework set is a kind of framework set that will be used in most software design processes. This framework is based on MVC, and MVC pattern has become a common pattern in modern J2EE development, and it is welcomed by more and more developers such as JSP and PHP.

MVC patterns are Model, View and Controller. After the application is divided into these three parts, each of them handles its own tasks. Struts is used as the overall infrastructure of the system, which is responsible for the separation of MVC. In the model part of Struts framework, it controls the business jump, and hibernate framework is used to support the persistence layer. Spring manages Struts and Hibernate. The SSH framework set mentioned above corresponds to the development and use of MVC pattern. The integration of the three frameworks of Struts+Hibernate+Spring fits the three-tier object of MVC pattern. Struts corresponds to the control layer of the foreground, while Spring is responsible for the business logic processing of entity bean, while Hibernate is responsible for the handover of databases and the use of Dao interface to complete operations. The SSH framework diagram is shown in Figure 5.8

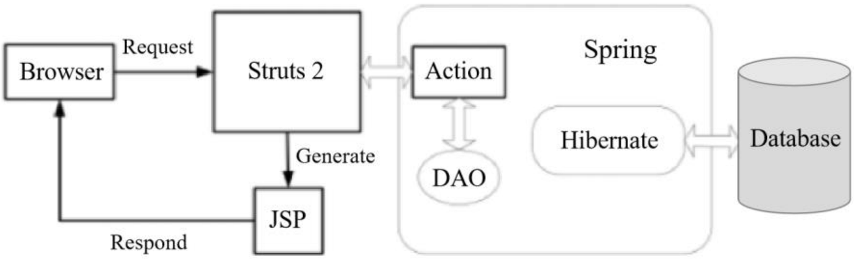

Figure 5 SSH framework architecture diagram

IV. Development environment

Comprehensive analysis platform of tax data based on big data, which uses Hadoop-based big data server cluster to process data and store it in MySQL database, and uses JavaWeb technology to develop an application platform.

According to the data volume and overall operation requirements of the system, a total of four cluster servers are used to build Hadoop3.3 cluster, of which one node is the Master.Hadoop master node and the other three nodes are slave nodes. Hadoop cluster needs to run components including Hive 1.2, Mapreduce and Sqoop-1. Hadoop and its functional components are synchronously installed and deployed on four nodes to complete the construction of Hadoop cluster. The cluster will be developed under Linux system. This paper selects CentOS-8.2 release version of Linux enterprise operating system. When using web crawler technology to collect data, make use of Scrapy2.5 framework. The Java development tool used in the JavaWeb application of this system is IDEA 2021.1.3 (Ultimate Edition), the development environment is JDK 1.8, the development language is Java, and Apache Tomcat 9.0 is selected for server building. The development of the system is based on MVC pattern, and the SSH framework of Structs 2.3+Spring 5.3+Hibernate 5.3 is selected as the framework. And choose MySQL 8.0.28 to help manage data. Through the introduction of the above key technical theories, we have determined the overall environment of system development, the configuration of related software and tools, and the technical feasibility of the overall project.

CONCLUSIONS

This system designs the functions of this system according to the needs of tax authorities. Different functions are set according to different needs and management directions of the tax department. Compared with the traditional tax collection and management platform, it has prominent advantages in the three main functional modules of data integration, data inspection and data query.

I. Advantages of data integration

In the data integration module, you can obtain different types of data information through industrial and commercial bureaus, banking organs, tax departments at all levels in counties and districts, and third-party tax websites in different regions, and then integrate and sort out financial statements and other data in different years according to the corresponding tax laws, regulations, policies, implementation standards, taxpayers and other information of different taxes, so as to quickly submit income tax returns Turnover tax return, accountant's form, tax agent's form, etc.

II. Advantages of data query

The data query module can be divided into two sub modules: one user query and department query, which can query the basic information of taxpayers, tax related information, financial information and relevant third-party information from different angles.

III. Advantages of data inspection

Tax authorities compare and analyse the data from different sources in the system, check the abnormality and integrity, and quickly check whether the information is missing or wrong, and easy use.

However, in the process of establishing the initial system, it needs to spend a lot of manpower, material resources and financial resources to design, establish and test. Meanwhile, due to the complexity of the design data, the collection of receipts is a huge project. Therefore, the preparatory work in the early stage is complicated.

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Internal Audit Behavioural, Job Performance, and Audit Quality of Local Government In Riau Province

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ABSTRACT

Audit quality is crucial in an organization. This happens because audit quality reflects the work activities of the auditors, in this case, the government's internal auditors. The government's internal auditor is an internal supervisory apparatus, is tasked with supervising and conducting consultation activities on the implementation of government affairs so that the implementation of government programs are efficient,effective, and economical and the objectives of good

governance are achieved. This study aims to discuss how auditor behavior influences audit quality with job performance as a mediating variable in the Riau provincial government. The auditor behavior in this paper used is role conflict, role ambiguity, role clarity, and knowledge-seeking behavior. The data to be used is primary data using a questionnaire. The sample in this study targeted 217 internal auditors using Krejcie and Morgan tables. The analysis used uses Structural Equation Modeling - Partial Least Square (SEM-PLS) with WarpPLS 4.0 software, and the test tools used are direct and indirect effects. The results of this study are expected to provide implications to government policies and theory development related to internal government auditors.
Keywords: Role Conflict; Role Ambiguity; Role Clarity; Knowledge Seeking Behavior; Job Performance; Audit Quality

INTRODUCTION

The design of this study investigates the quality of public sector audits in local governments in the province of Riau. The methodological aspect of internal audit quality assessment is still a topic that is relevant to current conditions. The relevance of the selected research issues was confirmed by various scientific forums devoted to issues of quality and effectiveness of the internal audit. This is consistent with what was stated (Paananen, 2020) that municipal governments are the main economic and social actors in most countries. However, very little is known about their audits, especially the determinants of their audit reports. De DeAngelo (1981) revealed that the classical audit theory states that audit quality is the probability that the auditor will find and report violations in the client's accounting system. Meanwhile, Ferraz and Finan (2010) find that government audit reports can reveal corrupt activities, which then affect the outcome of political elections.

Changes in the political, social, economic, and social systems have led to various demands for good governance. This change in activity has an impact on audit quality. Audit quality can be interpreted as audit work related to the good and bad of audit work and compliance with existing standards. Gramling and Hermanson (2009) revealed that internal audit quality determinants are the audit report's value and the implementation of the resulting audit recommendations.

The results of the Supreme Audit Agency (BPK) audit as the government's external auditor of the Riau Representative BPK's Audit Results Report (LHP) totaled more than Rp. 91 billion in the Riau 2020 APBD, which became BPK's findings. This figure has even increased from year2019, which was only IDR 27 billion. This is based on data from the BPK LHP, and if totaled in the findings of the special BPK LHP audit in the province alone in 2020, it amounts to Rp. 91.204 billion, which consists of findings, namely potential losses of Rp. 81.6 billion, the shortfall in receipts of Rp. 1.9 billion. Administrative irregularities of Rp.7.6 billion. These findings, when viewed from the previous year in 2019, where the head of the OPD is also still the same as the current leadership. If it is trended throughout 2019-2020, the most significant potential for findings is in 2020 of Rp. 91.204 billion, while in 2019, it is only Rp. 27.504 billion (RRI Pekanbaru, 2021). This problem, creates a stigma that it still needs to be improved and maximizes the work performance role of the government's internal auditors so that the number of external auditors is met.

The summary of Semester Examination Results (IHPS) I 2021 for Indonesia reveals that audit findings on government performance in Indonesia, namely, BPK found 8,483 findings containing 14,501 problems worth Rp 8.37 trillion or by 46% problems with weaknesses in the internal control system (SPI). In addition, 7,512 (52%) problems of non-compliance with laws and regulations amounted to Rp. 8.26 trillion, and 372 (2%) problems of ineffectiveness, inefficiency, and ineffectiveness of Rp. 113.13 billion. Of the non-compliance problems, as many as 4,774 worth Rp 8.26 trillion are problems that can result in losses of Rp 1.94 trillion, potential losses of Rp 776.45 billion, and a shortfall in receipts of Rp 5.55 trillion. As for the Riau province, the Audit Result Report (LHP) of the Riau Representative Financial Audit Agency (BPK), the total in the Riau 2020 APBD, became the findings of the BPK reached more than Rp. 91 billion. This figure has even increased from last 2019, which was only IDR 27 billion. This is based on data from the BPK LHP, and if totaled in the findings of the special BPK LHP audit in the province alone in 2020, it amounts to Rp. 91.204 billion, which consists of findings, namely potential losses of Rp. 81.6 billion, a shortfall in receipts of Rp. 1.9 billion. And administrative irregularities of Rp.7.6 billion. This finding is when viewed from the previous year in 2019, where the head of regional apparatus organizations is also still the same as the current leadership. If it is trended throughout 2019-2020, the greatest potential for findings is in 2020, which is Rp. 91.204 billion, while in 2019 it is only Rp. 27.504 billion.

