UNIVERSITI TEKNOLOGI MARA

# INDUSTRIAL TRAINING REPORT

## AIA PUBLIC TAKAFUL BERHAD


**PREPARED BY**

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(EXAMINER)

**FACULTY OF BUSINESS AND MANAGEMENT**

**BACHELOR OF BUSINESS ADMINISTRATION (HONS.) FINANCE**

# INDUSTRIAL TRAINING REPORT (MGT666)

## *"THE DETERMINANTS OF DOMESTIC SAVINGS IN MALAYSIA"*


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**SUBMISSION**

26TH JANUARY 2024

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## EXECUTIVE SUMMARY

MGT666 Industrial Training is a required course for Universiti Teknologi MARA (UiTM)'s Bachelor of Business Administration (Finance) program. For a base period of twenty-four weeks, the course gives a temporary position in the workplace. The crucial and informative twenty-four-week period of mechanical training began here at AIA PUBLIC Takaful Berhad, a subsidiary of AIA Berhad that complies with Shariah. My industrial training endeavor will conclude on February 29, 2024, having started on September 1, 2023. This industrial training's main goal is to provide students with access to job knowledge, develop their work skills, gain understanding, and develop a sense of value in the workplace within an organization. The understudy can genuinely and cognitively plan the workstation in this way. The next step is to develop one's own potential, self-awareness, and traits related to dependability, creativity, academic aptitude, employability, work capacity, business venture aptitude, and individual abilities. My academic advisor, Miss Shaliza Azreen Binti Mohd Zulkifli, and supervisor Puan Norsuliza Binti Sohhimy, who gave and shared a lot of information with me, were the persons who helped me the most throughout my internship.

The AIA PUBLIC Takaful office that is located at Jalan Ampang, Kuala Lumpur was set up in 2011. This organization is focusing on offering the right Shariah arrangements in assisting their clients with setting up life’s vulnerabilities and to get their monetary and insurance needs. It consists of 7 departments which is Business Governance Departments, Strategy and Distribution Management (SDM), Customer Propositions Marketing (CPM), Takaful Actuarial, Takaful Finance, Shariah, Legal and Secretarial (SLS) along with Risk Management and Compliance. I was assigned to the Enterprise Risk Management (ERM), however I also occasionally ordered to assist other departments. The goal of my internship was to learn about this company’s workflow and obtain more experience with it.

While working at AIA PUBLIC Takaful Berhad, I have assisted with the preparation of risk management reports on a monthly, quarterly, and annual basis, including those on risk appetite, risk policy management, and other topics. There, I learned a lot of practical information on actuarial applications such as PowerPivot on Excel and Visual Basic for Applications (VBA) for automation. Apart from that, I have met many amazing people and learned a great deal from them. Additionally, the Malaysian domestic savings determinants are covered in this paper. Using Time Series Data Analysis, the analysis aims to evaluate the factors influencing savings in Malaysia based on economic performance. The data is computed over thirty (30) consecutive years. I'm hoping that this report will fulfil the necessary requirements.

## COMPANY'S PROFILE

### 3.1 Background of Establishment

*Figure 1: AIA Berhad logo*

*Figure 2: AIA PUBLIC Takaful Berhad logo*

*Figure 3: Public Bank Berhad logo*

| | |
|---|---|
| **COMPANY'S NAME** | AIA PUBLIC TAKAFUL BERHAD |
| **OFFICE ADDRESS** | Menara AIA, 99 Jalan Ampang, 50450<br>Kuala Lumpur |
| **WEBSITES** | www.aiapublic.com.my |
| **EMAIL** | my.customer@aiapublic.com.my |
| **CONTACT NUMBER** | 1300-88-8922 |
| **OFFICE HOURS** | Mon - Thu: 8:30am - 5:30pm<br>Friday: 8:30am - 4:30pm |
| **DIRECTORS** | Encik Elmie Aman Najas (2014-Present) |

AIA Berhad Malaysia is a leading life insurance and takaful provider in Malaysia. Early beginnings in 19948 when AIA's journey in Malaysia began as American International Assurance Company (AIA) established its branch in Kuala Lumpur. AIAs has grown consistently its product portfolio, offering diverse range of life insurance, takaful plans, and healthcare solutions to cater the evolving needs of Malaysians. The company is the successor to two former takaful operators—ING Public Takaful Ehsan and AIA AFG Takaful. ING Public was the takaful joint venture between ING Group and Public Bank until 2012, when AIA acquired ING's Malaysian operations. AIA AFG was the takaful joint venture between AIA and Alliance Financial Group (AFG).

After AIA's acquisition of ING's stake in ING Public (renamed AIA PUBLIC), AFG disposed of its interest in AIA AFG. AIA AFG was then merged into AIA Public, with the transfer of business completed in 2014. AIA PUBLIC Takaful Bhd. (AIA PUBLIC Takaful) is jointly owned by AIA Bhd. (AIA), Public Bank Berhad (PBB) and Public Islamic Bank Berhad (a wholly owned subsidiary of PBB).

Incorporated on 11 March 2011, AIA PUBLIC Takaful leverages on AIA and PBB Group's leadership positions as well as established infrastructure and distribution networks in the insurance and banking industries to drive growth and increase the Family Takaful penetration in the domestic market.

All across Malaysia, with more than 250 branches from cities to villages are opening their doors, ready to welcome more than 17,000 life planners. These planners will work with 256,800 people across the country to help them achieve their goals.

## 3.2 Product and Serviced Offered

i. Life Protection

**a. A-Life Ikhtiar**

A-Life Ikhtiar is a family plan Takaful plan that provides financial protection in case of unexpected events. It offers death and total permanent disability (TPD) benefits, as well as a maturity benefit that pays out 100% of your account value at the end of the policy term. The plan is suitable for individuals aged between 14 days and 60 years old who are looking for Shariah-compliant life insurance with savings potential. There're other savings potential that can increase savings through optional add-ons such as A-Plus Saver-i and additional contributions. Together with flexibility to customize the coverage by adding optional riders such as critical illness and hospital income riders.

**b. A-Life Legasi**

A-Life Legasi is a Family Takaful plan that offers financial protection and wealth accumulation. There are two main plans under A-Life Legasi:

- A-Life Legasi Builder: Regular contribution Takaful plan that provides death and TPD benefits, as well as additional coverage for death due to accident or death during Hajj or Umrah. It also offers rewards for good financial habits with Legasi Rewards, Legasi Booster and Maturity Booster.
- A-Life Legasi Beyond: Investment-linked Takaful plan that provides Hibah Takaful to your loved ones in the event of death. It also has the potential to grow wealth through investment in Shariah-compliant investment funds. Receive up to 8% of the coverage amount from Legasi Reward and up to 16% from Legasi Booster upon certificate maturity when you stay financially disciplined.

**c. A-Life Kasih Famili**

A-Life Kasih Famili from AIA Takaful offers affordable, Shariah-compliant family protection with death and disability benefits. Unlike other plans, A-Life Kasih Family pays out 200% of the basic coverage amount if you suffer accidental death, offering enhanced financial security for your family. With basic coverage amount in case of death or TPD by heping to manage immediate expenses. Given optional to extend coverage to your spouse for death, TPD, or accidental death with the A-Plus ProtectSpouse-i rider. At the end of each year, AIA PUBLIC Takaful may share any excess funds from the Takaful risk fund with eligible participants, potentially increasing the account value. Will receive 100% of accumulated account value upon reaching the policy maturity age.

ii. Medical Protection

**a. A-Plus Total Health**

A-Plus Total Health is a comprehensive Takaful medical plan designed to provide complete financial support for your healthcare needs throughout your life. It goes beyond basic hospitalization coverage, offering various benefits and unique features. Covers hospital room and board, surgical expenses and more. Unlike traditional plans, the annual benefits reset each year, ensure continuous coverage regardless of past claims. Limits up to RM2 million per year and earn rewards and discounts on premiums by adopting healthy lifestyle habits through the AIA Vitality program. Operates based on Islamic ethical principles, providing peace of mind for Shariah-conscious individuals.

**b. A-Life Medik Famili**

A-Life Medik Famili to provide comprehensive coverage for hospitalization, surgery and more to suit family's needs. Its an annual and lifetime limits to choose from a range of annual and lifetime limits to suits the customer budget and coverage needs. There's also option to customize the coverage with riders like Critical Illness Protection, Hospital Income Benefits and more. The operation is based on Islamic ethical principles, providing peace of mind for those seeking Takaful coverage. Other than benefits for the family in terms of financial security, peace of mind allows you to focus on recovery and access to quality healthcare.

**c. A-Life Sejuta Makna**

A-Life Sejuta Makna, a takaful family plan from AIA Malaysia, provides high coverage with a minimum of RM1 million to protect your loved ones' future. It features death and disability benefits, estate management assistance, and optional benefits like Hajj/Umrah coverage. Flexible contribution terms and potential cashback through AIA Vitality make it a customizable option for securing your family's well-being.

iii. Critical Illness Protection

**a. A-Life Lady360-i**

A-Life Lady360-i is a Shariah-compliant Takaful plan designed specifically for women, offering comprehensive protection against various life events. That goes beyond basic life events. Upon death or TPD, the beneficiaries receive the basic coverage amount, ensuring financial stability for your loved ones. Benefits for critical illnesses that commonly affect women including breast cancer, cervical cancer, and ovarian cancer. Comes with maturity benefit upon reaching the policy maturity age (usually 80 years old), will receive 150% of the accumulated account value. Coverage amounts will range from RM50,000 to RM500,000.

