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Analysis of the Impact of Indirect Taxation on Foreign Direct Investment Inflows in Malaysia: Implications for Sustainable Economic Growth

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Abstract

Despite Malaysia's reputation as one of the most attractive destinations for FDI in Asia, the nation has experienced a downward trend in FDI flows since reaching a peak in 2011. A well-structured taxation system is a key strategy for attracting FDI, and Malaysia has recently undergone significant reforms in its indirect tax policies. This study examines the effectiveness of these tax changes in influencing foreign investment decisions by focusing on five key indirect tax. Utilizing annual tax revenue data from the Royal Malaysian Customs Department for the period 1999–2023, this study applies the Autoregressive Distributed Lag model to estimate the impact of various indirect taxes on FDI inflows. The findings reveal that import duty and consumption tax negatively affect FDI inflows, while export duty, excise duty, and vehicle levy have a positive impact on FDI inflows into Malaysia. These results underscore the importance of tax policy design in shaping FDI trends. To enhance Malaysia's investment attractiveness, policymakers should consider reducing import duties and consumption tax, while maintaining or optimizing revenue-generating taxes such as export duties, excise duties, and vehicle levies. This study provides valuable insights for tax authorities and policymakers in formulating effective fiscal strategies to sustain Malaysia's competitiveness as a preferred FDI destination.

Keywords: Investment, FDI Inflow, Taxation, Indirect Tax, RMCD, Sustainable Growth

JEL: C32, F21, F41

Introduction

Foreign Direct Investment (FDI) refers to cross-border investments made by individuals, businesses, or entities to establish ownership or control over assets in a foreign country. These investments typically involve establishing or acquiring companies, subsidiaries, or branches, reflecting a long-term commitment with the intention of maintaining significant influence in the foreign market. FDI can take various forms, including equity investments, reinvested earnings, and intercompany loans. It is widely recognized as a key driver of economic growth, particularly in developing economies, as it brings foreign capital, managerial expertise, technology transfer,

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and employment opportunities (Mohd Ghazi et al., 2017; Mohanasundaram & Karthikeyan, 2015; Cambazoglu & Karaalp, 2014; Raluca & Alecsandru, 2012). Moreover, FDI contributes to poverty alleviation and enhances trade competitiveness by improving domestic economic structures and fostering innovation (Beloucif et al., 2020).

The trends in FDI inflows into Malaysia from 1999 to 2023 reveal notable fluctuations. As shown in Figure 1, Malaysia experienced robust FDI inflows prior to the 1997 Asian financial crisis. However, from 1999 onward, inflows were relatively subdued, reflecting a sluggish recovery in the post-crisis period. In the mid-2000s, a gradual upward trend in FDI inflows emerged, peaking in 2011. Following this peak, Malaysia faced several episodes of decline, with notable drops in 2016 and 2021. The data from 2020 to 2023 reveals a mixed trend, with a sharp decline during the COVID-19 pandemic and subsequent modest recovery.

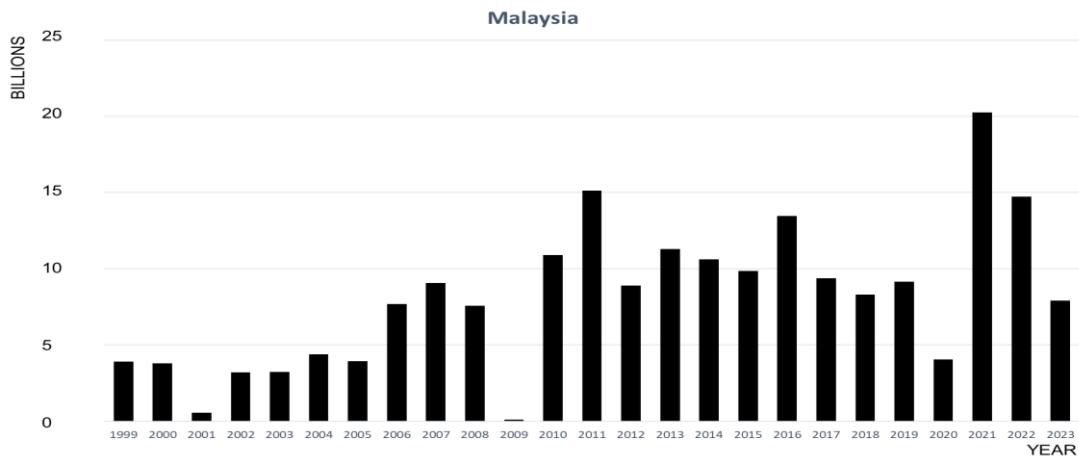


Figure 1: FDI Inflows Trends in Malaysia (In Billion RM).