Judging from the number of cases above, it can be seen that APIP has not maximized the functions and roles of APIP, namely conducting Government Internal Control System (SPIP) development and encouraging increased effectiveness of risk management, control, and governance of organizations, as mandated in Government Regulation Number 60 of 2008 concerning Government Internal Control System. It can be concluded that the external audit findings reflect the quality of the internal audit. Gamar and Djamhuri (2015) reveal that in various cases in the regions, the weak role and performance of local government internal auditors.

Many previous studies have provided definitions and indicators to define audit quality, such as DeAngelo (1981) audit quality related to independence and competence; Deis and Giroux (1992) audit quality is related to assurance; Wallace (1991) audit quality of auditor experience, lawsuits against auditors, legal regime, audit firm size, reputation, and specialization. However, because audit quality is a complex and difficult concept to understand, it is still difficult to measure. As a result, errors often occur in identifying the type and quality (Sumartono et al., 2019).

Internal auditors have an important role in conducting the audit process. Because the results of the audit are conducted by the internal auditor because the results of the auditor will be audited by the internal auditor. However, in practice, internal auditors often have role conflicts because they have to balance two roles (Tungga, et al., 2020). Role conflict is part of the dualism of one's thinking about a job, and this is what often causes employees not to focus (Atmadja, 2018). Role clarity is associated with the many positive outcomes that organizations and practitioners have had over the years that focus on role ambiguity can be removed with treatments such as responsibility charts, role analysis, and sound decision making (Peng et al.,(2016); Zheng et al,(2014).

Local government internal auditors have difficulty understanding the ambiguity of the role of the audit task they have to perform, which will impact the auditor's performance. This is supported by similar research that suggests role ambiguity is negatively related with job performance (Caillier, (2010); Novriansa and Riyanto, (2016); Khuong et al., (2016); Saha et al., (2019); Cahayasanthi & Piartrini, 2020). Causholli et al. (2021) suggest auditor knowledge from two dimensions: theoretical perspective (human capital and social capital) and specific knowledge (general knowledge and specific knowledge). One of the main assets that an organization must own is human capital. Human capital can improve performance and enhance organizational excellence based on the ability to transfer knowledge from the source to the recipient's efforts (Elbaz et al., 2017).

Research objectives

This study empirically examines and develops a model of the relationship between the Behavior of Internal Auditors of Local Governments in Riau Province: Implications for Audit Quality. Auditor behavior used in this research is role conflict, role ambiguity, role clarity, and knowledge-seeking behavior. The aim of this research is:

1. To determine the effect of role conflict on job performance
2. To determine the effect of role clarity on job performance
3. To determine the effect of role ambiguity on job performance
4. To determine the effect of knowledge-seeking behavior on job performance
5. To determine the effect of role conflict on audit quality
6. To determine the effect of role clarity on audit quality

7. To determine the effect of role ambiguity on audit quality
8. To determine the effect of knowledge-seeking behavior to audit quality
9. To determine the effect of role conflict to audit quality with work performance as a mediating variable
10. To determine the effect of role clarity on audit quality with work performance as a mediating variable
11. To determine the effect of role ambiguity on audit quality with work performance as a mediating variable
12. To determine the effect of knowledge-seeking behavior to audit quality with work performance as a mediating variable
13. To determine the effect of job performance on audit quality

Research questions

This research proposal dissertation investigates the predictive ability of role clarity, role conflict, role ambiguity, knowledge-seeking behavior, job performance, and audit quality in the public sector organization.

1. What is the effect of role conflict on job performance?
2. What is the effect of role clarity on job performance?
3. What is the effect of role ambiguity on job performance?
4. What is the effect of knowledge-seeking behavior on job performance?
5. What is the effect of role conflict on audit quality?
6. What is the effect of role clarity on audit quality?
7. What is the effect of role ambiguity on audit quality?
8. What is the effect of knowledge seeking to audit quality?
9. What is the effect of role conflict on audit quality with work performance as a mediating variable?
10. What is the effect of role clarity to audit quality with work performance as a mediating variable?
11. What is the effect of role ambiguity on audit quality with work performance as a mediating variable?
12. What is the effect of knowledge seeking to audit quality with work performance as a mediating variable?
13. What is the effect of job performance on audit quality?

RESEARCH FRAMEWORK

The research model is based on the theories used, namely the theory of planned behavior and the role theory. Planned behavior theory and role theory are used because they are considered able to explain the relationship between audit and organizational behavior in this study. The research framework can be seen in Figure 2 in the appendix.

PROPOSED RESEARCH METHOD

Research sites

The location of this research is the Regency Government of Riau Province, namely the Riau Province BPKP and the Riau Province Inspectorate and City Regency Inspectorate in Riau Province.

Research Design

This research uses the quantitative method. They are collecting data using research instruments. This study uses primary data from questionnaires and respondents' perceptions in answering the questions posed. Questionnaire data was collected directly from respondents to get a higher response rate. The direct survey was conducted by distributing questionnaires directly to the local government internal auditors in the Riau Province Region.

Population and Sample Size

The population in this study were the internal auditors of the Riau Provincial Government, namely the Riau Province BPKP and the Riau Province Inspectorate and City Regency Inspectorate in Riau Province. The sample in this study amounted to 217 internal government auditors with sample selection using Krejcie and Morgan (1970) tables.

Research Instrument

Role conflict in this study was measured using 8 statement items from Rizzo et al. creating instruments (1970). A 5-point Likert scale was used to answer each statement. Novriansa and Sugiyanto (2016), Burney and Widener (2007), Fisher (2001), Viator (2001), Gregson et al. (1994), Bamber et al. (1989), Rebele and Michaels (1990), and Senatra (1990) all used the role conflict instrument developed by Rizzo et al. (1970). (1980). In this study, role ambiguity was assessed using a six-item statement from Rizzo et al. (1970), Novriansa, and Sugiyanto Instrument (2016). A 5-point Likert scale was used to answer each statement. Sawyer (1992) was used to determine how clearly workers understood their roles. This scale is divided into two parts: role clarity and process clarity, by using a Likert scale 5. For the variable of work performance, the instrument uses Fogarty et al. (2000) self-reported performance evaluation and Whitaker et al (2007) task performance and contextual performance using a 5 Likert scale. For the variable of knowledge-seeking behavior, it was measured using the measures of Causholli et al., (2021) Human capital, social capital, general knowledge, and special knowledge. By using a Likert scale 5. The audit quality variable is measured by the state financial audit standard (SPKN, 2017) with the dimensions of being accountable, transparent, economical, efficient, and effective.

Pilot Test

Before the questionnaires were sent and given to the research respondents, the researchers conducted a pilot study. This trial was carried out by Cooper and Schindler (2006) to detect weaknesses in the research instrument and design. The instrument is first checked for validity and reliability before the questionnaire is given to the actual respondents. The trial was used to test the validity and reliability of the research instrument. This was done because of the use of questionnaires in foreign languages, different countries, and different organizations, so a pilot study was necessary.

Data Analysis

This research uses Structural Equation Modeling-Partial Least Square (SEM-PLS) with WarpPLS 4.0 software. SEM-PLS is used to predict and explain latent constructs and variables, not to test theories, confirm theories, or compare alternative theories, but is explanatory or an extension of existing theories (Sholihin and Ratmono, 2013).

Hypothesis test

Hypothesis testing in this study was tested using the structural equation model (SEM-PLS) using WarpPLS version 4.0 software. This study tested the hypothesis by looking at the path coefficient value and the significance value (p-value). Supporting the hypothesis in this study are p-value <0.01 (significant at 1% level), p-value <0.05 (significant at 5% level) and p-value <0.1 (significant at 10% level).). They test the mediation model in SEM-PLS by testing the direct and indirect effects. Testing the mediation model must significantly influence the path coefficient, both direct and indirect testing (Hair et al., 2014). Hypothesis testing will be carried out by testing direct and indirect influences. This study uses mediation, then tests the mediation model using the mediation analysis procedure using the VAF (Variance Accounted For) method with several stages. The testing stages can be seen in Figure 2 in the appendix.

CONCLUSIONS

This conceptual paper's auditory behaviors are role conflict, role ambiguity, role clarity, and knowledge-seeking behavior. This auditor behavior is used because some of the roles of internal auditors are contradictory, such as supervisors and consultants from government organizations being audited. In carrying out their work, the auditor is required to provide the best performance. AAIPI (2014) revealed that in their assignments, local government internal auditors and local government agency management have a relationship between consultants and service recipients that requires cooperation. Establishing cooperative and coordinating relationships to achieve good commissioners will lead to social relations. Social relations are established because of the intensity of the meeting in carrying out their respective roles. This will lead to reduced auditor independence. This is why independence is an attitude that the auditor must own. So, when the auditor experiences weakness in his independence, it will trigger a decrease in his work performance. The results of this study are expected to provide implications such as on academic development, theory, and government, such as government policies and theory development related to internal government auditors.