**b. A-Life Cancer360-i**

A-Life Cancer360-i from AIA Takaful is a Shariah-compliant Takaful plan designed to offer comprehensive protection against all stages of cancer, from early detection to advanced treatment. It provides financial support and peace of mind throughout the cancer journey. The payer will receive payments upon diagnosis depending on the cancer stage Early Stage 30% of coverage amount immediately plus a 20% Recovery Reward in the first year. While for the Advanced Stage 100% of coverage amount immediately, followed by 50% of coverage amount annually for five years. Together with full maturity benefits after the policy term, the payer will receive 100% of the coverage amount.

iv. Savings and Investment

**a. A-EnrichGold-i**

A-EnrichGold-i is a Shariah-compliant savings plan from AIA Malaysia that combines guaranteed cash payments with potential investment gains and takaful coverage. It offers short-term contributions for long-term benefits, including increasing cash payments, life and disability protection, and the chance to grow your wealth through choice of investment funds. A-EnrichGold-i caters to those seeking financial security, wealth accumulation, and peace of mind through a Shariah-aligned plan.

v. Online Products

**a. AIA i-Med Basic**

AIA i-Med Basic is an affordable online takaful plan from AIA Malaysia offering basic hospitalisation and surgical coverage for as low as RM1.74 per day. This yearly renewable plan is commission-free and perfect for individuals seeking budget-friendly medical protection, with no intermediaries involved. It provides peace of mind with coverage until age 70, allowing you to focus on staying healthy and secure.

**b. AIA i-Critical Illness Cover**

AIA i-Critical Illness Cover is a budget-friendly, online takaful plan from AIA Malaysia that protects you against 39 critical illnesses for as low as RM0.08 per day. Receive a lump sum payment if diagnosed with a covered illness, with additional payouts for specific conditions like angioplasty. No health checks are required, and coverage continues until age 70. Choose from RM50,000 to RM250,000 of coverage to suit your needs. Enjoy commission-free, direct access to this convenient protection plan.

**c. AIA i-Starter Plan**

AIA i-Starter Plan is a simple and affordable one-year term takaful plan from AIA Public Takaful Bhd. Offering basic death protection for as low as RM0.11 per day, it's ideal for individuals wanting introductory coverage or adding a temporary layer of

protection to their existing plans. It's commission-free, boasts online registration, and can be easily adjusted to your needs throughout the year.

**d. AIA i-One Plan**

AIA i-OnePlan is a fuss-free, affordable term takaful plan from AIA Public Takaful covering death and total permanent disability for one year. No commission or intermediaries are involved, and with instant coverage and online payments, it's a simple way to secure your family's future at minimal cost.

### 3.3 Assets

AIA Buildings in Kuala Lumpur.


*Figure 4: Menara AIA CapSquare*


*Figure 5: Wisma AIA Customer Center*


*Figure 6: Menara AIA Malaysia's Headquarter*

Wisma AIA is a 15-storey commercial property on Jalan Ampang in Kuala Lumpur. It is part of the AIA complex that includes the adjacent Menara AIA and nearby AIA Cap Square Tower. Wisma AIA was formerly the local headquarters of Chartis Insurance.

*Figure 7: Menara AIA Sentral Digital+*

AIA Buildings in Bukit Bintang.

Menara AIA Sentral (formerly Menara Standard Chartered) is in the middle of the Bukit Bintang shopping and entertainment district. Located at the Jalan Sultan Ismail and Jalan Raja Chulan intersections, Menara AIA Sentral is a popular business address for corporates in the insurance and financial sectors. It is a 3-minute walk from the Raja Chulan Monorail Station and a 10-minute walk from the Bukit Bintang MRT Station.

AIA Buildings in Cyberjaya.

AIA Shared Services (AIASS) was established in May 2009 as a subsidiary of AIA Group Limited (known as 'AIA'), the largest independent publicly listed pan-Asian life insurance group and a market leader in the Asia-Pacific region for life insurance premiums.

*Figure 8: AIA Shared Services*

### 3.4 Locale

The company is headquartered at Menara AIA, 99, Jalan Ampang, 50450, Kuala Lumpur P.O. Box 10140, 50704. The office tower is opposite of KL Tower, and across SMK Convent Bukit Nenas. The office can be commute by using wide options of public transportation and roads since it's located in between LRT Masjid Jamek and LRT Dang Wangi.

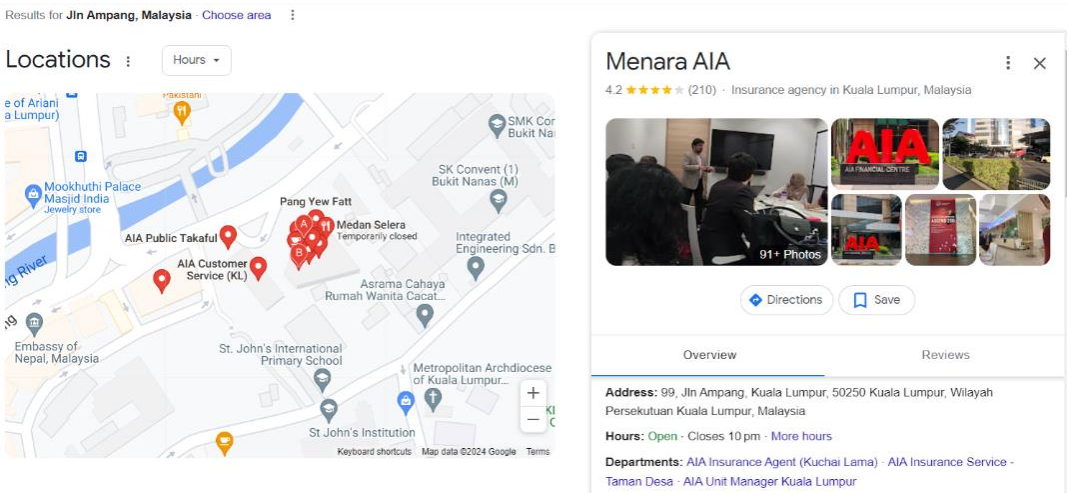


*Figure 9: Location of Menara AIA in Google*


*Figure 10: Menara AIA from outside*


*Figure 11: AIA Digital Billboard*

### 3.5 Vision and Mission


AIA, across all its markets, has a unified vision, mission, and objective:

**Vision**: To be the leading pan-Asian life insurer. This highlights their ambition to be the top life insurance provider throughout Asia, emphasizing their regional strength and focus.

**Mission**: To help people live Healthier, Longer, Better Lives. This mission speaks to AIA's commitment to promoting wellbeing and improving the lives of their customers by providing financial security and promoting health initiatives.

**Objective**: To achieve sustainable, profitable growth. These objective outlines AIA's focus on balancing financial success with long-term sustainability. They aim to grow their business while operating responsibly and ethically.

Additionally, AIA also promotes an internal purpose statement: We race against risk to protect every family and empower them to live **Healthier, Longer, Better Lives**. This reinforces their dedication to protecting families from financial risk and empowering them to thrive.

### 3.6 Board of Directors

AIA PUBLIC Takaful Berhad overseen by an impressive board of directors with a wide range of skills and experience overseeing several specialties areas.

**Mahani Binti Amat**
Independent Non-Executive Director
(Chairperson)

**Datuk Husni Zai Yaacob**
Independent Non-Executive Director

**Dato' Chang Kat Kiam**
Non- Independent Non-Executive Director

**Datin Dr. Rusnah Muhamad**
Independent Non-Executive Director

**Chong Kin Leong**
Independent Non-Executive Director

**Dato' Seri Mohamed Hassan Kamil**
Independent Non-Executive Director

**Ben Ng**
Executive Director

### 3.7 Management Team

AIA PUBLIC Takaful Berhad is run by a team of elite employees who have a wide range of experience in various business roles.

**Elmie Aman Najas**
Chief Executive Officer

**Sze Yuet Ping**
Director, Takaful Finance

**Teng Phei San**
Associate Director, Takaful Actuarial

**Reena Sari Abdul Halim**
Associate Director, Business Governance

**Then Yeun Tsuey**
Associate Director, Customer Propositions Marketing

**Ahmad Faisal Ahamad Nawawi**
Associate Director, Compliance

**Sharizad Ghouse**
Associate Director, Strategy & Distribution Management

# TRAINING'S REFLECTION

- **Duration: Specific Date, Working Days and Time**

## 1 SEPT - 29 FEB

### DATES

Internship was carried out within the time period, subject to optional extension up until graduation.

## MONDAY - FRIDAY

### WORKING DAYS

With exclusions of public holidays and leave of not more than 3 consecutive days amounting up to 6 days throughout the attachment period.

## 8.30 A.M. - 5.30 P.M.

### WORKING HOURS

With overtime on special occasions arising from seasonal additions of workload (monthly, quarterly, and annual reports).

## Department, Roles, Responsibilities, Assignments and Tasks

Primary Department: *Enterprise Risk Management – Takaful*

My role is to assist in overseeing the company's risk related to operations and financial. Which required me to do analysis prior from incidents reported by the Business Units. There will be categorize into each section, and based on the regulations will be reported to Bank Negara Malaysia if applicable any.

1. Looks at risk management strategically from the perspective of the entire firm or organization. It is a top-down strategy that aims to identify, assess, and prepare for potential losses, dangers, hazards, and other potentials for harm that may interfere with an organization's operations and objectives and/or lead to losses.

2. Identify inherent business risks and prompt measures, processes, and controls to reduce the impact of the risks on business operations by doing Risk Assessment such as Qualitative risk assessment, and Quantitative risk assessment. This can be done using the common risk assessment tools like risk matrix.

3. Helps organization analyse the incidents reported on the system that will be categorized by the incidents severity levels. The common framework for incident severity levels is based on four factors and will be determine with Level 1 (Low), Level 2 (Medium), Level 3 (High), and Level 4 (Critical). There is also guideline from Bank Negara Malaysia for which level we should report to them.

4. Using Key Risk Indicators (KRI) to quantify and monitor each risk. By identifying any risk exposure relate to current or emerging risk trends. Also assess and quantify each risk and its potential impact. KRI's assist companies by comparing business objectives and strategy to actual performance to isolate changes, measure the effectiveness and demonstrate changes of specific risk event.