Source: World Bank (2025).

Despite these fluctuations, Malaysia continues to rank highly in the FDI Attractiveness Index, standing third in Asia after China and Thailand, based on key determinants such as labor costs, transportation infrastructure, domestic manufacturing capacity, investment climate, and the regulatory environment (Cochrane, 2019). While Malaysia's position in the FDI Attractiveness Index remains favorable, it lags behind regional peers such as Singapore, Indonesia, Vietnam, and Thailand in actual FDI inflows, signaling a gap between perceived attractiveness and realized investment performance (Yiyun Jiang, Xiufeng Wang, Toong Hai Sam, 2024).

One possible policy adjustment to enhance FDI inflows is modifying the tax system to be more favorable to multinational corporations (MNCs). Theoretically, countries with more competitive taxation frameworks tend to attract higher FDI inflows (Moray et al., 2019). However, tax policy changes can have both positive and negative effects on FDI. Increasing tax rates typically deters foreign investors by escalating business costs, potentially reducing investment inflows, as profitability is a critical determinant in FDI decisions. Conversely, lowering tax rates may encourage FDI by reducing operational expenses and enhancing profit margins for investors. Empirical studies suggest that a 1% increase in tax rates may result in a 0.5% decrease in FDI inflows (De Mooij & Ederveen, 2003).

In Malaysia, a significant taxation reform occurred in 2015, when the Sales and Services Tax (SST) introduced in 1972 was replaced by the Goods and Services Tax (GST). The adoption of GST aligned Malaysia with over 160 countries implementing Value-Added Tax (VAT) due to its neutral and efficient taxation system, which aimed to enhance government revenue while addressing inefficiencies in the previous sales tax regime. However, due to political transitions, GST was repealed in 2018, and SST was reintroduced. These abrupt policy changes raise concerns regarding their impact on Malaysia's attractiveness for FDI. The question arises: Did the restructuring of indirect tax policies—particularly the transition between GST and SST—contribute to Malaysia's declining FDI trends?

Although previous studies, such as those by Moray et al. (2019), have examined indirect taxation in specific industries, such as the automobile sector, indirect tax mechanisms function differently under various legislative frameworks, tax acts, and economic conditions. Each type of indirect tax—import duty, export duty, consumption tax, excise tax, and vehicle levy—operates under distinct regulatory provisions, affecting investment decisions in different ways. Given the lack of comprehensive research in this area, this study aims to examine the impact of multiple forms of indirect taxation on FDI inflows into Malaysia. Therefore, the main objective of this paper is to investigate the effect of indirect tax policies on FDI inflows into Malaysia. Understanding how different forms of indirect taxation influence foreign investors' decisions is crucial for designing fiscal policies that balance revenue generation and investment attractiveness.

This research is structured as follows: Section 2 goes over some facts about taxes in Malaysia. Section three offers a review of relevant theories, definitions and the scope of the taxes and indirect taxes, along with a synthesis of empirical studies examining the relationship between the taxes and FDI. The fourth section discusses the methodology used in this study. The methodology employed and the empirical results obtained are detailed in the subsequent two sections. The paper concludes with the final section, which summarizes the findings and discusses policy recommendations.

Background of Study

Taxation, encompassing both direct and indirect taxes, has long been a fundamental pillar of government revenue, originating from the feudal system (Salanie, 2003). The main goal of taxation is to raise revenue to finance government spending in an administratively efficient way, while also promoting equity and effectiveness (Burgess & Stern, 1993). In Malaysia, both direct and indirect taxes collectively contribute over 65% of government revenue, as illustrated in Figure 2. Beyond revenue generation, taxation serves multiple purposes, including influencing economic behaviors, addressing market inefficiencies, and shaping income and wealth distribution (Bird & Zolt, 2005). A well-structured tax system ensures the equitable allocation of the financial burden of government expenditures. Moreover, direct, and indirect taxes provide a stable and broad-based revenue stream that underpins public services, infrastructure development, and social welfare programs. The effectiveness and sustainability of a country's fiscal system depend on a balanced combination of these tax mechanisms.