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APPENDIX

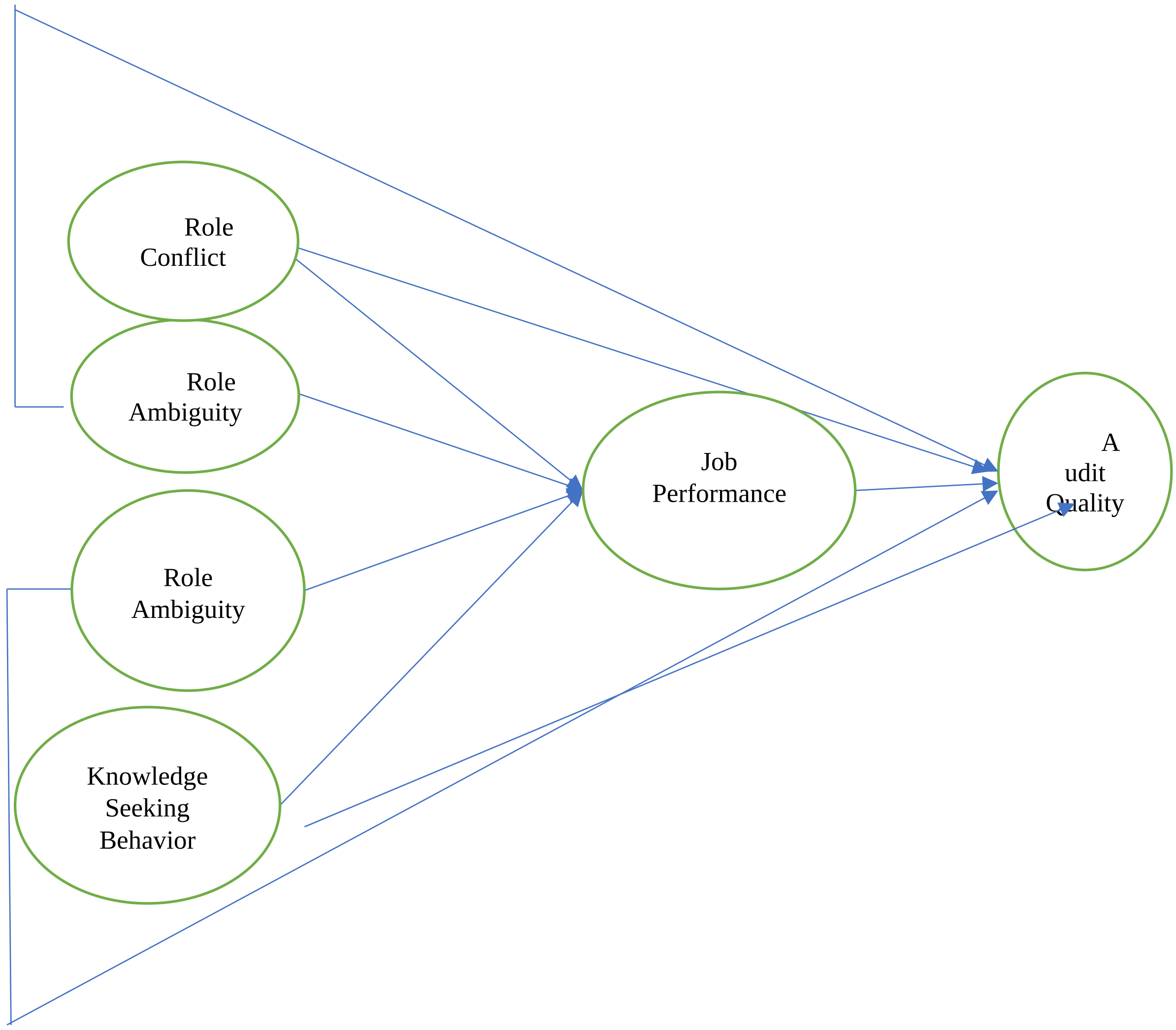

Figure 1. Research Model

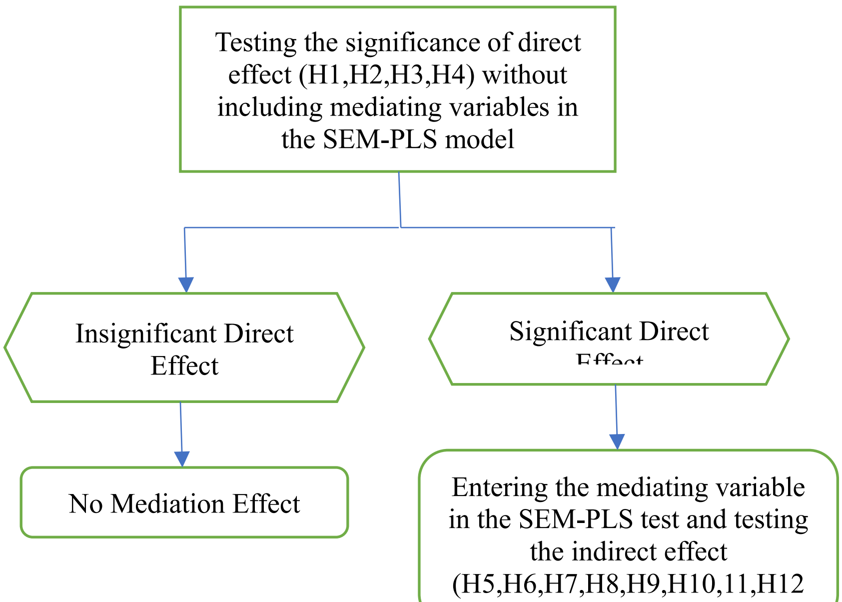

Figure 2. Hypothesis test

The Role of Innovation and Dynamic Environment in the Relationship Between SMAT and Performance in Riau Manufacturing Companies

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ABSTRACT

This study aims to examine the effect of innovation, dynamic environment, and strategic management accounting techniques (SMAT) on the performance of manufacturing companies. This study will also examine innovation and dynamic environment as mediating the effect of strategic management accounting techniques on performance. This study discusses the proposed research methodology based on a review of previous articles. This study is planned to use quantitative methods and the data used are primary data in the form of a questionnaire which will be distributed to 188 managers. Respondents in this study were managers of medium and small scale manufacturing companies located in Riau Province, Indonesia. It is planned that the analytical tool to be used in this research is WarpPls 4.0. The contribution of this research can later be used for policy makers as consideration for determining policies related to the company. Managers can motivate the use of strategic management accounting techniques supported by innovation and a dynamic environment in carrying out their operational activities.

Keywords: Strategic Management Accounting Techniques, Innovation, dynamic environment, performance.

INTRODUCTION

The manufacturing industry has a key role as a promoter of national economic development, both in developed and developing countries. Manufacturing contributions can increase the added value of domestic raw materials, absorb local workers, generate foreign exchange and so on (Airlangga, 2019). The performance of the manufacturing industry can also be seen from the growth of its Gross Domestic Product (GDP). In Indonesia, the manufacturing industry is the mainstay sector to boost the country's economic growth. Based on data from the Central Statistics Agency (BPS) of Riau Province (2021) that during 2010-2020 the contribution of the manufacturing sector to Gross Domestic Product (GDP) was in the range of 38.26% - 43.91%, so it can be concluded that the manufacturing industry in Indonesia is the main pawns in improving the country's economy, followed by the service industry and the agricultural industry. However, manufacturing performance is also vulnerable to uncertainty in the business environment, which can cause the company's performance to decline and cannot take on an important role optimally (Ojua & Michael, 2021; Sumkaew & Intanon, 2021).

An uncertain environment will cause several problems in the company, for example, there are fluctuations in product sales which result in costs incurred by the company increasing but not being matched by product sales, so that profit growth is not optimal and company operations are hampered and performance declines (Candra, 2020).). Therefore, a comprehensive performance assessment is needed in the midst of environmental uncertainty. Financial performance appraisal is still considered traditional and does not adequately address the company's needs, because it only pursues the goal of obtaining short-term profits and ignores the company's long-term viability, and cannot detect the entity's ability to continue into the future (Kober & Northcott, 2021; Zawawi, 2012). et al., 2020), so that financial performance measurement is considered insufficient to achieve organizational strategic goals in today's highly competitive business environment (Alewine & Miller, 2016). Therefore, there is a need for more integrated non-financial performance measurements and their implications for company performance such as the balance scorecard (Bui et al., 2020; Moses et al., 2018;

van Iwaarden, et al., 2009; Sardi, et al., 2020) . Balanced scorecard consists of 4 perspectives, namely financial and customer perspectives determine what the organization wants to achieve, while internal business processes and learning growth perspectives cover how to implement strategy (Kaplan, R. S., and Norton, 2000). The balanced scorecard is also called as one of the widely acclaimed performance management frameworks (Anthony & Govindarajan, 2015; (Rompho, 2020; Wilderom, Van den Berg, & Wiersma, 2012) so that many companies use it as a performance measurement (Sener & Ege, 2017).) and there has been some increase in the use of the balanced scorecard (Oyewo, Moses, & Erin, 2021).Nevertheless, there is still debate on its use (DeGeuser, Mooraj & Oyon, 2009; Aly & Mansur, 2017), as some results indicate the use of performance still higher, especially in developing countries (Oyewo et al., 2021).

This difference in results may be due to the company not getting the benefits of adopting a balanced scorecard as expected, this could be due to resources and the business environment that affect it. So it is necessary to conduct research in other developing countries, namely Indonesia, which is believed to have a different business environment from previous studies such as Nigeria (Oyewo, 2022), Nepalese (Dahal, 2021), Jordan (Bawaneh, 2019), Turkey (Kefe, 2019). Indonesia is a developing country that has several industrial areas, one of which is in Riau Province, which is opposite Malaysia and Singapore, which are believed to have a more competitive and dynamic business environment. Therefore, companies located in these industrial areas must update their competencies and strategies in order to be able to achieve improved performance and achieve competitive advantage over time.