5. Analyse the possibility of the business unit malfunction or not performing as it was designed and advertised by Functional Risk Report. It helps to evaluate requirements as defined by the company regarding the risk or other controls to reduce the risk identified.

6. Implement risk taxonomy that was categories and update after getting approval by the Board which provide a comprehensive set of risk categories. It will help organization to identify risks in their critical end-to-end business processes.

Gains: Intrinsic and Extrinsic Benefits

Over the course of my internship, the company grants me with an allowance of RM1,000 per month and a laptop to carry out my work in the company. Supporting well with the company's initiatives

to support its employees to work from home, the company provided once a week or 4 to 5 days a month to choose from. The company also provided other additional benefits such as multiple training that will be useful to apply and gym enrolment for those who's interested.

There also variety of workout class in afternoon and evening to choose from. There's also initiative to take some professional paper that will remunerate by the company up until 3rd time of reseat. What I love the most was the company really put forward the workers' health by having free monthly check-up and required each one of them to have minimum at least 300,000 steps in one year to make sure everyone is fit and in good shape. If you're sick, you are free to walk-in to their in-house clinic that provides free consultation and medicine if needed.

Overall, I managed to gather as much experience as possible during my internship. I have actively engaged in strategic planning with risk management committees and regulatory compliance teams to achieve both short-term and long-term financial goals. I made sure that all presentations, press releases, and media inquiries were delivered in a clear and correct manner as the main point of contact for business units. During important industry events like committee meetings on performance and presentations by risk department, my thorough research and report preparation abilities came in handy. In addition, my dedication to lifelong learning allowed me to acquire a thorough comprehension of the insurance market trends and the regulatory modifications that affect the sector.

I am able to have a deep understanding of enterprise risk management within the insurance industry, encompassing comprehensive knowledge of various lines of insurance and their distinct risk profiles. I'm well-versed in key risk categories like underwriting, investment, operational, and regulatory, and can assess their potential impact on an insurance company's financial stability. My expertise extends to analysing the influence of economic cycles, market volatility, and disruptive events like pandemics and cyber threats on the insurance landscape. Furthermore, I have a strong grasp of both internal risk factors, such as management errors and system failures, and external factors, including regulatory changes, competitor actions, and technological advancements. This holistic understanding of ERM principles positions me to effectively identify, assess, and mitigate risks, contributing to the long-term health and sustainability of the insurance company.

Through my experience with corporate governance initiatives, I'm well-versed in the risk oversight function of the board and relevant committees, such as risk management and compliance. I actively facilitated collaboration between departments to enhance risk management practices, including data sharing, risk assessments, and functional reporting. My expertise in risk relations extends to effectively communicating risk-related information to business units, ensuring transparency and adherence to regulatory requirements.

# Determinants of Domestic Savings: Case of Malaysia

Nur Iman Syuhada Binti Sainey[1]

Bachelor of Business Administration (Hons) in Finance

University Technology MARA (UiTM) Cawangan Perlis

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## ABSTRACT

The purpose of this study is to identify the "*Determinants of Domestic Savings in Malaysia"* over the period of 1992 to 2022. The paper explores the relationship between domestic savings and other macroeconomic indicator that will be used a time-series approach. Using the Dynamic Ordinary Least Squares (DOLS) model to examine the impact of the key economic on savings rate that, defeats the purpose of non-stationarity in time series data. The tests will be used in this research are correlation test, unit root test, cointegration test and long-run estimates. The research is based on data gathered in Malaysia over a certain period. Domestic savings is a major problem for economic as it can be an indicator of a country financial stability, capital formation and macroeconomic resilience. The findings can help country to develop appropriate policies and action taken to reduce the risk and maintain the savings at acceptable level. The results show relationship between gross domestic product (GDP) and interest rates on domestic savings are significant, while inflation rate and unemployment rate are insignificant. Shown that one of the reason GDP growths can lead to increase in the savings ratio but in some cases, total domestic savings declines as GDP rises. As long as GDP continues to grow, total savings can still increase, even if it grows slower than GDP. As for interest rates can lead to increase in domestic savings. This occurs when increased incentives to save, when higher interest rates offer a better return on savings, make it interesting compared to spending or investing. Other than reduced incentive to borrow and consumer tend to adjust their spending based on relative costs. Overall, this study contributes to the existing literature on domestic savings for Malaysia from 1992 to 2022. The findings of this study may also have consequences for regulators and policymakers in developing rules and policies to ensure the economic system's stability and resilience.

# CHAPTER 1

## 1.0 Introduction

The domestic savings is often being indicator as a critical indicator of a nation's economic health that shows the stability and growth of the country's economy. It reflects the consumption of the household income consumed and invested. A high saving rate usually means the country can have leftovers to be used after spending on necessities. Gross domestic savings are the total savings in a country received from the household, public savings, and private Khan et al. (2017). Savings are apart from the capital mold before they become domestic savings. According to Solow (1956) and Romer (1986), higher economic growth in a country can be caused by high savings rates through the impact of capital of a country. In addition, Lin (1992) mentioned that economic growth can be sustained only if resources such as saving are mobilized efficiently into productive activities that enable growth of a country.

In addition to promoting growth, domestic savings support stability in the economy. Households and businesses can more successfully weather periods of economic downturn or financial shocks by building up a buffer against unforeseen occurrences according to Guirguis et al., (2022). This resilience shields vulnerable populations from suffering and lessens the severity of economic catastrophes. Additionally, strong domestic savings rates can contribute to lower dependency on foreign capital, providing governments greater influence over their economic policies and minimizing exposure to external financial turbulence by Beck and Levine (2020).

On the other hand, there might be significant and complex relationships between domestic savings and the economy. Although a positive correlation is usually accurate, its direction and strength might vary depending on several circumstances. Income distribution, financial development, cultural attitudes towards saving, and even demographic trends all play a role in shaping saving behavior by Agosin et al., (2020). Therefore, it is essential to understand the conditions of every country to create policies that effectively promote optimal saving rates and optimize their contribution to economic stability and prosperity.

To sum up, domestic savings are essential to a strong economy because they promote resilience and growth. By supporting sustainable saving practices and addressing problems that inhibit savings accumulation, policymakers can utilize this great instrument to construct a stronger and more secure future for their citizens.

## 1.1 Background of Study

Domestic saving is a critical factor that significantly influences a nation's economic path, as it determines investment, development, and overall financial strength. Given Malaysia's economic

upheavals and the fast-changing global scene, it is crucial to analyze domestic saving in the Malaysian context. Many Malaysians, particularly in rural areas and the informal sector, lack access to formal financial services which leads to non-systematic behaviour of savings (Hassan and Yusoff, 2016). This forces them to rely on informal saving mechanisms like self-help groups or moneylenders, often with limited returns and high risks (Abdullah, 2018). Considering the uncertain global economic conditions, Malaysia's domestic saving patterns have impacts that go beyond its own boundaries.

### 1.1.1 Domestic savings in Malaysia

Savings are undeniably important. Savings provide a sort of safety net for finances. Because life is unpredictable, having money provides with a safety net in case unforeseen costs or opportunities present. Savings gives financial flexibility and peace of mind, whether it's for an emergency, an unexpected job loss, or an amazing once-in-a-lifetime chance. Malaysians, however, no longer practice saving. According to a Statista Research Department poll from 2019, 35 percent out of 3,211 participants saved less than RM500 per month on average, and only 9 percent saved more than RM2,000. As savings disappear and the cost of things rises, it is a terrible reality that affects not just the people but also legislators and business leaders. This is a generational problem that calls for long-term solutions and consistent, coordinated assistance from all stakeholders.

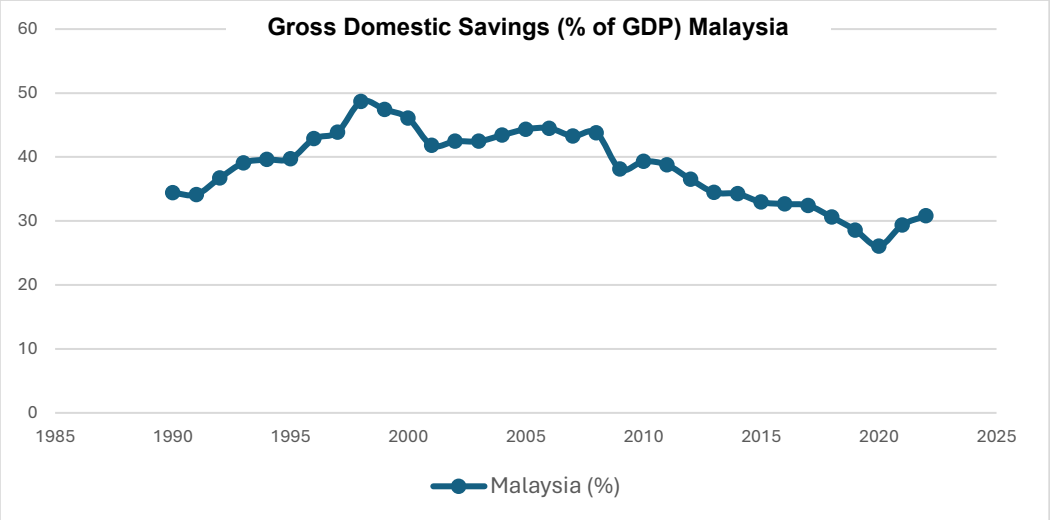



*Figure 1: Gross Domestic Savings (% of GDP) Malaysia from 1990 – 2022*

Based on the World Bank data, figure 1 shows Malaysia’s Gross Domestic Savings (GDS) between 1992 and 2022. The first few years (1992-1998) saw an uptrend from 37 percent to 49 percent with the highest being 49 percent in 1998. Bank Negara Malaysia (1998) from The Real Economy Report stated that the low rate of inflation, high level of savings, Malaysia's openness to global investment and trade, and foreign rating agencies' recognition are the favourable aspects of the country's economy led to high savings. However, it is believed that due to the Asian Financial Crisis, it has resulted to a decline trend from 1998 to 2001 to 42 percent, yet it bounced back afterwards. Then,

Malaysia started to recover even in unvarying trend with additional 1 percent per year. GDS stabilized at about 40 percent in the early 2000s, indicating a slow but steady economic recovery. Rising commodity prices and pro-business government measures helped this time. A fresh increasing trend began in 2002 and continued until 2008, peaking at 44 percent in 2006 with a slight drop in 2007. But the worldwide financial collapse of 2008 and the COVID-19 epidemic of 2020 interrupted the trendline. The latter delivered an especially severe blow, causing GDS to fall to just 26 percent in 2020. However, like in the past, Malaysia's continuously have actively sought improvement in recovery rate by 2021 for 3 percent more than the previous year. Nevertheless, Malaysia is back to the track even in small changes of percentage in 2022 with 31 percent.