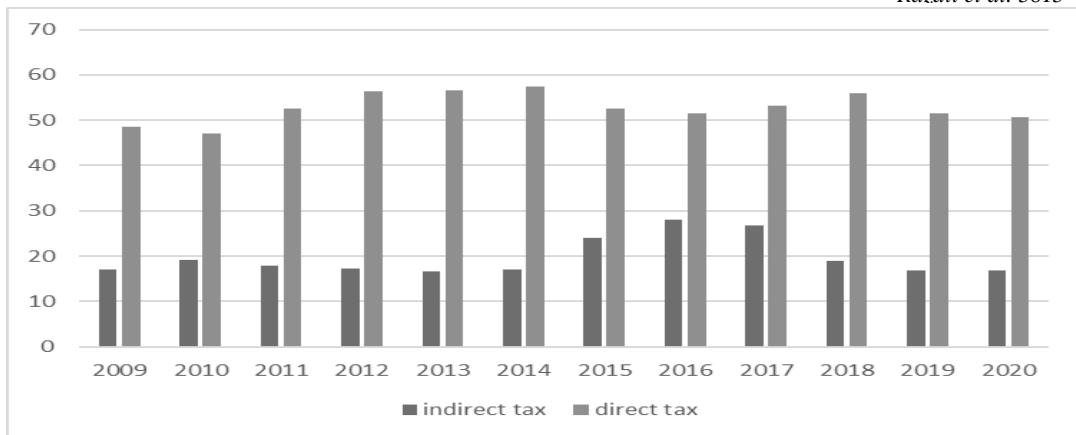


Figure 2: Revenue From Direct Taxes and Indirect Taxes in Malaysia (In Billion RM).

Source: Ministry of Finance Malaysia (2009 - 2020).

Direct tax refers to taxes paid directly by individuals and businesses to the government, such as corporate tax, income tax, personal property tax, and real property tax. Conversely, indirect tax is collected through intermediaries, such as retailers, importers, and traders, who transfer the tax burden to consumers. In Malaysia, direct taxes are collected by the Inland Revenue Board of Malaysia (IRBM), whereas indirect taxes fall under the jurisdiction of the Royal Malaysia Customs Department (RMCD). The structure of indirect taxation in Malaysia is further detailed in Figure 3.

Historically, RMCD's role in taxation dates to the 15th century, when Melaka emerged as an international trade hub. At that time, customs authorities—known as "syahbandar"—were responsible for overseeing market operations, ensuring the welfare and security of traders, managing taxes, and enforcing maritime regulations. Over the centuries, customs administration evolved significantly. In 1819, the Straits Settlements Customs was established, expanding its jurisdiction as Malaysia's territories developed. After Malaysia's independence in 1957, the Customs and Excise Department was formed, and in 1988, it was officially renamed the Royal Malaysia Customs Department (RMCD). Today, RMCD plays a pivotal role in revenue collection, trade facilitation, and customs law enforcement, ensuring effective tax administration that supports national economic development.