As in the Resource-Based View (RBV) theory which states that a superior business strategy is carried out by allocating resources to market needs when the ability of competing companies is insufficient so that it will provide effective results for the company. Companies must continue to innovate as a form of corporate strategy in improving their performance. According to Agustia, (2020) good innovation will produce quality products or services with cost efficiency, product improvisation and produce products that are different from before. The implementation of good innovation will have an impact on improving the company's performance. Innovation is a process that utilizes skills and resources to achieve maximum performance.

Contingency theory supports the relationship between innovation and performance, stating that the design of an organization will be effective only under certain conditions (Otley, 2016). If the conditions are different, the design is also different, among others, can be seen from the type of industry, geographical differences. Thus, innovation is needed to improve performance in conditions of intense business competition. In addition to innovation, information is also the most important thing in improving performance, especially reliable information for making decisions. The availability of integrated information is believed to improve company performance (Israel & Patrick, 2020). Strategic management accounting techniques (SMAT) are information generated from new management accounting techniques that are used to answer company challenges in facing uncertainty (Dang, Le, Le, & Pham, 2021). SMAT was first introduced by Simmon in 1981, who defined SMAT as the provision and analysis of management accounting data about a business and its competitors for use in the development and monitoring of business strategies (Peter, 2019). SMAT is very important to the success of the company. It is even possible to postulate that the importance of SMAT techniques is growing in today's dynamic business environment (Altin, Akgun, & Kasimoglu, 2020). Researchers have various arguments about the SMAT technique (Cadez & Guilding, 2012) stating that there are 16 SMAT techniques consisting of Attribute Costing, Benchmarking, Brand Valuating, Competitive position monitoring, Competitor appraisal based on FS, Competitor cost assessment, Customer profit analysis, Integrated performance measurement (PMS), Life-cycle costing, customer lifetime profitability analysis, quality costing, strategic costing (strategic cost management), strategic pricing, target costing, customer valuation as an asset, and value chain costing. Meanwhile (Cescon, Costantini, & Grassetti, 2019) said there were only 12 SMAT techniques, (Dmitrović-Šaponja & Suljović,

2017) said there were 17 techniques in SMAT, and the latest one is research on 11 techniques (Petera & oljaková, 2020).

Although there are differences in the techniques used by companies, the main role of SMAT in providing information is very useful in assisting managers in making effective decisions, reducing uncertainty, and reducing risk in choosing alternatives so that it is expected to improve company performance (Agu, et al., 2016; J.O., 2019; Roodbari and Kordestani, 2020). Furthermore, the results of the study (Emiaso & Patrick, 2018) also recommend that manufacturing companies must implement appropriate steps in the use of SMAT so that the decision-making process carried out by management can improve organizational performance.

LITERATURE REVIEW

RBV Theory

The Resource-Based View (RBV) theory has a plausible explanation of the possible relationship that exists between strategic management accounting techniques and manufacturing firm performance. Developed by Wernerfelt (1986), it emphasizes the importance and influence of organizational resources on short-term performance and long-term viability. To that extent, the company's profitability also depends on the resources owned by the company. In addition, resources in this context can be either human or material. Therefore, the resources used in this study include all assets, especially inventory, cash, administrative assets, and human assets (accounting and accounting expertise).

Contingency theory

This theory argues that the effectiveness of the company comes from matching the company's management control system to a particular situation (Petera & oljaková, 2020).This theory is useful in this research because it shows the importance of matching the internal environment with a flexible external environment. The efficiency of the manufacturing sector can be increased by making investment decisions to improve its performance. Management accounting information is generated internally but can be used to chart a way forward for manufacturing companies to invest by increasing efficiency in investment decision making among top management in manufacturing companies.

Performance

The success of every organization is reflected in its performance which is very dependent on the organization's strategy. Organizations must also understand that it is necessary to measure organizational performance not only from a financial perspective, but also from the level of customer satisfaction, technological developments, and the creation of an environment to support learning and growth (Valentine, 2015). Therefore, to increase the satisfaction of various parties, companies need to carry out integrated and coordinated planning to satisfy various parties and remain in line with the company's strategy to achieve the vision and mission that have been set previously.

One way that can be done is by planning a performance measurement that does not only look at the financial aspect, but the company must also look at the non-financial aspect to find out the level of satisfaction of various parties. fulfilled (Nazaruddin, 2015). The Balanced Scorecard can be a strategic performance measurement tool for an organization.

Innovation

Innovation is defined as a process within an organization of how to utilize skills and resources to develop new products and or services or to build new production and operating systems to meet customer needs (Sharma, Jones, & Ratnatunga, 2006). Han, Kim, and Srivastava (1998) stated that innovation has an important role in influencing company performance because it is related to basic activities or activities related to products/processes and to avoid competition based on costs (Rosenbusch et al., 2011).

Dynamic Environment
The business environment is seen as a dynamic condition whose changes are difficult to predict and can create opportunities and challenges for companies (Miles et al., 2000), as well as a source of information and a vehicle for providing resources (Hitt et al., 2000; Khouroh, Windhyastiti, & Ratnaningsih, 2020) which causes companies to make changes. large by redesigning themselves (Delloitte, 2017).

SMAT
SMAT is a management accounting approach that is considered to be a solution to the limitations of traditional management accounting (Al-Tarawneh, Al-Thnaibat, & Almomani, 2021). Traditional management accounting is considered unable to answer the needs of changing technology and a competitive environment, besides that traditional product costing systems are also believed to provide misleading information in decision making, financial orientation and almost entirely focus on internal activities, while very little attention is paid to the external environment. where the business operates (Fowzia & Afroz, 2016).
The substance used in this study refers to (Cadez and Guilding, 2012) which consists of 5 dimensions and 16 techniques.

The purpose of this study is to determine the effect of innovation, environmental dynamics, and strategic management accounting techniques on the performance of manufacturing companies, which are described in the following framework;

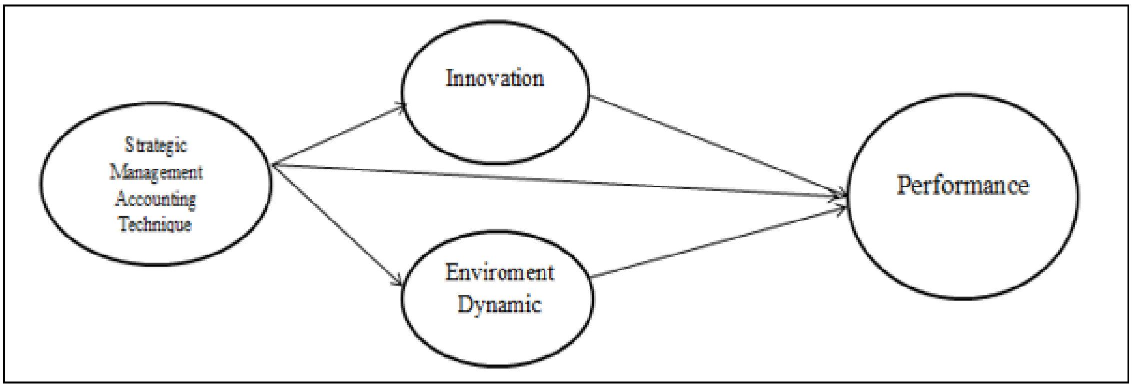

Figure 1

PROPOSED RESEARCH METHOD

Research setting
The location of this research is in small and medium manufacturing companies located in Riau, Indonesia.

Design Studies
This study uses quantitative research methods. The data collection technique used in this study was through the distribution of questionnaires. The questions were measured using an Ordinal Scale using a Likert Scale. Likert scale is used to measure attitudes, opinions, and perceptions of a person or group of people about social phenomena. The purpose of

quantitative research is to show the relationship between variables, test theories, and look for generalizations that have predictive value (Sugiyono, 2010a). Secondary data is also needed in this research, namely in the form of data on manufacturing in Riau obtained from BPS Riau in 2022.

Unit Of Analysis

The unit of analysis refers to the level of aggregation of data collected during the next stage of data analysis. The unit of analysis in this study is a manufacturing company, both medium and large in Riau Province. The manufacturing criteria are based on data from BPS Riau, which states that the establishment is considered “medium” when it employs 20 to 99 workers and is considered “large” when it employs 100 or more workers.

Population

The population in this study were manufacturing managers in Riau as many as 355 companies (BPS Riau, 2021). This study focused on managers working in medium and large manufacturing companies in Riau Province.

Sampling

Determination of the number of samples can be done using statistical calculations, namely by using the Slovin formula. Based on the Slovin formula the sample size in this study is 188 congregations managing the manufacturing industry who will be the respondents.