### 1.1.2 Household income in Malaysia

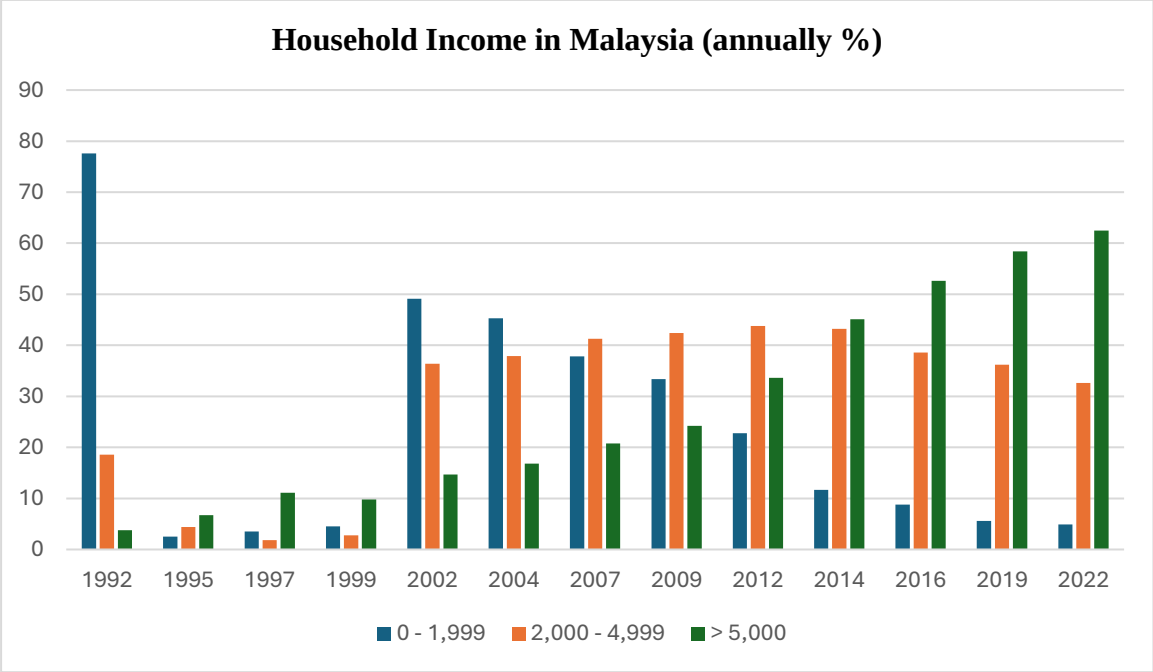



*Figure 2: Household Income in Malaysia from 1992 – 2022*

Based on the data provided by Department of Statistics Malaysia, figure 2 shows the household income data in Malaysia from 1992 to 2022. Two income categories change significantly, as shown by the lowest income (RM0- RM1,999) almost disappearing from 77.6 percent in 1992 to just 4.9 percent in 2022 due to increase in minimum income requirement by the government such as RM900 as in 2013, RM1,000 in 2016 and RM1,100 in 2019. Meanwhile for high-income category, the increase recorded from only 3.8 percent in the earlier year to 62.5 percent to later year. This is contributed by the improvement in educational level obtained by Malaysian in general where better skilled jobs matched this. However, middle income category can be seen grew a little bit from 2002 until 2012 from 35.4 percent to 43.8 percent and went down again until 2022 to 32.6 percent; that is within 11.2 percent range. This proved a widening income inequality in Malaysia occurring especially in 2014 onwards.

Turning points identify pivotal times. After a brief dent to middle-class and upper-class income groups, the Asian financial crisis (1997–1998) was followed by a sharp recovery from 2022 onwards. It is also interesting to see post COVID-19 income where only the high bracket income experienced growth from pre COVID-19. There was a difference in income trends during the post-crisis era. Income disparity increased when the growth rate slowed down, while the overall mean kept rising. Research by Lim and Hui (2019), who name growing income inequality as a major obstacle to Malaysia's economic progress, reflects this tendency. The COVID-19 pandemic in 2020 caused a severe decrease in household income, especially for vulnerable populations, which made the situation much worse. This result is consistent with the findings of Khor et al. (2021), who point out that low-income households worldwide have been disproportionately affected by the pandemic.

Overall income rise was probably influenced by factors such robust economic growth, government initiatives, and better education, particularly for those in lower income categories (Azmi and Rahim, 2009). Yet, it's possible that technical development and globalization have disproportionately benefited industries and socioeconomic groups, aggravating inequality (Ahmed et al., 2014). In conclusion, over the last thirty years, Malaysian household income has evolved into a complicated mosaic of advancement, inequality, and resiliency. Examining this pattern provides insightful information about the nation's economic progress and emphasizes the necessity of strong policies to promote inclusive growth, lower inequality, and create a more equitable future for all Malaysians.

### 1.3.1 Trend of GDP in Malaysia

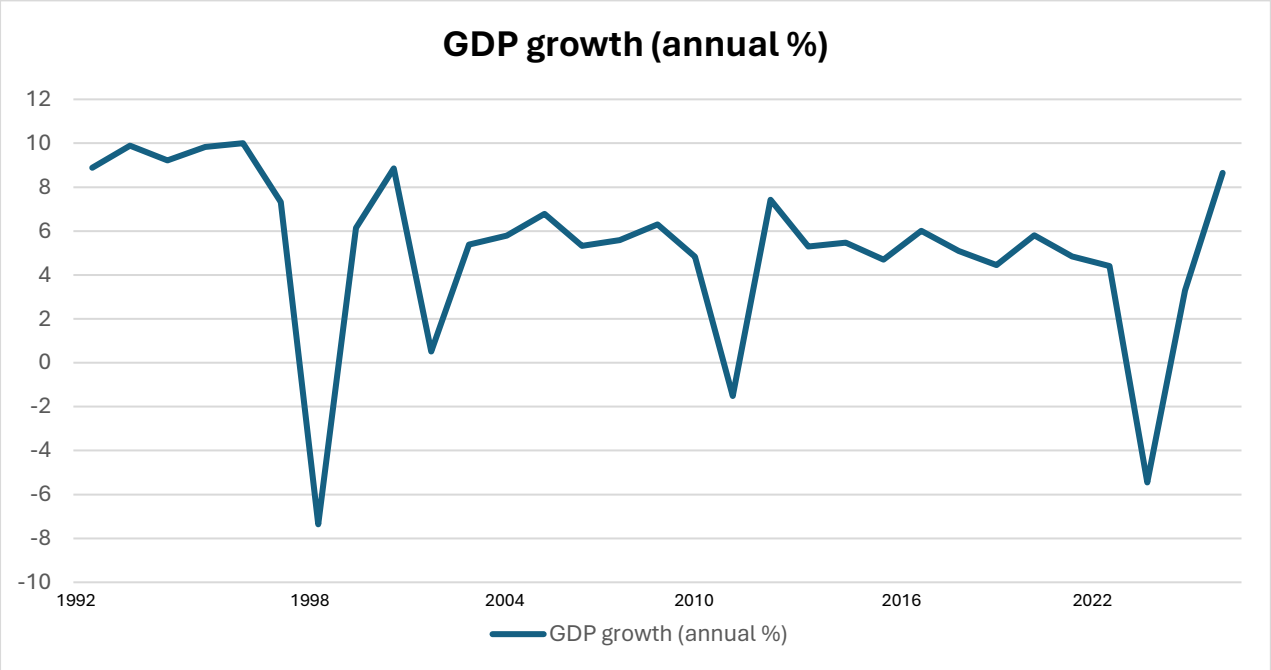



*Figure 3: Gross Domestic Product (annually %) Malaysia from 1992 – 2022*

Based on the World Bank data, figure 3 above shows Malaysia's GDP growth over the last thirty years between 1992 and 2022. The first few years (1992–1996) saw remarkable growth, with annual growth rates above 8 percent, highest being 10 percent. Nordin (2011) stated this was driven by resource exports and robust policy frameworks. However, in 1997 – 1998 the Asian Financial Crisis had a serious toll on the GDP growth in Malaysia, resulting in a contraction that was almost double and below zero at -7.4 percent. But Malaysia quickly recovered, showing tenacity and adaptation as positive development returned by 1999. A quick and strict response by the government at that time by pegging Ringgit to US Dollar at RM4 per USD1 and restricting capital outflow from Malaysia was major factors to this recovery. Although, a worldwide recession in 2001 momentarily pushed growth into negative territory at 0.5 percent. Furthermore, the early 2000s were a time of relative stability for its GDP per capita growth from 2002 until 2008 within 5.4 percent and 4.8 percent. In the following year, a negative growth follow suit at -1.5 percent due to the 2008 World Financial Crisis. Then, a sharp hike was recorded in 2010 at 7.4 percent and following the turn of the millennium, growth remained moderate, ranging between 4.4 and 5.3 percent, until the disastrous COVID-19 pandemic of 2020 (-5.5 percent) impacted the economy. However, like in the past, Malaysia's spirit of recovery is seen highest at 8.7 percent growth return in 2022, which was last seen in 12 previous years.