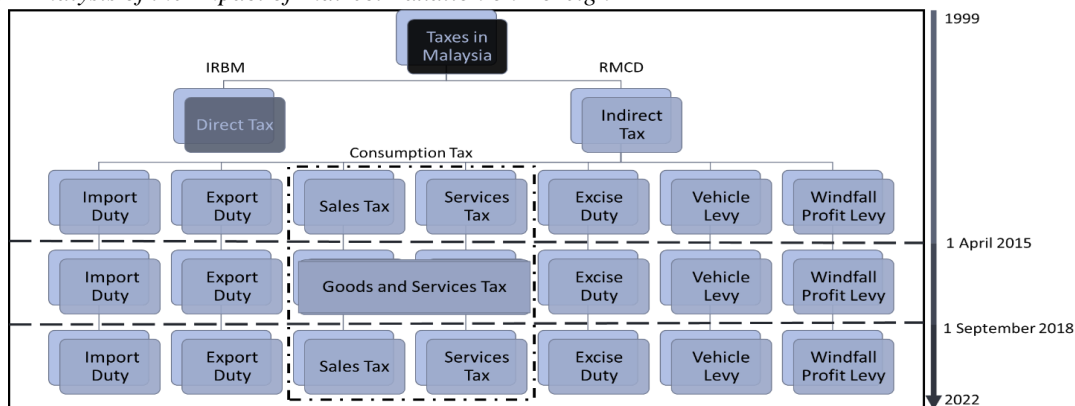


Figure 2: Indirect Tax Structure in Malaysia from the Year 1999 Until 2022

Source: Authors' Illustration

In Malaysia, indirect taxes include a variety of levies such as import and export duties, consumption taxes, excise taxes, vehicle fees, and windfall profit taxes. Each of these taxes serves a unique purpose within the country's fiscal framework. Import duties are charges placed on goods entering the country, typically designed to safeguard local industries, generate government revenue, or manage trade flows. This duty is often calculated as a percentage of the goods' value. Export duties, in contrast, are applied to goods being exported, generally to regulate the outflow of critical resources or to ensure sufficient domestic supply. The rates and rules for both import and export duties can differ from one nation to another and are determined by the nature of the goods involved.

A consumption tax is a tax imposed on the buying of goods and services, affecting either individuals or businesses. Unlike taxes on income or wealth, this tax focuses on the spending behavior of consumers. There are various types of consumption taxes, including sales tax, value-added tax (VAT), or goods and services tax (GST). These taxes are generally added to the cost of goods or services at the time of purchase, with the final consumer bearing the expense. Governments use consumption taxes as a means to raise funds and maintain economic stability.

Excise duty is a tax that governments place on certain goods, whether they are made locally or brought in from other countries. It's typically applied to items like alcohol, tobacco, fuel, and luxury goods. The main reasons for excise duties are to help raise funds for the government and to discourage the use of products that could harm society or the environment. Usually, this tax is either a set fee per item or a percentage of the product's value. Governments can adjust these duties for different purposes, like improving public health, boosting local production, or supporting specific industries.

Meanwhile a vehicle levy refers to a tax or fee imposed by the government on the ownership, registration, or operation of motor vehicles. It is a financial obligation that vehicle owners must fulfill to comply with regulatory requirements. The purpose of a vehicle levy can vary, but it is often used to fund transportation infrastructure, promote environmental sustainability, or regulate vehicle usage. The specific regulations and rates of a vehicle levy depend on the jurisdiction and the type of vehicle being taxed.

Over the past 25 years, indirect tax collection has exhibited significant variations (Figure 3).

Notably, import and export duties, governed by the Customs Act 1967, have demonstrated fluctuating trends due to shifts in global trade policies and economic conditions. Consumption tax revenue, particularly under the Goods and Services Tax (GST), saw a substantial increase between 2015 and 2017 before plummeting in 2018 when GST was repealed and replaced by Sales and Services Tax (SST). Despite this transition, SST revenue has shown a steady upward trend since 2018. Similarly, excise duties, regulated under the Excise Act 1976, have gradually increased over the last two decades, reflecting adjustments in tax policies on alcohol, tobacco, and luxury goods. The vehicle levy, governed by the Goods Vehicle Levy Act 1983, displayed consistent trends from 1998 to 2020, followed by a sharp increase from 2021 to 2023, potentially due to changes in transportation policies and vehicle ownership patterns.

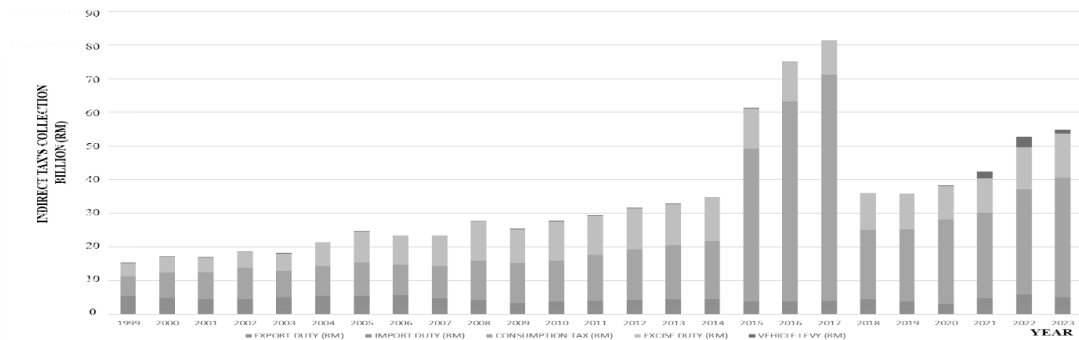


Figure 4: Indirect Tax's Collection from the Year 1999 Until 2023

Source: Customs Annual Report (various years, 1999-2023)