Research Instruments

Performance in this study will be measured using instruments from Hernaus, Skerlavaj, & Dimovski (2008) consisting of 4 indicators, namely; financial perspective, customer perspective, internal business process perspective and learning and growth perspective. SMAT will be measured using 5 dimensions developed by Cadez & Guilding (2008), namely; 1). strategic costing, 2). Planning, monitoring and performance, 3). Strategic decision making, 4). Competitors Accounting, 5) Customer Accounting. While the dynamic environment refers to Jiao (2011) which consists of 4 indicators, namely; 1). Product/service features that customers want. 2). Product/service features provided by competitors, 3). Product technology in Industry, 4). Government policies in industry. And for innovation, referring to the research of Chenhall and Morris (1995) namely changes in product lines, new products and research and development.

Analysis Techniques

The research data were analyzed using Variance-based SEM or Partial Least Square (SEM PLS) analysis with the Warp PLS 4.0 program. The use of Warp PLS 4.0 is because, besides being able to be used to confirm theory, it can also be used to explain whether or not there is a relationship between latent variables. Parameter estimation in this method does not require a large sample size and the data does not have to be normally distributed.

CONCLUSIONS

This study is expected to prove the research model that improving the performance of manufacturing companies can be improved through the use of innovation and adaptation to a dynamic environment and supported by a reliable SMAT. Manufacturing companies in Riau mostly consist of gas and oil companies so that the possibility of product innovation is not really needed, but the use of SMAT as decision-making information is needed.

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Enhancing Financial Reporting Quality through Corporate Ethics Commitment: The Accountants' Perspectives

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ABSTRACT

A growing number of cases involving ethical misconduct within business have recently received significant attention in Malaysia. Despite the country's declaration of a strong corporate governance policy, which has been reinforced by the Code of Ethics for Company Directors and the Malaysia Code of Corporate Governance (MCCG), unethical practices and a lack of integrity within firms continue to be a problem. The pervasiveness of the problem has jeopardized the quality of Malaysian firms' financial reporting. Through in-depth interviews, this paper gathers accountants' perspectives on the current implementation of corporate ethical practices among corporate governance practitioners, as well as the effect of corporate ethics commitment on financial reporting quality in Malaysian public listed companies. The analysis of data showed that corporate ethics commitment had a significant relationship with financial reporting quality. The study highlighted four themes based on thematic analysis; “Corporate Ethical Values”, “Corporate Ethics Commitment Attributes”, “Financial Reporting Quality Features”, and “Best Practice of Corporate Governance”. The findings can be used to increase ethical corporate conduct and improve the financial reporting quality of Malaysian public listed companies.

Keywords: Corporate Ethics; Ethical Commitment; Financing Reporting Quality.

INTRODUCTION

Financial reports are critical decision-making tools for market participants. These reports give reliable and timely information about a company's economic health. Furthermore, high-quality financial reports are a helpful tool for users of financial analysis and feasibility reports to make appropriate decisions (Şeker & Şengür, 2021). However, firms’ misrepresentation of their true economic condition reduces the quality of financial reporting. The failure of some companies and an increase in the number of prominent frauds over the last two decades have raised concerns about the unethical behavior within firms. These have called into question the effectiveness of corporate governance mechanisms (Mabil, 2019). Recently, the Malaysia corporate sector has been stunned by Serba Dinamik’s case, where its CEO and three senior officers on charges of submitting a false statement to Bursa Malaysia last year. Despite the country's declaration of a strong corporate governance policy, which has been reinforced by the Code of Ethics for Company Directors and the Malaysia Code of Corporate Governance (MCCG), unethical practices and a lack of integrity continue to be serious issues among Malaysian corporations.

The pervasiveness of the problem has jeopardized the quality and credibility of Malaysian firms' financial reporting, which has increased the demand for professional ethics in the financial reporting profession. This is because the firm's performance is highly dependent on the corporate financial reports. Users of financial statements include both internal and external stakeholder groups such as executives, investors, security analysts, suppliers, and lending institutions Karasioğlu, Humta, and Gokturk (2022). According to Herath and Albarqi (2017), the need for a clear and comprehensive definition of financial reporting quality has increased. It is critical to provide high-quality financial reporting in order to influence users' investment decisions and to improve market efficiency. The higher the quality of financial reporting, the higher the benefits to investors and readers of financial reports. Furthermore, financial reporting quality not only covers financial information, but also non-financial information that is useful for decision making.

The primary objective of this paper is to investigate accountant's perceptions on the current implementation of corporate ethical practices among corporate governance practitioners, as well as the effect of corporate ethics commitment on financial reporting quality in Malaysian public listed companies. For this purpose, in-depth interviews were conducted on four professional accountants in Malaysia.

LITERATURE REVIEW

Early research on financial reporting quality in Malaysia concentrated on corporate governance, specifically the role of the board of directors and audit committee in guiding corporate reporting. However, as a result of numerous corporate scandals involving the manipulation of financial information, regulators began to emphasize the need of corporations having high-quality financial information. This can be support by Nasir, Hashim, che nawi, Yusoff, and Aluwi (2021), corporate ethical commitments that can reduce the risk of financial statement fraud while indirectly increasing financial reporting quality.

According to Karasioğlu et al. (2022), the consistency of financial reporting is a feature of the quality of accounting standards and the standards' related regulatory compliance. Three factors can influence financial reporting consistency: standard setters' decisions, management's accounting system, and management's judgement and estimates in applying the chosen substitutes. As a result, regulation is an important tool for improving financial reporting consistency; without it, even the best accounting principles would be incapable of providing different users with accurate and reliable accounting information. Securities Commission Malaysia and Bursa Malaysia are the Malaysian regulators in charge of monitoring corporate ethics and business management. While professional bodies such as ACCA and MICPA serve as accounting oversight bodies. The primary objective of financial reporting is to provide economic entities with high-quality financial reporting information, primarily of a financial nature, that is useful for economic decision-making. High-quality financial reporting information is critical because it influences expenditure, credit, and other resource allocation decisions made by capital providers and other stakeholders, thereby improving overall market performance.

Abed, Hussin, Haddad, Alramahi, and A. Ali (2022a), concluded that quality of financial reporting is influenced by an ethical environment and ethical management. Firms with a proven track record provide high-quality financial reports. Independence, integrity, objectivity, competence, and judgement are key characteristics that appear in professional body codes of ethics (Osunwole, Adeyemi, & Dunsin, 2020). The authors also concluded that achieving an objective, reliable, and transparent financial report requires a high ethical standard. Enofe, Edemenya, and Osunbor (2015) in their research stated that ethics had a positive and significant relationship with financial reporting integrity, but not with faithful disclosure of financial report.

Several recent research have focused on the relationship between financial reporting quality and accounting ethics. For example, based on Karasioğlu *et al.* (2022), accounting ethics has a significant impact on financial report quality and decision-making in Kabul-based logistic firms. Other than that, Edi and Enzelin (2022) also investigated the impact of accounting ethics on quality of financial report of Nigerian firms. The authors concluded that accounting ethics had a favorable and significant effect on the relevance and faithful depiction of financial information, respectively.

Accounting theory was used as a basis for this study. Pioneer in accounting theory, Hendriksen

(1985), stated that accounting theory is defined as logical reasoning in the form of a set of broad principles that provide a general frame of reference for evaluating accounting practices and guiding the development of new practices and procedures. As accounting theory has evolved over time through observation, evaluation, scrutiny, and scanning, as well as explanations of daily accounting processes, it can help accountant professionals with solving real world practicing challenges that could arise in their professionalism (Mabil, 2019). For example, accounting knowledge, the accountant's integrity and independence all play a role in affecting the quality of financial accounting reports.

RESEARCH METHOD

This study used a qualitative approach to gain in-depth knowledge and understanding of the corporate ethics commitment toward financial reporting quality in Malaysian public companies, based on the accountant’s view. Purposive sampling was employed in this study because it involves identifying and selecting individuals or groups of individuals who are proficient and knowledgeable with specific issues (Etikan, 2016). Hence, to meet the research objective, four senior professional accountants were selected to be the research participants. Professional accountants were the best fit to this study because they are the practitioners of accounting standards and preparers of financial reports.

Primary data was used to carry out this study and it was obtained through in-depth interviews with the participants. According to Showkat and Parveen (2017), in-depth interviews are performed to investigate themes for further inquiry and descriptive analysis. This is because, this method delivers much more precise information as compared to other types of data collection methods.

A set of interview protocols were developed based on content analysis of twenty companies’ annual reports and have been reviewed and validated by three academic experts in corporate governance and financial reporting studies. Changes and improvements have been made in accordance with the academic expert's feedback. This attempt is being done to secure the best interview protocol for the interview. A total of four semi-structured one-on-one interviews were conducted and used for the analysis. The data generated were analyzed using thematic analysis in ATLAS.ti.

DATA ANALYSIS PROCEDURE

In this study, the researchers analyzed data from participants' interview transcripts. The research analysis started with quotations and coding of the documents. Coding is useful for synthesizing the meaning or central information included in a collection of related quotations. The first stage of coding was open coding, which was used to identify and categorize ideas by thoroughly inspecting the data (Adeniyi, Losch, & Adelle, 2021). The researchers then create code groups to compare and contrast data based on any criterion of interest. Code groups, according to Soratto, Pires de Pires, and Friese (2020), are extremely valuable in the retrieval and analysis of data. Their primary function is to act as filters, which also contribute to the construction of the coding frame.