## 1.2 Problem Statement

Savings and consumption make up for disposable income. Consumption level may decline if households choose to save more and vice versa (McConnell et al., 2021). A slowdown in economic growth could result from this decrease in consumer expenditure. On the contrary, savings are the portion of disposable income that is not used for spending. In essence, it is the revenue that remains after all expenses related to consuming have been taken into consideration. Therefore, the theory behind many savings programs is that consumers would voluntarily and logically wish to save money for future objectives and rainy days. But because of behavioral biases, people rarely save Lea et. Al (1987). Another factor to add into the equation is investments which help the total wealth to increase. However, according to Rasmidatta (2011) a rise in savings is necessary for an increase in investment. Savings, then, are crucial in supplying the nation's capacity for production and investment, both of which have an impact on the likelihood of economic growth. The low rate of saving can be a significant obstacle to long-term, sustainable economic growth.

Even though Malaysia had a strong economic growth from the past decades, the country’s comparatively low domestic saving rates continue to be a source of concern. While the importance of savings has been long talked about, most individuals and households don’t save or have little savings. A decreasing trend from 2008 until 2020 showed Gross Domestic Savings only at 38 percent and 24 percent out of Gross Domestic Product (GDP) respectively. Furthermore, based on Economic and Monetary Review 2022 by Bank Negara Malaysia, household debt levels in Malaysia are comparatively

high despite modest income levels. These elements reduced Malaysians' ability to save money. In addition, informal workers in Malaysia have limited access to the current social security structure, which primarily supports the formal employment sector, this is made worse by the sizeable informal sector in the country. Recently, many people prematurely depleted their old-age savings due to exceptional withdrawals made from retirement funds during the COVID-19 pandemic. This had an impact on their level of living in the long run, particularly given the rising life expectancy.

Moreover, the increase in the cost of living due to global inflation problem has also been a huge contributing factor to lack of savings in this country increase in inflation caused by interrupted supply of raw materials and foods post COVID-19 pandemic. This worsened the existing state of economy and yet impact the domestic saving rate even with a slight increase by 2 percent in 2022 (World Bank Data). This mostly impacts the lower and some middle-income group as their survival in this challenging economy even before the pandemic is an uphill climb. Having said that, this research is conducted to study the determinants of domestic saving rates in Malaysia using an annual data for 32 years from 1990 to 2022. In order to achieve this, independent variables like gross domestic product, inflation, interest rates and unemployment and domestic saving as dependent variable are chosen as guideline.

## 1.3 Research Objective

### 1.3.1 General Objective

The general objective of this research is to study the determinants of domestic savings in Malaysia.

### 1.3.2 Specific Objective

1. To examine the relationship between gross domestic product (GDP), inflation, interest rate, unemployment, and domestic saving in Malaysia.
2. To find the most significant variables; GDP, inflation, interest rate, unemployment affecting domestic saving in Malaysia.

## 1.4 Significance of Study

### 1.4.1 To the government/policy maker

This study provides an academic study on the factors determining domestic savings in Malaysia which to the government may help to evaluate the effectiveness of the current financial assistance program and identify the areas for improvement.

### 1.4.2 To the financial sector

This study helps the financial sector understand savings pattern based on macroeconomic variables and may provide insight to better position themselves to have a better growth.

#### 1.4.3 To the body of literature

This study adds knowledge and enables researchers to produce more useful work and better engagement with the topic.

#### 1.4.4 To the Public

This study provides information as far as savings in concerned to the public. Furthermore, it can further deepen awareness to the individuals and households on the importance of savings.

## 1.5 Scope of Study

This study uses time series data within Malaysia context and data are collected from Department of Statistic Malaysia (DOSM), World Data Bank, Bank Negara Malaysia (BNM) official website. The period of study is 32 years from 1990 until 2022 and by using the gross domestic product, inflation, interest rates and unemployment as the independent variables and domestic savings as dependent variable.

## 1.6 Limitation of Study

Limitation is a crucial aspect of maintaining transparency during the research study that was conducted. The quality of data used in this study are fully dependent on the availability on the secondary data. Other than that, some aspect of economic in this context from journal found may not be fully accurate in explaining the outcome of this study as different of economic level of countries or other region.

# CHAPTER 2: LITERATURE REVIEW

## 2.1 Domestic Savings

The percentage of a country's revenues that is collectively saved rather than consumed by enterprises, households, and the government is known as domestic savings rate, which is important to the economic statistic. It frequently appears as a percentage of gross domestic product (GDP). The computation considers savings from a variety of sources, including investments, pension fund contribution (EPF), and bank deposits (Misztal, 2011). According to Aghevli (1990), a low savings rate may indicate prospective difficulties in funding growth and meeting future economic needs, a high domestic savings rate is typically seen as beneficial for economic development since it provides funds for investments. Researchers and policy makers will frequently examine the domestic savings rate to assess a country's sustainability and state of economy.

Domestic savings play an important role in economic growth and development. This accumulates the financial resources of a country, on the ability to invest and turn into productive activities that will enhance he productive capacity and elevate living standards. Savings and consumption theories have always developed together. The theory by Keynes (1936) of absolute income hypothesis served as the foundation as for Duesenberry (1949) relative income hypothesis that states consumption behaviors of individuals are irreversible, which means as income increases, consumption of an individual also increases. On the contrary, Keynes also introduced The Paradox of Thrift (paradox of savings) looks at people's saving behavior and demonstrate how excessive savings can throw and economy further into a recession. When autonomous saving rises, aggregate demand declines, resulting in a drop in gross output, which in turn lowers total saving. The paradox is that, on the one hand, people's efforts to save more money may cause overall savings to decline, and, on the other hand, a rise in saving may have negative effects on the economy.

## 2.2 Gross Domestic Product (GDP)

According to the World Bank (2023), the GDP is the total market value of all finished goods and services produced inside a nation's borders each year. Economists have long been fascinated by its relationship to domestic savings, with the prevalent story pointing to a positive correlation. In other words, rising GDP frequently corresponds to rising domestic savings rates. Rising GDP, according to Zhao and Gong (2021), indicates rising national income. Individuals

will have more disposable money as a result, which will increase the amount they save. Keynesian theory describes that consumption tends to rise at a decreasing rate even when it is positively connected with income, as Foster (1990) notes. As a result, as national income rises (as indicated by the GDP), some of the gains go unspent and grow into savings. The relationship between GDP and savings is not without complexity, though, as some studies by Arestis & Mavrellis, (2000) point out the possibility of reverse suggesting that higher savings may also encourage investment and economic growth, which in turn raises GDP. Other variables that may affect the strength and nature of this association include income distribution, financial policies, and cultural preferences. This hypothesis was first presented by Modigliani (1966) and holds that people save money while they are employed to build wealth for necessities such as retirement. Increased earnings and earning potential from higher GDPs support this ability to save.

For instance, a study by Fasih et al. (2019) found a strong positive significant relationship between domestic savings and GDP during 2000 to 2017 for productive sectors in countries like China, India and Brazil. Similarly, Choi and Shin (2020) in the International Journal of Finance and Economics that investigate 173 countries from 1970 to 2017 find a significant and positive relationship between GDP and domestic savings which argue on the efficient of the financial system facilities increase savings mobility and utilization. Seen also in some developing countries by Gurguis et al., (2022) between 2000 and 2020, suggests a positive and significant impact of GDP growth on savings especially in income distribution and financial inclusion which focusing on regions like Sub-Saharan Africa and Latin America.

However, in China between 1992 and 2018 by Choi and Narayan (2022) in the Quarterly Journal of Economics mentioned that they found a negative insignificant relationship between GDP growth and domestic savings at higher incomes levels. To add on, study by Shahbaz et al. (2023) looking at 59 developed and developing countries from 1970 to 2019 finds a no significant relationship between GDP and domestic savings which suggests efficient financial markets for financial development. In addition, a study Ghost et al. (2023) in 12 emerging Asian economies found a weak positive and significant relationship between GDP growth and domestic savings. On the contrary, Nguyen et al. (2022) that analyze data from 2000 to 2020 found a strong positive and significant relationship between GDP growth and domestic savings in Vietnam.

### 2.3 Inflation

Inflation, the general increase in prices over time, can have a significant impact on domestic savings behavior. The relationship between inflation and domestic savings is complex. According to Jacobs (2014), inflation rates vary across households due to different spending patterns and because not all prices increase at the same rate. Furthermore, in China between 2000 to 2020, where Luo and Huang (2022) found a positive relationship between inflation rate and domestic savings by suggesting that higher inflation motivates individuals to save more as a hedge against future purchasing power and to maintain desired standard of living. This result is supported by a study in Sub-Saharan Africa by Ndikumana and Opoku (2021) where they found a positive relationship between inflation rates and domestic savings between 2000 and 2020 that encourage individuals to save more to maintain their purchasing power.

Other than that, Saaed (2007) analyzed the relationship of inflation and domestic savings for Kuwait from 1985-2005. The empirical evidence demonstrated that there exists a statistically significant long run negative relationship. Meanwhile, Er et al. (2014) showed that no relationship found between inflation and domestic savings in the short run within Turkish economy from 2003 to 2012. In addition, research in Philippines from 2010 until 2020 postulated a negative significant relationship of inflation rates and domestic savings particularly for households with high debt levels which lead them to reduce ability to save to pay debts (Ramos and Cruz, 2021).