Literature Review

Some Basic Theories

This study looks at how Foreign Direct Investment (FDI) relates to indirect taxes, using three important economic theories: the Product Life Cycle (PLC) Theory, the Eclectic Paradigm (OLI Framework), and the Heckscher-Ohlin (H-O) Theory. These theories help us understand how different tax policies, especially indirect taxes, affect trade patterns, investment decisions, and the overall competitiveness of Malaysia's economy.

The Product Life Cycle (PLC) Theory, developed by Vernon in 1966, illustrates how global trade and investment evolve as products pass through different stages of their life cycle. Vernon explains that a new product typically starts in an advanced country where innovation and consumer demand help drive its initial development. Over time, as the product becomes more standardized, companies move production to countries with lower costs to stay competitive, which shifts trade and investment patterns. The theory outlines four key stages: Innovation (or Introduction), Growth, Maturity, and Decline. In the early phase, the product is introduced in a developed country, where research and development and strong purchasing power support its creation. As the product gains popularity, production increases, and exports grow during the growth phase. When the product reaches maturity, the cost of production is reduced through standardization, encouraging firms to move manufacturing to less expensive countries. Finally, as the product enters the decline phase, production moves largely to developing economies, and the original country transitions from being an exporter to an importer.

This theory is particularly relevant to FDI, as multinational corporations (MNCs) relocate

production to host countries based on cost efficiencies. However, the relocation of production is subject to taxation policies, including indirect taxes such as import duties, excise duties, and value-added tax (VAT/GST), which affect the overall cost structure. Governments often use tax incentives or exemptions to attract FDI and retain competitive advantages in global supply chains.

The Eclectic Paradigm, also known as the OLI framework, was introduced by Dunning in 1980 and 1993 as a comprehensive model to assess the factors influencing Foreign Direct Investment (FDI). The model is based on three key elements: Ownership (O) advantages, Location (L) advantages, and Internalization (I) advantages. Ownership advantages refer to the unique competitive strengths of the investing company, such as its technological capabilities, brand reputation, and intellectual property. Location advantages are specific to the country and include factors like infrastructure, labor costs, political stability, and tax regulations that make a country attractive for FDI. Internalization advantages, on the other hand, emphasize the company's preference to establish subsidiaries rather than relying on licensing agreements or joint ventures.

Among the various components, the Location (L) factor plays a crucial role in shaping indirect tax policies, as these policies directly impact the cost of conducting business in a host country. Previous studies have shown how taxation affects Foreign Direct Investment (FDI), particularly through corporate taxes, personal income taxes, and indirect taxes (Friedman et al., 1996; Chung & Alcacer, 2002; Bobonis & Shatz, 2007; Anderson & Sutherland, 2015; Cheng et al., 2017; Gao et al., 2018; Batschauer da Cruz et al., 2020). Research by Hajkova et al. (2007) and Eden & Dai (2010) suggests that taxation affects all three components of the OLI framework. However, for the purposes of this study, indirect taxes are primarily examined under the Location (L) factor, as they have a direct impact on operational costs, trade efficiency, and investment choices. Unlike direct taxes, which are mainly imposed on corporate profits, indirect taxes are applied to goods and services at various stages in the supply chain. In Malaysia, the Royal Malaysia Customs Department (RMCD) oversees indirect taxation, while direct taxes are managed by the Inland Revenue Board of Malaysia (IRBM).

The third theory that forms the basis of this study is the Heckscher-Ohlin (H-O) Model, proposed by Eli Heckscher and Bertil Ohlin. This model builds upon the theory of comparative advantage by emphasizing factor endowments as a key determinant of trade and investment patterns. According to the H-O Model, countries tend to export goods that make use of their abundant resources and import goods that require factors of production that are in short supply.