Throughout this phase, researchers created codes that related to the corporate ethics commitment and financial reporting quality. Then, codes that are similar or connected to one another were merged during this process. Following that, selective coding was used, in which the data and codes were examined in search of themes, concepts, and relationships. This procedure is critical for creating network diagrams, a qualitative visual representation of data in which concepts are represented (Lewis, 2016). By creating the network diagram, researchers were able to identify the themes, patterns, and relationships in the data.

According to Soratto et al. (2020), once themes and relationships have been identified, the researchers can proceed with thematic content analysis. Content analysis is commonly employed in qualitative research, and numerous approaches, including thematic or categorical analysis, can be applied. In this study, the thematic analysis highlighted the research objectives, which is to gather accountants' perspectives on the current implementation of corporate ethical practices among corporate governance practitioners, as well as the effect of corporate ethics commitment on financial reporting quality in Malaysian public listed companies.

FINDINGS

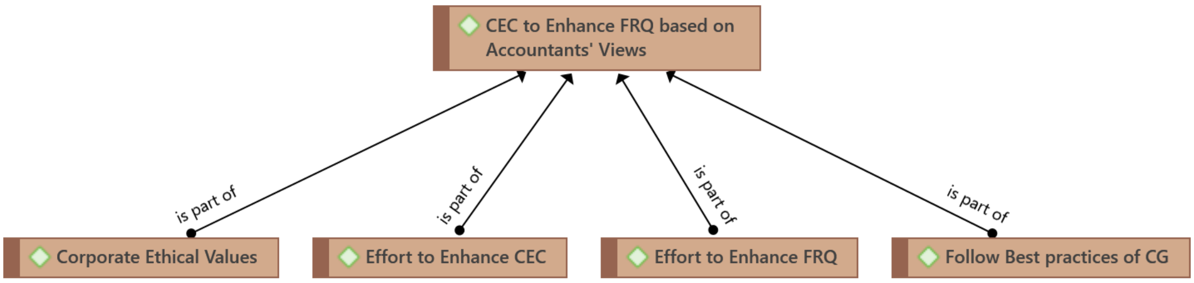

Figure 1: Network Diagram of CEC to Enhance FRQ in ATLAS.ti

To create a theme, all codes were analyzed to see whether they could be combined to form a theme. Four themes were identified, with a total of 20 sub themes. The four main themes were "corporate ethical values", "effort to enhance corporate ethics commitment (CEC)", "effort to enhance financial reporting quality (FRQ)", and "follow best practice of corporate governance (CG)".

Corporate Ethical Values

The participants described some corporate ethical values that need to be applied in a company to ensure the quality of financial reporting. They all agreed that integrity had a major impact on reporting quality. This is because when people have integrity, they will avoid any type of ethical misconduct in the workplace, whether it is the management or the employees. This is in line with Rashid et al. (2018), who mentioned in their article that responsibility and integrity are the most crucial aspects of dealing with financial reporting.

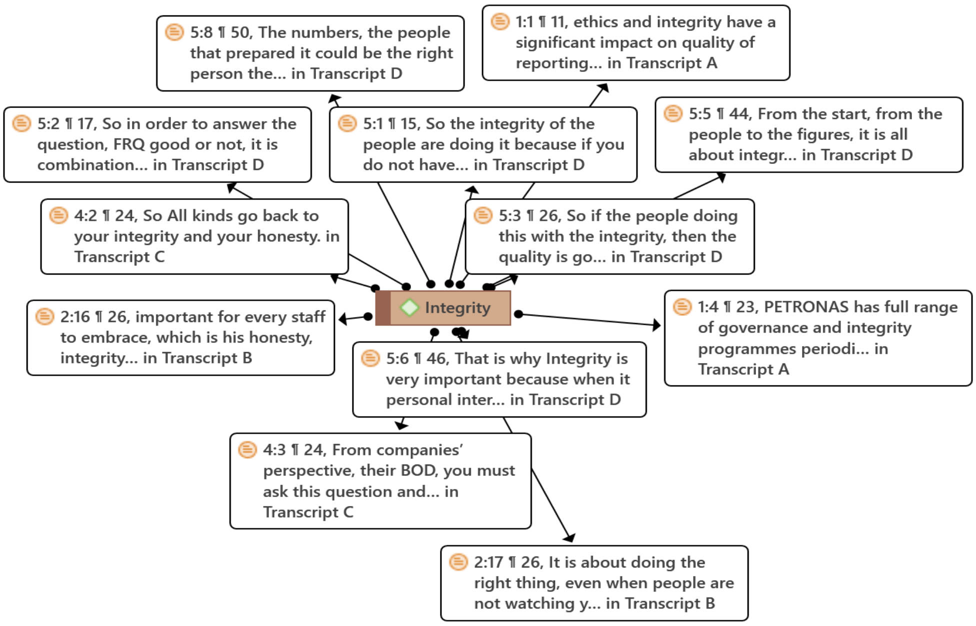

Figure 2: Hyperlink Diagram of Integrity in ATLAS.ti

Furthermore, some participants stated that when people have integrity, they will set their personal interests aside while performing their duty. Personal interests can lead to ethical violations and, in the worst-case scenario, organizational corruption. Globally, there have been several incidents of unethical behavior, including financial reporting manipulation such as the Enron and Parmalat scandals.

> *"People actually know that they have to be ethical, they have to be complied with the rules and regulation. But when it come to greed, people may abuse their power, do corruption. They think for their personal interest. That is why integrity is very important because when personal interest come into picture, people would do so many things"*
> *-Participant D*

Professional accountants are supposed to present a true and accurate image of an entity's performance even in the face of conflicting interests affecting his own interest as financial statement preparers (As & Ga, 2019) .

Some participants mentioned that honesty and integrity are related to each other. Both values are important for every staff to embrace. Based on Participant B, his organization adopted HIP values (Honesty, Integrity, and Passion), where all the staffs are required to comply. As stated by Edi and Enzelin (2022), the attitude of integrity promotes an accountant's honesty practice, therefore accountants tend to make true and true financial reports. However, As and Ga (2019) discovered that the integrity requirement has no significant impact on the quality of financial reports because of the avoidance of real or apparent conflicts of interest.

As stated by the respondents, corporate ethical values also included accountants adhering to accounting ethics. Abed, Hussin, Haddad, Alramahi, and A. Ali (2022b) mentioned that accountants, as professionals responsible for the creation of financial reports, must adhere to ethical accounting standards codes, as issued by Institute of Chartered Accountants. Accounting ethics is required for accountants to generate high-quality, error-free financial reports by assuring activities that encourage ethical standards compliance (As & Ga, 2019). Accordance to Edi and Enzelin (2022), a thorough understanding of accounting ethics can help an individual improve work performance and establish positive attitudes or behaviors.

Effort to Enhance Corporate Ethics Commitment

The researchers inquire about accountants' perspectives on corporations' efforts to improve their corporate ethical commitment. Majority of participants stated that companies are becoming more conscious of the necessity of high corporate ethical commitment, as recommended by regulators. Efforts such as ethics education, training, and workshops are in place to improve employees' corporate ethics. According to Zainul Abidin and Hashim (2020), ethics training is essential for businesses to instill excellent behavior in their staff while dealing with stakeholders. Continuous training can effectively develop an ethical society. Karasioğlu et al. (2022) also mentioned that professional organizations should create training sessions and programs that encourage its members to be honest in carrying out their professional responsibilities.

> *"… management guidance on groupwide internal accounting policy and practices, also important things need to be look up. Such as necessary training, skill group, promote internal sharing of best practices through community of practices, internal attestations through financial reporting control framework" – Participant A*

Effort to Enhance Financial Reporting Quality

According to the accountants, there are numerous approaches to improve the quality of financial reports. As required by Malaysian Financial Reporting Standards (MFRSs), the company should generate financial reports that are timely, comparable, verifiable, and understandable.

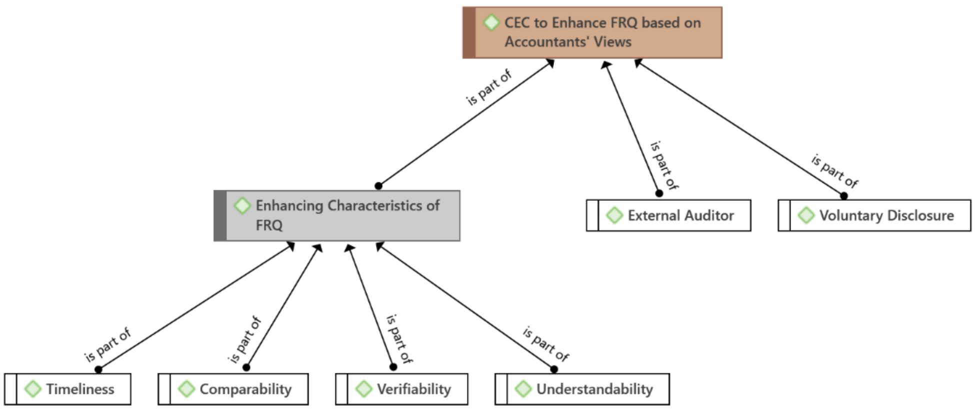

Figure 3: Hyperlink Diagram of Effort to Enhance FRQ in ATLAS.ti

This is supported by Golochalova and Tsurcanu (2020) who stated that comparability and timeliness of financial reports provide an opportunity to develop rational approach for measuring the quality of financial statements. Furthermore, Bandara (2021) concluded in his thesis that the fundamentals of qualitative characteristics of financial reporting quality, are relevance and faithful representation. While enhancing it includes understandability, comparability, verifiability, and timeliness.