However, there are some investigations in European Union Countries (EUC) in 2000 to 2020 that give a mixed relationships with inflation rate and domestic savings that is insignificant. Cerra and Panza (2022) stated that the diverse levels of financial literacy and inflation expectations contribute to the variation from the results as different countries will have different levels of indicators. In European Union Countries with lower income based on Gross National Income (GNI) like Albania and Ukraine, they showed insignificant and negative results and for some EUC with higher GNI results showed a significant positive relationship between inflation and domestic savings.

### 2.4 Interest Rate

As for interest rates, Abidin and Habibullah (2022) argue that higher interest rates will offer more return which captive individuals to save more particularly in investment long-run. To support more, Huang and Wu (2021) have suggested that for wealthier households, interest

rates hold a stronger role in savings decisions. Next, Chen et al., (2022) stated that future generation may profit from increased saving brought by rising interest rates. However, it's possible for parents to save more for their kids' which will encourage longer term and increase transfer of wealth between generation to generation. In addition, studies suggest that even small rises in interest rates can act work towards saving, especially when combined with financial literacy campaign. The leverage cognitive biases to encourage saving behaviour is stated by Ashraf et al., (2023)

The recent studies by Elsayed et al. (2023), using data from emerging market and developing economies (EMDEs), depicted a significant positive relationship between interest rates and domestic savings from 2000 until 2020. Additionally, Apergis and Tsouma (2017) that studies on OECD countries from 2000 to 2014, Luo and Huang (2022) in China from 2000 to 2019 and Sinha et al., (2023) in India from 2000 – 2020 found both positive and significant relationship between interest rates and domestic savings.

However, studies by Chowdhury and Zaman (2022), using data from Bangladesh in 2010-2020 found a weak or negative relation significant relationship between interest rates and domestic savings. Similar to Carroll and Weil (1994), there were weak or negative significant relationship on domestic savings and interest rates in developed countries from 1958-1987. Moreover, study done by Cerra and Panza (2022) in European Union (EU) countries from 2000 to 2020 found a mixed significant relationship exhibiting some countries have positive relationship while others showing negative relationship that attributed from the country's financial development levels.

### 2.5 Unemployment

According to Aydogan and Guven (2019), they suggested that higher unemployment rates attract people to save as precautionary move. To face the job insecurity with unemployment risk, an individual tends to save more as a buffer. In countries with high financial literacy, individuals may view unemployment as their way to trigger and improve their financial situation. Furthermore, Gulen and Gultekin (2020) suggest that this awareness could lead to increased savings for future emergencies. Next, a study by Coibion et al. (2022) found that the relationship between unemployment and savings will depend on the type of unemployment. The involuntary unemployment may be due to economic downturns that led to higher in savings, while the other way goes when the voluntary unemployment for career transition had no significant impact. Also, study by Adams et al. (2023) suggested that the

impact of unemployment and savings varies across income levels. Which low-income households might be forced to decrease savings due to immediate needs and high-income were more likely to increase savings during unemployment due to greater and sufficient financial to save on.

A study examined by Wu and Chen (2022) found a negative and insignificant relationship of unemployment rates and domestic savings in China from 2000 to 2019. Other that, in India between 2000 and 2020, there is a negative significant relationship between unemployment rates and domestic savings which attributed from limited unemployment benefits and increased financial stress (Gupta and Singh, 2023).

On the other hand, Liu and Li (2022) recorded a positive and significant relationship for unemployment rates and domestic savings, in rural areas of China from 2000 to 2020, suggesting that higher unemployment rate make individuals to save more as a precautionary step. Next, Brunnermeier and Smets (2012) found a positive with significant relationship between unemployment rate and domestic savings during the economic recession in Germany from 2000 to 2012. This is due to government policies that promote short-term savings and increased government expenditure that stimulated households saving behavior. Then, Park and Kim (2023), found a positive and significant relationship between unemployment rate and domestic savings for low-income household in Korea from 2010 until 2022.

# CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

## 3.0 Introduction

In this chapter, will be focus on the research design methodology between domestic savings as the dependent variables and gross domestic product, inflation, interest rate and unemployment rate as the independent variables. The proses of it is by using the data collection with proxy that will be used. The result will be used to clarify more understanding on the topic which will be accepted or rejected on the correlation, unit root test, cointegration and long-run. Despite that, the highlighted for the results will be used to support more of the research. To conclude, the data choose, and run will indicate whether the research variables connected to one another.

## 3.1 Data Collection

### 3.1.1 Data Collection Process

The study conducted is based on time series and using only secondary data. Financial data of the variables will be extracted from the World Bank Data Collection, Bank Negara Malaysia (BNM) and Department of Statistic Malaysia (DOSM) websites. All data will be analyzed using statistical software; EViews version12. The period of study is from 1992 until 2022.

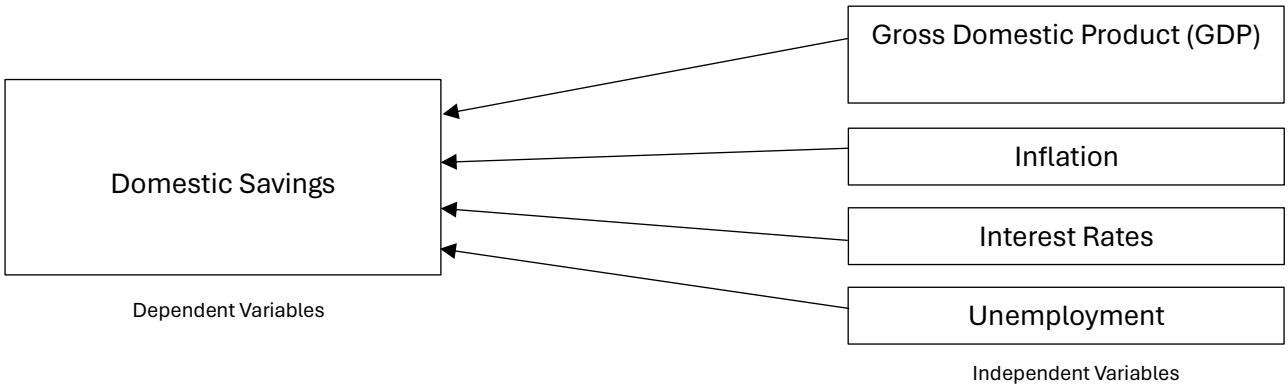
### 3.1.2 Research Variables

Table 1: Research variables, proxies and units

| Variable | Proxy | Units |
|---|---|---|
| **Domestic Savings** | Gross Domestic Savings | Percentage (%) |
| **Gross Domestic Product** | Gross National Expenditure (% of GDP) | Percentage (%) |
| **Inflation** | Inflation Rate | Percentage (%) |
| **Interest Rate** | Deposit Interest Rate | Percentage (%) |
| **Unemployment Rate** | Unemployment rate | Percentage (%) |

### 3.1.3 Theoretical Framework

In research, a theoretical framework serves as a basis by offering an organized method for comprehending and evaluating your subject. It provides an overview of current theories and ideas related to the research subject, assisting with organize research to structures thoughts and findings by connecting them to established theories and research. Thus, by developing hypotheses will helps to formulate specific predictions on the relationship about the independent variables such as GDP, inflation, interest rates and unemployment rate that will influence the dependent variables of domestic savings whether it have a significant or insignificant with one another.




### 3.2 Hypothesis

*$H_0$: Gross Domestic Product (GDP) has no significant relationship with domestic savings.*

*$H_1$: Inflation rate has no significant relationship with domestic savings.*

*$H_2$: Interest rate has no significant relationship with domestic savings.*

*$H_3$: Unemployment rate has no significant relationship with domestic savings.*

### 3.3 Methodology

This study will be using Dynamic Ordinary Least Squares (DOLS) with the aid of Eviews12 software; an effective tool to conduct an analysis to identify the long-term trends in the economy that affect savings. This sophisticated instrument, incorporated into the EViews12 program, defeats the purpose of non-stationarity in time series data. The tests will be used in this research are correlation test, unit root test, cointegration test and long-run estimates.

An equation is used to represent the linear regression model for this study. This equation, which is also model of the study is used to model the relationship between a dependent variable and its independent variables. Hence, the general model is as follows:

$$Yt = \alpha_0 + \beta_1 X_{1t} + \beta_2 X_{2t} + \ldots\ldots\ldots\ldots\ldots\ldots + \beta_n X_{n\ t} + \varepsilon_t$$

However, in this study, all the variables will be change into natural logarithm (In) thus, the model of this study is written as follows:

$$InSMt = \alpha + \beta_1 InGDP_t + \beta_2 InFR_t + \beta_3 InIR_t + \beta_4 InUR_t + \varepsilon_t$$

Where,

| | | |
|---|---|---|
| SM | = | Domestic Savings |
| GDP | = | Gross Domestic Product |
| FR | = | Inflation Rates |
| IR | = | Interest Rates |
| UR | = | Unemployment Rates |
| $\beta_1, \beta_2, \beta_3, \beta_4$ | = | Coefficients for each independent variable |
| $\varepsilon$ | = | Error Term |
| $t$ | = | Times |

**3.4 Data Analysis**

**3.4.1 Correlation Test**

The statistical results of correlation tests, examine the complex link between two variables by measuring how much their motions mimic one another. On a -1 to +1 scale, they reveal the associated waltz: values close to ±1 signify an intense result, 0 an autonomous move, and intermediate values varied degrees of coordinated swing. (Cohen, 1988). A positive correlation coefficient indicates a positive relationship, meaning that as one variable increases, the other tends to increase as well. A negative correlation coefficient indicates a negative

relationship, meaning that as one variable increases, the other tends to decrease. A correlation coefficient close to zero indicates a weak or no linear relationship.