This theory is particularly relevant to Foreign Direct Investment (FDI) and taxation, as countries rich in capital, such as the United States, Japan, and Germany, often invest in labor-intensive nations like Malaysia, where lower labor costs and abundant resources offer advantages. However, the tax system plays an important role in influencing investment decisions. Labor-intensive countries like Malaysia typically rely more on indirect taxes, such as the Goods and Services Tax (GST), Sales and Service Tax (SST), and excise duties, to fund government operations. The H-O Model suggests that the structure of indirect taxation can either attract or deter FDI, depending on how it affects production costs and the competitiveness of trade.

Domestic Market and FDI

Market size is one of the most significant factors influencing FDI decisions. Multinational enterprises (MNEs) prioritize countries with large domestic markets as they offer greater opportunities for revenue generation. Even a small share of a large market can yield substantial

profits, making domestic market size a key determinant of investment attractiveness (Masron & Abdullah, 2010; Masron & Yusop, 2012; Masron, 2017).

A widely used proxy for market size is Gross Domestic Product (GDP), which reflects domestic purchasing power and economic activity. A high GDP indicates higher consumer demand, making the market more appealing to foreign investors. Empirical studies have demonstrated a positive correlation between GDP and FDI, as higher national income levels typically translate into greater consumption and business expansion opportunities (Angresano et al., 2002; Fedderke & Romm, 2006; Moosa & Cardak, 2006; Choong & Lam, 2010; Aw & Tang, 2010). Beyond consumer purchasing power, GDP also represents broader economic conditions that influence FDI decisions. A growing economy signals market stability and long-term profitability, encouraging MNEs to establish operations in the host country. Countries with sustained economic growth often attract higher FDI inflows, as firms seek to leverage expansion opportunities in dynamic markets (Boateng et al., 2011; Ho & Booth, 2017; Awad, 2020).

Trade and FDI

Trade is the exchange of goods and services between individuals, businesses, and nations. It can be categorized into domestic trade, which occurs within a country, and international trade, which involves cross-border transactions. International trade takes three primary forms: imports, exports, and *entrepôt* trade (Whiteaker, 2020). Imports refer to goods and services brought into a country, while exports involve selling domestically produced goods and services abroad. *Entrepôt* trade, on the other hand, refers to goods temporarily imported into a country before being re-exported to another destination.

The relationship between trade and FDI has been widely discussed in economic literature, particularly regarding whether trade and FDI act as substitutes or complements in driving economic growth. Over the past 25 years, trade has played a crucial role in economic development, poverty reduction, and technological advancement, leading to a more competitive global market (Asiedu, 2002; Ghosh, 2007). Trade promotes market efficiency, increases competition, and enhances productivity, which, in turn, influences FDI inflows by creating a more attractive investment environment.

Empirical studies have demonstrated that trade has a significant impact on FDI flows. The openness of an economy to trade encourages foreign investment by improving market access, reducing production costs, and fostering knowledge spillovers (Bénassy-Quéré et al., 1999; Bende-Nabende, 2002; Onyeiwu & Shrestha, 2004; Nonnemberg & Mendonca, 2004; Razafimahefa & Hamori, 2005). Countries with liberal trade policies, fewer restrictions on imports and exports, and strong trade agreements tend to attract higher levels of FDI, as businesses seek to integrate into global value chains and exploit economies of scale.

However, the impact of trade on FDI varies across regions and economies. Addison & Heshmati (2003) found that trade positively influences FDI, but the extent of this impact differs across regions. Their study revealed that sub-Saharan African economies experience the weakest trade effects on FDI, whereas Latin American countries exhibit the strongest trade-driven FDI growth. Similarly, Bende-Nabende (2002) argued that trade affects FDI patterns differently across nations, as factors such as market size, regulatory framework, and trade barriers influence investment decisions.