The participants also highlighted on the importance of appointing independent external auditor to increase the quality of financial report. This is consistent with Alzeban (2019), which external auditor quality have significant impacts on financial reporting quality.

As mentioned by Joseph et al. (2016), Malaysian companies only make few voluntary disclosures and are still hesitant to share information about their ethical practices. However, based on the interviews, it appears that corporations have begun to provide voluntary disclosure in order to improve the quality of their financial reporting and attract potential investors. This is consistent with Md Zaini, Sharma, Samkin, and Davey (2020), which the purpose of voluntary disclosure is to give relevant stakeholders with information about corporate operations that are not reflected in financial statements.

Follow the Best Practices of Corporate Governance

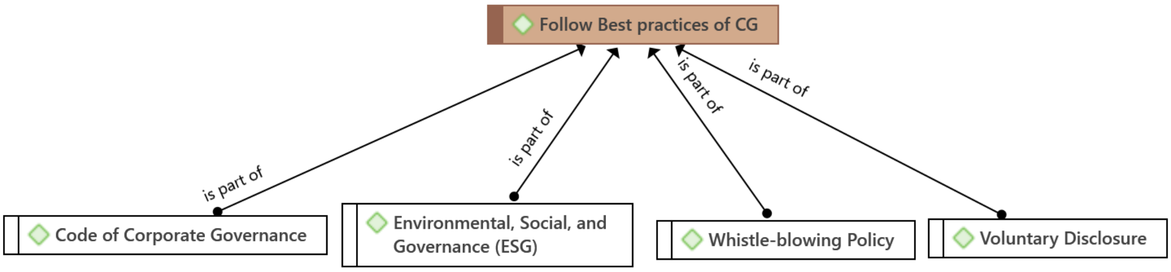

Figure 4: Hyperlink Diagram of Follow Best Practices of CG in ATLAS.ti

In Malaysia, the Malaysian Code of Corporate Governance (MCCG) serves as a guideline for Malaysian public listed companies to conduct ethically. As cited from Zainul Abidin and Hashim (2020), MCCG provides set of standards for companies to commit to better transparency and ethical business practices. The findings of the interviews also emphasize the importance of a corporation adhering to MCCG principles, such as the code of corporate governance and the most recent issue, Environmental, Social, and Governance (ESG).

> *"If your question is either can ethics being integrated with good quality of financial reporting, the straight answer is Yes. That is why the ESG also highlight the ethical element" -Participant D*

In their study of the relationship between financial reporting quality and ESG performance, Şeker and Şengür (2021) discovered that firms' ESG performance improves financial reporting quality.

During the interview, some participants acknowledged the importance of an organization providing a whistleblowing policy. It is crucial to have independent and anonymous communication channel for stakeholders to raise any concern without fear. In their study, Hashim, Zainul Abidin, Salleh, and Devi (2020), developed an Ethical Commitment Index (ECI) that includes whistleblowing policies. According to them, the ECI was extended based on past literatures and MCCG recommendations, to suit Malaysian corporate environment.

CONCLUSIONS

This paper investigates the perspectives of professional accountants on corporate ethics commitment in improving financial reporting quality. It is crucial to get the accountants' opinions because they are the ones who are accountable for preparing high-quality financial reports. Based on the interviews, it can be concluded that there is significant impact of corporate ethics commitment on financial reporting quality. This is consistent with Nasir et al. (2021), that high corporate ethics commitment leads to high financial reporting quality. There were four themes that can be highlighted from the study, "corporate ethical values", "effort to enhance corporate ethics commitment (CEC)", "effort to enhance financial reporting quality (FRQ)", and "follow best practice of corporate governance (CG)". The restriction of this research is the possibility of the accountant providing biased opinions in order to build up the accountant's reputation. Which was the primary data's shortcoming. Further investigation should be conducted to ensure that the accountant's answers are devoid of bias.

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Two Decades Of Government Performance Accountability: Why Is Still Poor?

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ABSTRACT

The issue of performance accountability since 1999 is still a concern of many parties. Many government organizations in Indonesia are more concerned with aspects of financial performance with “unqualified opinion” stamp from Supreme Audit Agency. Meanwhile, performance accountability that reflects real performance of organization has received less attention, so that national average value of performance accountability that can be achieved until now is only around 65.95 with category B. This figure has not shown satisfactory results according to the expectations of public service users. In fact, performance accountability is part of bureaucratic reform to create a more efficient, effective, clean and responsible government administration, and to realize good government governance. The previous research finding conducted by Ahyaruddin and Akbar (2016; 2017) revealed that government organizations tend to be more concerned with formality aspect to fulfill regulatory obligations in performance reporting practices. So that the practice of performance accountability that has been carried out so far is only to gain legitimacy and political support without paying attention to the processes that occur to improve real performance in the field. DiMaggio and Powell (1983) revealed that there is a role of institutional isomorphism in organizational change, namely coercive, mimetic, and normative. This institutional isomorphism will affect organizational change and behavior. Therefore, this research is conducted based on institutional theory that is expected to be a powerful and popular explanatory tool for analyzing organizational change and behavior.

Keywords: Accountability; Performance; Institutional Isomorphism; Government Organizations.

INTRODUCTION

For more than two decades since the issuance of Presidential Instruction Republic Indonesia Number 7 of 1999, the issue of performance accountability of Indonesian government organizations is still a hot topic of discussion among researchers and government observers (Sofyani et al., 2018; Ahyaruddin and Amrillah, 2018). This is because the performance accountability achieved by government organizations has not yet shown satisfactory results and is only able to produce a national average score of 65.95 with category B (KemenpanRB, 2019). This data shows that the issue of performance accountability of government organizations needs to be focus of improvement by stakeholders because it is part of bureaucratic reform to create good government governance (Rahakbuw and Firdausy, 2018).

Until now, many government organizations, especially local governments, have only focused on achieving financial performance without prioritizing outcomes and impacts of government administration activities (Sofyani and Akbar, 2015). In fact, government administration activities are core business of government organizations to create social welfare for the community. However, this core business is often forgotten and put aside just to achieve financial goals, which are more formal in nature in the form of an ”unqualified opinion” stamp from Supreme Audit Agency.

According to Ahyaruddin and Akbar (2016; 2017), the practice of performance accountability is often more concerned with formality aspect to fulfill regulatory obligations (Ahyaruddin and Akbar, 2017; 2016). This condition gives rise to a pseudo-performance of government administration because it only reports successful programs and activities, while failed programs tend to be hidden (Nurkhamid, 2008). What is even more saddening according to Ahyaruddin and Akbar (2017) is that information contained in performance accountability report is not used and considered in decision-making process (Ahyaruddin and Akbar, 2017). This conditions gives rise to phenomenon of institutional isomorphism because performance reporting is only to gain legitimacy and political support rather than to increase substantive performance (DiMaggio and Powell, 1983; Ashworth et al., 2009).

In concept of institutional isomorphism, organization moves and changes influenced by isomorphic pressures from its environment, namely coercive, mimetic and normative. Many previous studies reveal the phenomenon of institutional isomorphism in public sector organizations (Sofyani et al., 2018; Ahyaruddin and Akbar, 2016; Ashworth et al., 2009; Brignall and Modell, 2000). In Indonesia, every government agency is obliged to make a performance accountability report about their activities in organizations. The results of our previous research have confirmed that process of preparing performance accountability reports is influenced by isomorphic pressure, namely coercive, mimetic and normative (Ahyaruddin and Akbar, 2017; 2016). However, the question is, what isomorphic pressure most dominantly affects performance accountability reporting? Does performance reporting so far been only a formality to gain legitimacy and political support? How are policy makers use performance information in planning and budgeting for the future?

INSTITUTIONAL THEORY

In recent years, the use of institutional theory in accounting literature has begun to increase. Burns & Scapens (2000) revealed that there are three institutional theories that are often used in the accounting literature, namely: new institutional economics (NIE), old institutional economics (OIE), and new institutional sociology (NIS). This study adopts the use of new institutional sociology (NIS) theory. The reason for using this theory is because the NIS approach is more suitable for explaining the context of local government in Indonesia, which is indeed heavily influenced by political factors and external environment and tends to prioritize “formal ceremonial and administrative” practices in performance reporting. NIS theory focuses on a sociological approach which emphasizes that local government organizations in Indonesia are more influenced by institutional environment referred to as "isomorphic pressure" in order to improve performance and gain legitimacy and social support from the public (Ahyaruddin and Akbar, 2016; Akbar et al., 2015; 2012; Pratiwi and Akbar, 2018). In addition, institutional characteristics such as corruption and nepotism that occur in organizations will create self-interest motivation, low performance orientation, low participation in decision making, low organizational commitment and lack of accountability (Tallaki and Bracci, 2019). Figure 1 shows the mechanism of institutional isomorphism according to DiMaggio and Powell (1983).