Correlation tests provide important insights, setting the stage for a deeper understanding in fields such in this study on economic purposes to strength and direction of the linear relationship between each independent variable and the dependent variable. To interpret more, there are three categories of correlation consist of strong, moderate, and weak. In statistical, if the range is between **±0.8 and ±1** means that the correlation has strong correlation and reliable between the two variables. While values between **±0.3 and ±0.6** indicates a moderate correlation and have potential between the two variables. Lastly, with values around **±0.0 to ±0.2** reflect from weak correlation.

### 3.4.2 Unit Root Test of Augmented Dickey Fuller (ADF) and Phillip-perron (PP)

Since unit roots affect the statistical characteristics of time series data, it is essential to comprehend them. Random walks are observed in non-stationary data with a unit root, where historical values have little to no predictive value for future values. On the other hand, stationarity denotes a consistent mean and variance, which qualifies the data for additional examination and trustworthy deductions. This study aims to test the presence of unit roots in the data series using both the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests. The null hypothesis ($H_0$) states that a unit root exists in the data, signifying non-stationarity. Conversely, the alternative hypothesis ($H_1$) posits that no unit root exists, indicating stationarity. (Dickey & Fuller, 1981; Phillips & Perron, 1988).

The ADF and PP tests use distinct strategies to account for potential serial correlation and heteroskedasticity in the data. The test statistic results can be compared to crucial values at various significance levels (1, 5 and 10 percent) to see whether the null hypothesis can be rejected or not, hence indicating whether the data has a unit root.

### 3.4.3 Cointegration Test

The purpose of this test is to look at the possibility of long-term cointegration between X and Y, two variables. Assuming that there is no cointegration, the null hypothesis ($H_0$) indicates that although X and Y are individually integrated, they do not have a stable long-run equilibrium connection. On the other hand, the alternative hypothesis ($H_1$) suggests cointegration, implying that the variables share a similar stochastic tendency that makes them

jointly non-stationary and interdependent over time (Johansen, 1991; Engel & Granger, 1987). The summary of the hypothesis is as follows:

$H_0$ = There is cointegration

$H_1$ = There is no cointegration

Although it is difficult to define a single value that will provide accurate long-term forecasts, statistically meaningful cointegration tests and a large enough sample size offer a good starting point. Additionally, it can be more confident in the long-term associations and have uncovered by using robust cointegration tests, such as Johansen's, and taking into account various model specifications. To reject the null hypothesis, the t-value should be less than the p-value of either 1 percent, 5 percent and 10 percent.

### 3.4.4 Long-run Estimates

Following suit, cointegration makes the underlying equilibrium more visible, that allows the reliable estimation of long-term results and is impossible if there are unit roots for both variables. They move so rapidly that it is impossible to create a steady balance. Cointegration becomes possible if at least one variable is stable. By offering a vital point of reference, this fixed variable enables the other to modify and coordinate its movements, maybe leading to the formation of a clear long-term relationship.

## CHAPTER 4: DATA ANALYSIS AND FINDINGS

### 4.1 Introduction

This paper analyzes Malaysia's domestic savings over a three-decade period (1992–2022) and reveals its relationship with important economic variables. Revealing the underlying linkages influencing Malaysia's domestic savings by using advanced statistical research techniques, this study provides insightful information to both scholars and policymakers.

### 4.2 Correlation Test

Table 4.2: Correlation Test

| | **LSM** | **LGDP** | **LFR** | **LIR** | **LUR** |
|---|---|---|---|---|---|
| **LSM** | 1.0000 | -0.5389 | 0.4683 | 0.5085 | -0.3696 |
| **LGDP** | -0.5389 | 1.0000 | 0.0303 | 0.2993 | -0.0534 |
| **LFR** | 0.4683 | 0.0303 | 1.0000 | 0.5040 | -0.3568 |
| **LIR** | 0.5085 | 0.2993 | 0.5040 | 1.0000 | -0.4093 |
| **LUR** | -0.3696 | -0.0534 | -0.3568 | -0.4093 | 1.0000 |

Based on table 4.2, it shows the results of the correlation test. Gross domestic product (GDP) and inflation rate have a positive weak correlation with one another (0.0303) and with interest rates at 0.2993. Furthermore, GDP and unemployment have a negative weak negative correlation at -0.0534. For inflation rate, and interest rates at 0.5040 which is a positive moderate correlation and negative correlation for unemployment rate with -0.3568. While interest rates and unemployment rates show a moderate negative correlation with one another by -0.4093. Lastly, on the unemployment rate shows a negative correlation with gross domestic savings by -0.0534, inflation rates by -0.3568, and interest rate by -0.4093. Thus, the result from this test indicates that there is no multicollinearity problem since all the correlation is lower than 0.8.

### 4.3 Unit Root Test

Table 4.3: Unit Root Test

| Series | Level | | First Difference | |
|---|---|---|---|---|
| | ADF | PP | ADF | PP |
| In*SM* | -2.6806 | -2.9820 | -4.8402*** | -4.8292*** |
| In*GDP* | -1.6722 | -1.5846 | -4.8722*** | -4.9827*** |
| In*FR* | -4.7987 | -4.7737 | -7.9758*** | -13.1411*** |
| In*IR* | -2.5126 | -2.4577 | -4.6752*** | -6.4477*** |
| In*UR* | -2.9727 | -2.6220 | -5.1103*** | -6.1293*** |

*Notes: The asterisks ***, ** and * denote significant at one percent, five percent and ten percent level respectively.*

Table 4.3 above shows the unit root test results for both Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP). All variables in their level form fails to reject the null hypothesis of a unit root at conventional significance levels (1 percent, 5 percent or 10 percent). This suggests that the variables are non-stationary, meaning their statistical properties (mean, variance, etc.) are not constant over time. All variables become stationary after taking their first differences. The ADF and PP test statistics for the first differences are significantly lower than the critical values, indicating strong evidence of stationarity. Non-stationary variables can lead to spurious regressions and unreliable results in econometric analysis. It's essential to address non-stationarity before proceeding with modelling.

The results for the first difference of ADF and PP are all significant at 10 percent. For ADF, domestic savings, GDP, inflation, interest rate and unemployment rate show significant t-values at -4.802, -4.8722, -7.9758, -4.6752 and -5.1103 respectively. For PP, domestic savings, GDP, inflation, interest rate and unemployment rate show significant t-values at -4.8292, -4.9827, -13.1411, -6.4477 and -6.1293 respectively. Thus, the test rejects $H_0$ indicating no unit root detected in all variables. Therefore, it is wise to proceed to the next step which is cointegration test.

## 4.4 Cointegration Test

Table 4.4: Cointegration Test

Cointegration Test - Hansen Parameter Instability
Date: 12/29/23 Time: 22:16
Equation: UNTITLED
Series: LSM LGDP LFR LIR LUR
Null hypothesis: Series are cointegrated
Cointegrating equation deterministic: C
HAC score variance

| Lc statistic | Stochastic Trends (m) | Deterministic Trends (k) | Excluded Trends (p2) | Prob.* |
|---|---|---|---|---|
| 0.296649 | 4 | 0 | 0 | > 0.2 |

Based on the result in table 4.4, The Lc statistic is 0.2966, which is more than the probability value 0.2. This means a failure to reject the null hypothesis of where series are cointegrated. Thus, cointegration does exist for this model and long run estimates could be done in the next step.

## 4.5 Long-Run Estimation

Table 4.5: Long-run Estimation

Dependent Variable: LSM
Method: Dynamic Least Squares (DOLS)
Date: 12/29/23 Time: 22:21
Sample (adjusted): 1994 2021
Included observations: 28 after adjustments
Cointegrating equation deterministic: C
Fixed leads and lags specification (lead=1, lag=1)
HAC standard errors & covariance (Bartlett kernel, Newey-West fixed bandwidth = 4.0000)

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| LGDP | -1.7258 | 0.0797 | -21.6538 | 0.0000 |
| LFR | 0.0283 | 0.0462 | 0.6122 | 0.5528 |
| LIR | 0.4230 | 0.0608 | 6.9661 | 0.0000 |
| LUR | 0.1413 | 0.1495 | 0.9452 | 0.3649 |
| C | 10.6324 | 0.4856 | 21.8966 | 0.0000 |

| | | | |
|---|---|---|---|
| R-squared | 0.9887 | Mean dependent var | 3.6469 |
| Adjusted R-squared | 0.9722 | S.D. dependent var | 0.1666 |
| S.E. of regression | 0.0278 | Sum squared resid | 0.0085 |

According to table 4.5, two independent variables show significant relationship. GDP is negative significant with probability of 0.0000 at 1 percent level. Thus, null hypothesis is rejected revealing a significant relationship. This relationship shows that a 1 percent of increase in GDP will decrease domestic savings by 1.7258 percent. The same result goes to interest rate at 0.0000 probability indicates it is positive significant at 1 percent level. Thus, null hypothesis is rejected revealing a significant relationship. The increase of a 1 percent of interest rate will increase domestic savings by 0.4230 percent. Meanwhile the other variables; inflation and unemployment show insignificant relationship. Therefore, the null hypotheses are failed to be rejected for these two independent variables. Furthermore, the adjusted R-squared is valued at 0.9722 suggest a strong fit, capturing most of the variation in domestic saving. Hence, 97.22 percent of its independent variables affect domestic saving

while the other 2.78 percent comes from unknown factors. The standard error of the regression (0.027789) is relatively small, indicating that the model's predictions are generally accurate.

Since a long run equilibrium does exist, thus, the model of this study can be rewritten as follows:

$$InSMt = \alpha + \underset{(-21.6538)}{-1.7258}InGDP_t*** + \underset{(0.6122)}{0.0283}InFR_t + \underset{(6.9661)}{0.4230}InIR_t*** + \underset{(0.9452)}{0.1413}InUR_t + \varepsilon_t$$

## CHAPTER 5: CONCLUSION AND RECOMMENDATION

### 5.1 Introduction

For economists, Malaysia's changing domestic savings situation during the last three decades (1992–2022) offers a fascinating but complex riddle. Determining the factors that influence this important variable is not only an academic journey; it has important policy results for advancing sustainable economic growth and financial stability. This study carefully examines the variables influencing Malaysian savings behaviour using an in-depth econometric analysis. The research makes use of a comprehensive set of econometric tools and advanced methodologies to thoroughly examine each aspect of savings data from Malaysia.