Taxation vs FDI

Taxation plays a crucial role in economic development, serving as a primary tool for governments to generate revenue and support long-term growth. Tax policy reforms are often introduced to enhance investment attractiveness by adapting to changing economic, social, and political conditions (Owens, 2006). In Malaysia, indirect tax policies have undergone significant changes in recent years, including the introduction of the Tourism Tax Act 2017, the transition from Sales and Services Tax (SST) to Goods and Services Tax (GST) in 2014, and the reinstatement of SST in 2018. More recently, an excise duty on nicotine-based liquid and gel products used in e-cigarettes was announced, reflecting the government's evolving tax strategy (Ibrahim, 2023). These frequent modifications impact not only domestic businesses but also foreign investors, particularly those dealing with indirect tax authorities such as the Royal Malaysia Customs Department (RMCD).

Numerous studies have explored the relationship between taxation and FDI, with most research focusing on corporate income tax rather than indirect taxes (Gorter & Parikh, 2003; Çak & Karakaş, 2009; Jones & Temouri, 2016; Merz et al., 2017; Nasution, 2020; Nguyen et al., 2020). Despite extensive research on direct taxation, studies examining the effects of indirect taxation on FDI remain limited. Many studies have failed to distinguish between different forms of indirect taxes, such as sales tax, value-added tax (VAT), excise duty, and customs duties, instead categorizing them collectively as non-income taxes (Desai et al., 2002). Some research focuses exclusively on consumption taxes (Beck & Chaves, 2011), while others analyse industry-specific indirect tax impacts, such as in the automobile sector (Moray et al., 2019). Given the lack of comprehensive research on indirect taxes under customs administration, there is a need to individually assess the effects of import duty, export duty, consumption tax, excise duty, and vehicle levy on FDI inflows in Malaysia (Yi et al., 2019).

Findings on indirect tax-FDI relationships vary widely. Import duties have shown a positive relationship with FDI (Khan & Nawaz, 2010), whereas customs duties, which encompass import and export duties, exhibit a negative correlation with FDI in Australia (Koojaroenprasit, 2013). While some studies suggest a negative impact of customs duties and excise taxes on FDI (Akinwunmi et al., 2017), others report no significant relationship (Eiya & Okaiwele, 2019). The impact of consumption taxes (GST/VAT) on FDI also remains inconclusive, with studies reporting negative (Nistor & Paun, 2013; Shukla & Shukla, 2019), positive (Akinwunmi et al., 2017; Eiya & Okaiwele, 2019), and insignificant (Beck & Chaves, 2011) effects. Meanwhile, limited research exists on vehicle levy and excise duty in the context of FDI, highlighting a gap that this study aims to address.

Existing literature has largely focused on direct taxation, leaving a research gap in the study of indirect taxes and their role in FDI attraction. This study aims to analyze the individual effects of import duty, export duty, consumption tax, excise duty, and vehicle levy on FDI inflows in Malaysia, contributing to a broader understanding of taxation policies and investment competitiveness.

Methodology

Based on the literature review, the following empirical model is specified to examine the impact of indirect taxation, trade, and GDP on FDI inflows in Malaysia:

$$FDI_t = \beta_0 + \beta_1 GDP_t + \beta_2 TRD_t + \beta_3 INDT_t + \mu_i \quad (1)$$

where *FDI* is foreign direct investment inflows, *GDP* is a gross domestic product, *TRD* is total trade, *INDT* is an indirect tax, and *t* is time. *FDI* is represented by inward FDI (as % of GDP), *GDP* is proxied by real GDP, *TRD* is measured by total trade (as % of GDP) and *INDT* is represented by a composite index of indirect tax, as well as each of the components of the composite index. Each independent variable is chosen based on its theoretical relevance in influencing FDI. GDP serves as a proxy for market size and economic growth, total trade captures trade openness and integration into global markets, while indirect taxation is analyzed both as a composite index and through its individual components: import duty, export duty, consumption tax, excise duty, and vehicle levy.

The use of time series data in econometric modelling often raises concerns about spurious regression, particularly when variables exhibit unit root properties. To address this issue, the first step in the empirical analysis is to examine the stationarity of each variable using the Augmented Dickey-Fuller (ADF) test and the Phillips-Perron (PP) test. If a unit root is detected, the Johansen cointegration test is conducted using the trace statistic and maximum eigenvalue test to determine whether a long-run equilibrium relationship exists among the variables.