The isomorphism expressed by Dimaggio and Powell (1983) consists of competitive isomorphism and institutional isomorphism. Competitive isomorphism is related to organizational efficiency (technical or economic explanation), while institutional isomorphism develops through three mechanisms, namely coercive, mimetic, and normative. In the concept of competitive isomorphism, organizations will make a change when there is a cheaper, better, or more efficient way to do it. Meanwhile, in the concept of institutional isomorphism, an organization is influenced by institutional environment that is called organizational field, where organization as a whole is a recognized area of institutional life, namely key suppliers, product resources and customers, regulatory dependence, and other organizations providing similar services and products (Erro and Sánchez, 2012). Based on the competitive and institutional isomorphism process, an organization does not compete for resources or customers but rather an effort to gain political support for power and legitimacy, as well as to gain social welfare and economic results (Ahyaruddin and Akbar, 2017; 2016; DiMaggio and Powell, 2004). 1983; Akbar et al., 2012; Erro and Sánchez, 2012).

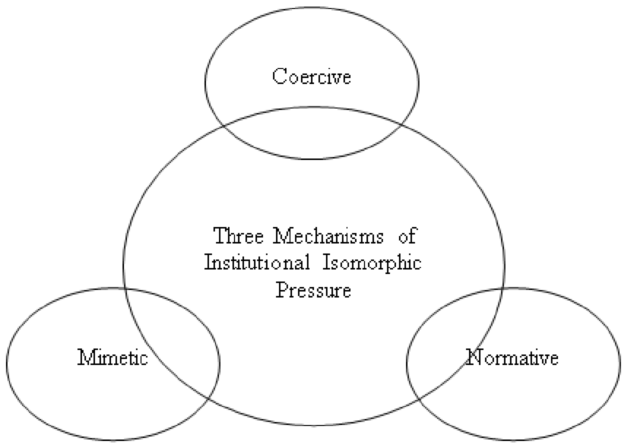

Figure 1. Mechanism of Institutional Isomorphism by DiMaggio and Powell (1983)

The concept of institutional isomorphism is a useful concept or way to understand organizational policies which are heavily influenced by politics and culture "formal ceremonial and administrative" that greatly determine the course of modern organizational life (Sofyani and Akbar, 2015; Erro and Sánchez, 2012). In context of performance accountability reporting by government agency, three forms of institutional isomorphism play an important role. Coercive isomorphism emerges through formal regulations (i.e: Perpres number 29 of 2014) which force every government organization to make performance accountability report for implementation of government activities that have been carried out. Other pressures can also arise in informal forms such as agreements and codes of ethics and cultural beliefs in society that relate to organizational activities. This coercive isomorphism will usually create organization that is only concerned with administrative performance because it provides information with the aim of transmitting a good image to external parties (Erro and Sánchez, 2012).

Mimetic isomorphism arises when organizations face environmental uncertainty, inability to understand existing technology, and ambiguous organizational goals (DiMaggio and Powell, 1983). Organizations that face mimetic pressure will imitate other organizations even with limited knowledge in order to gain recognition or social legitimacy (Erro and Sánchez, 2012; Pratiwi and Akbar, 2018). This condition often arises in government organizations in Indonesia in making performance accountability reports by imitating other more successful organizations in order to make reports easier for them so that in the end creates organizational homogenization.

Normative isomorphism can occur because of profession or professionalization of people who make decisions in organization. Professionalization builds cognitive and legitimacy base for organizational autonomy (DiMaggio and Powell, 1983). Professionalization of organizational management, for example, appears through courses, training, socialization, and other forms so that organizations have a common way of understanding, interpreting, and solving the problems they face. Normative isomorphism will create same cognitive mindset, develop similar behavior patterns, and also provide similar solutions in order to create better organizational management (Erro and Sánchez, 2012). Performance accountability reporting that is influenced by the pressure of normative isomorphism is everyone's hope because the activities and changes carried out by organization result from cognitive base and professional awareness of everyone to move towards better direction, not because of coercion or imitation.

PERFORMANCE ACCOUNTABILITY

The term of accountability can be defined in different ways and has changed over time. Many researchers define accountability according to their respective contexts and conditions. Bovens (2010) argues that accountability is increasingly used in political discourse and policy documents because it conveys an image of transparency and trust. While Sinclair (1995) says that how accountability is defined will depend on the ideology, motives and language of our time. In the context of public sector organizations, Inaga (1991) as quoted by Iyoha and Oyerinde (2010) said that accountability requires the government to provide a reason related to the source and use of public resources. So that accountability in this case is related to monitoring and controlling government behavior, preventing the development of concentration of power, and increasing learning ability and effectiveness of public administration (Iyoha and Oyerinde, 2010).

In modern democratic theory assumes that accountability mechanisms generate legitimacy for, and trust in, democratic systems, namely: decision makers (elected officials), facilitators (public bureaucracy) and outcomes of public policies (coverage and quality) (Johansson and Montin, 2014). Thus, the existence of accountability mechanisms at general level is considered vital in promoting and stabilizing trust among citizens in modern democracies (Pratiwi and Akbar, 2018; Sinclair, 1995). Johansson and Montin (2014) reveal that performance accountability is accountability achieved by measuring and assessing performance based on service quality, efficiency, flexibility and adaptability which are highlighted as core values. Performance accountability refers to the output side of the political system and the actual results of public policy in the form of service production (Poulsen, 2009).

Theoretically, performance accountability is expected to increase trust through performance checks in three ways (Johansson and Montin, 2014). First, it can be used as a way to “meet the needs and preferences of citizens”. Performance accountability provides citizens with an assessment tool that can improve their ability to select services based on their own preferences. Second, performance accountability can be used as a way to “improve policy outputs and outcomes”. The results of activities that monitor performance serve as incentives for providers to increase market share. Third, it can be used as a way of “enforcing the rules of the game, ensuring fairness, equality and impartiality”. Compliance between service providers is fostered through regulatory controls (Johansson and Montin, 2014).

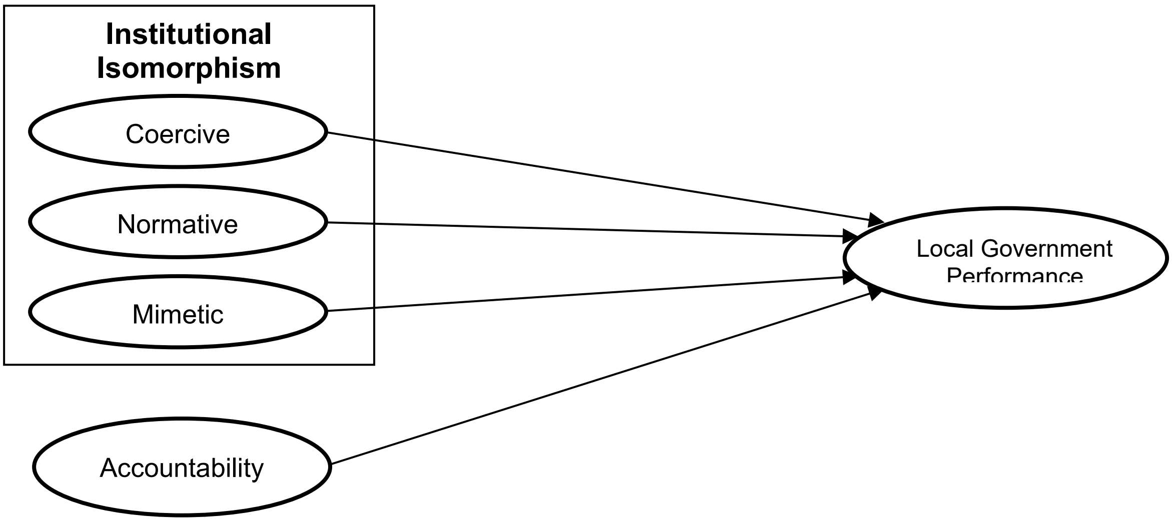

Figure 2: Proposed Research Model (developed by author for this study)

CONCLUSIONS

The research framework for this study is derived from institutional theory especially the concept of institutional isomorphism by DiMaggio & Powell (1983). The propose research framework model as shown in figure 2. Based on institutional theory, an organization will change following environmental changes. The organizational environment such as social norms, code of ethics, and culture will tend to influence organizational behavior. These institutional factors force organizations to react and adopt conformity to the demands of institutional environment in order to gain legitimacy and political support (Meyer & Rowan, 1977). DiMaggio and Powell (1983) call the pressure from institutional environment as a mechanism of institutional isomorphism and occured in three ways, namely coercive, mimetic, and normative. The institutional isomorphism will affect organizational change and behavior. Therefore, in this research, institutional theory, especially the concept of institutional isomorphism, is expected to be a powerful and popular explanatory tool for analyzing organizational change and behavior.

In public sector organizations, especially local governments, besides the coercive, mimetic, and normative isomorphism factors, pressure also arises from society to demand accountability about public organizations management. The community demands local governments to realize accountability in order to avoid wastefulness and inefficiency in public services delivery. The greater demand for accountability from the society, local government will try to maintain its performance in order to maintain legitimacy and political support. Therefore, the concept of accountability is important factor to explain performance of local governments which are always demanded by society to make continuous improvements and innovations in public services delivery.

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