### 5.2 Discussion

The research presented in the document focuses on the importance of domestic savings and its impact on the economic health and stability of a nation, with a specific focus on Malaysia. The discussion aims to provide a deeper understanding of the findings and their implications.

The document highlights that domestic savings play a critical role in determining a nation's economic growth and stability. High savings rates are associated with economic growth, as savings contribute to the accumulation of capital within the country. This capital can then be invested in productive activities, leading to sustained economic growth. The research references influential economists such as Solow and Romer to support this relationship between savings and economic growth.

Furthermore, domestic savings are crucial in promoting economic stability. They act as a buffer during periods of economic downturns or financial shocks, allowing households and businesses to better weather these challenges. By building up savings, individuals and businesses can mitigate the impact of unforeseen occurrences, reducing the severity of economic catastrophes. Additionally, high domestic savings rates can lower a nation's dependency on foreign capital, providing governments with greater control over economic policies and minimizing exposure to external financial turbulence.

However, the relationship between domestic savings and the economy is complex and influenced by various factors. The direction and strength of the correlation between savings and economic indicators can vary depending on income distribution, financial development, cultural attitudes towards saving, and demographic trends. These factors must be considered when formulating policies to effectively promote optimal saving rates and maximize their contribution to economic stability and prosperity. To support, Shahbaz et al. (2023) looking at 59 developed and developing countries from 1970 to 2019 finds a no significant relationship between GDP and domestic savings which is similar to the results of this study.

The research also sheds light on the domestic savings patterns in Malaysia. It identifies the challenges faced by many Malaysians, particularly those in rural areas and the informal sector, who lack access to formal financial services. As a result, they resort to non-systematic savings behaviors through informal mechanisms, which often offer limited returns and carry high risks. This highlights the need for improved financial inclusion and the development of formal saving mechanisms to encourage systematic saving practices among all segments of the population.

The document further discusses the trends in Malaysia's gross domestic savings (GDS) and household income. It shows the historical changes in Malaysia's GDS, which experienced fluctuations due to events such as the Asian Financial Crisis, the global financial collapse of 2008, and the COVID-19 pandemic. Despite these challenges, Malaysia has demonstrated resilience and a commitment to recovery, actively seeking improvements in its savings rates.

The analysis of household income reveals a significant shift in income distribution over the years. While the lowest income category has decreased, indicating progress in raising minimum income levels, there has been a widening income inequality, particularly from 2014 onwards. The research emphasizes the importance of addressing income inequality as it poses a major obstacle to Malaysia's economic progress. It also highlights the adverse impact of the COVID-19 pandemic on household income, especially for vulnerable populations.

The discussion concludes by emphasizing the need for strong policies to promote inclusive growth, reduce inequality, and create a more equitable future for all Malaysians. It underscores the importance of sustainable saving practices and the inclusion of all segments of society in the formal financial system. By addressing these challenges and leveraging domestic savings effectively, policymakers can contribute to a stronger and more secure economic future for the nation.

In summary, the research presented in the document underscores the significance of domestic savings in promoting economic growth, stability, and resilience. It highlights the complexities in the relationship between savings and the economy, emphasizing the need for context-specific policies. The findings provide valuable insights into Malaysia's domestic savings patterns and income distribution, highlighting the challenges and opportunities for policymakers to create a more inclusive and prosperous future.

## 5.3 Conclusion

In conclusion, the analysis of domestic savings, in Malaysia provides valuable insights into the country's economic landscape. The study revealed several significant findings regarding the relationship between these variables. First, domestic savings play a crucial role in promoting economic resilience and growth. They serve as a buffer against economic downturns and provide stability to households and businesses. Additionally, higher domestic savings rates reduce dependency on foreign capital, allowing

for greater control over economic policies. However, the study also identified complex relationships between domestic savings and the economy such as inflation rate and unemployment, influenced by factors such as income distribution, financial development, cultural attitudes towards saving, and demographic trends. These factors highlight the importance of understanding the unique conditions of each country when formulating effective policies to promote optimal saving rates. Moreover, the analysis of household income patterns revealed increasing income inequality in Malaysia, with significant disparities between income categories. Finally, the examination of GDP growth over the past three decades showcased the country's resilience in the face of economic crises, with periods of robust growth followed by recovery from downturns. The COVID-19 pandemic had a substantial negative impact on GDP growth in 2020. Overall, this study emphasizes the need for comprehensive policies that promote inclusive growth, reduce inequality, and create a more equitable future for all Malaysians. The most significant and positive relationship between interest rates and domestic savings, while gross domestic product shows a significant with negative relationship with domestic savings. However, for both inflation rate and unemployment shows insignificant results towards the end of the study.

## 5.4 Recommendation

This study identified the economic variables such as gross domestic product, inflation, interest rate and unemployment rate as significantly influence on domestic savings in Malaysia from 1992 to 2022. Notably, most OECD countries encourage people to save for retirement by taxing retirement savings plans as the incentive retirement savings. According to Daly and Wrage (1981) state that by reducing the person’s income tax for the year, the credit offsets the cost of funding a retirement account, ultimately bolstering their long-term savings over time. Also, the findings suggest that policymakers should focus on offering flexible savings options that align with the current economic situation to encourage savings and promote long-term economic growth. Future research could explore behavior in human in greater detail, potentially paving the way for even more effective interventions.

As a result, it is advised that future research focus on the following topics. First, behavior in humans is more complex than it ever was. More psychological factors should be included in future research on the psychology of saving and creating a more intricate connection that can help explain saving behaviour. Secondly, the savers' psychological condition is the exclusive subject of this study. It doesn't make use of the non-savers' psychological condition. Elaborate analyses of the psychological traits and variances between savers and non-savers will aid in the development of more successful savings plans. By fostering a culture of savings Malaysia can ensure a more stable and prosperous future for its citizens.

Based on the relationship between gross domestic product (GDP), interest rates, and domestic savings, the following recommendations can be made to improve the control of these variables and achieve a better economy:

Managing Interest Rates: Interest rates play a crucial role in influencing domestic savings and overall economic growth. To encourage higher savings rates, it is important for policymakers to maintain a favorable interest rate environment. This can be achieved by implementing monetary policies that strike a balance between stimulating economic activity and incentivizing savings. Regular monitoring and adjustments of interest rates should be conducted to ensure they align with the economic conditions and promote savings.

Promoting Investment in Productive Sectors: To boost GDP growth and domestic savings, it is essential to promote investment in productive sectors of the economy. Policymakers should focus on creating an enabling environment for businesses to thrive, such as providing tax incentives for investments, streamlining regulations, and improving infrastructure. By attracting domestic and foreign investments into sectors that have the potential for high productivity and returns, GDP growth can be stimulated, leading to higher domestic savings.

Enhancing Financial Education: Improving financial literacy among the population is crucial for promoting savings and making informed financial decisions. Policymakers should invest in financial education programs that provide individuals with the knowledge and skills to manage their finances effectively. This includes understanding the benefits of saving, the importance of budgeting, and the different investment options available. By empowering individuals with financial knowledge, they are more likely to make sound savings decisions, contributing to higher domestic savings.

Strengthening Data Collection and Monitoring: To effectively monitor and control the variables of GDP, interest rates, and domestic savings, it is important to have robust data collection mechanisms in place. Governments and relevant institutions should ensure the collection of accurate and timely data on GDP growth, interest rates, and savings rates. Regular monitoring and analysis of this data will enable policymakers to make informed decisions and implement appropriate measures to achieve economic stability and higher savings rates.

Encouraging Long-term Savings and Investment: Policymakers should introduce policies and incentives that encourage long-term savings and investment. This can include the establishment of tax-advantaged retirement savings plans, such as pension schemes or individual retirement accounts, that provide individuals with incentives to save for their future. By promoting long-term savings and investment, individuals can build a financial cushion, contribute to domestic savings, and support overall economic growth.

Recommendations for Future Study:

Impact of Interest Rate Changes on Savings Behavior: Future studies can analyze the impact of interest rate changes on individuals' savings behavior. This can help policymakers understand how

changes in interest rates influence savings decisions and design more effective policies to promote savings in different interest rate environments.

Comparative Analysis of Savings Rates: Comparative studies can be conducted to analyze the savings rates of different countries with varying interest rate policies. This can provide insights into the effectiveness of different approaches and help identify best practices that can be implemented to improve savings rates in Malaysia.

Role of Financial Institutions: Further research can explore the role of financial institutions in promoting domestic savings. This can involve studying the impact of financial products and services offered by banks and other financial institutions on individuals' savings behavior. Understanding the effectiveness of these offerings can inform the development of tailored savings products and services.

Long-term Impact of Domestic Savings on GDP Growth: Future studies can investigate the long-term relationship between domestic savings and GDP growth. This can involve analyzing historical data to identify patterns and trends and examining the causal relationship between savings and economic growth over extended periods.

By conducting these future studies, policymakers and researchers can gain a deeper understanding of the interplay between GDP, interest rates, and domestic savings. This knowledge can inform the design and implementation of policies and interventions aimed at achieving a better economy with higher savings rates and sustainable GDP growth.

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## APPENDICES

*Figure 1: Attend ESG Program by Sustainability Department*

*Figure 2: Attend Seminar on ESG Introduction to AIA Berhad*

*Figure 3: Quarterly Update on Risk Management by Risk Committees*


*Figure 4: Entrance door to the office*


*Figure 5: Marketing Standee Banner*

*Figure 6: Awards and Medal received.*


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