To select the optimal lag length, the Schwarz Information Criterion (SIC) is applied, ensuring efficiency in estimation, particularly given the relatively short time series sample (1999-2023). If a cointegrating relationship is established, the study proceeds with the error correction model (ECM) version of the Autoregressive Distributed Lag (ARDL) model, specified as follows:

$$\begin{aligned} \Delta \ln FDI_t = & \alpha_0 + \alpha_1 ECT_{t-1} + \sum_{i=1}^p \alpha_{2i} \Delta \ln FDI_{t-i} + \sum_{i=0}^q \alpha_{3i} \Delta \ln GDP_{t-i} \\ & + \sum_{i=0}^r \alpha_{4i} \ln TRD_{t-i} + \sum_{i=0}^s \alpha_{5i} \Delta \ln INDT_{t-i} + \varepsilon_t \end{aligned} \quad (2)$$

where ECT represents the error correction term, which captures the speed of adjustment toward the long-run equilibrium.

The study utilizes annual data from 1999 to 2023, sourced from UNCTAD (2025), World Bank (2025), and Royal Malaysia Customs Department (RMCD) reports (1999-2023). The summary of variable measurement and data sources is provided in Table 1.

	Symbol	Measurement	Source Of Data
FDI Inflows	<i>FDI</i>	The FDI inflows into Malaysia (as % of GDP)	UNCTAD (2025)
GDP	<i>GDP</i>	Real GDP (constant price for the Local Currency Unit) in Ringgit Malaysia	World Bank (2025)
Trade	<i>TRD</i>	Total trade (% of GDP)	
Indirect Taxes:	<i>INDT</i>	A composite index of 5 indirect taxes	RMC D annual report (1999 – 2023)
Export Duty	<i>DEXP</i>	The total amount of export duty collected in Ringgit Malaysia	
Import Duty	<i>DIMP</i>	The total amount of import duty collected in Ringgit Malaysia	
Consumption Tax	<i>CONT</i>	The total amount of sales and services tax and goods and services tax collected both import and local in Ringgit Malaysia	
Excise Duty	<i>DEKS</i>	The total amount of excise duty collected both import and local in Ringgit Malaysia	
Vehicle Levy	<i>LVEH</i>	The total amount of vehicle levy collected in Ringgit Malaysia	

Table 1: Measurement and Data Source

The model's validity is further investigated through several diagnostic tests, including autocorrelation, heterogeneity, and stability tests. Once the model passes all diagnostic tests, the estimated long-run and short-run relationships will be interpreted to assess the impact of indirect taxation, GDP, and trade on FDI inflows in Malaysia.

Results

The descriptive analysis for each variable is presented in Table 2. The results indicate that FDI inflows into Malaysia have increased significantly since 1999. However, the low standard deviation suggests fluctuations in FDI inflows, which may indicate economic volatility and variations in investment attractiveness over time.

	<i>FDI</i>	<i>GDP</i>	<i>TRD</i>	<i>Indirect Tax</i>				
				<i>DEXP</i>	<i>DIMP</i>	<i>CONT</i>	<i>DEKS</i>	<i>LVEH</i>
Mean	6.891	8.900	17.235	1.677	3.032	21.055	9.987	0.400
Maximum	12.198	13.600	22.041	3.185	4.712	67.076	13.120	3.118
Minimum	5.544	5.320	12.690	0.672	1.966	5.972	3.811	0.019
Std. Dev.	3.682	2.540	3.291	0.659	0.692	16.244	2.949	0.718

Table 2: Descriptive Analysis

Note: FDI is Foreign Direct Investment in billion USD, GDP is Gross Domestic Product in billion USD, TRD is trade (% of GDP) in billion USD, DEXP is export duty, DIMP is import duty, CONT is consumption tax, DEKS is excise duty and LVEH is vehicle levy in billion Ringgit Malaysia.

Table 3 presents the correlation matrix among the key variables. The results show FDI is strongly and positively correlated with DEKS (Excise Duty), GDP, and LVEH (Vehicle Levy). A strong negative correlation is observed between FDI and TRD (Total Trade) as well as DIMP (Import Duty), suggesting that higher trade activities and import duties may reduce FDI inflows. FDI exhibits a moderate correlation with DEXP (Export Duty) and CONT (Consumption Tax).

	FDI	GDP	TRD	Indirect Tax				
				DEXP	DIMP	CONT	DEKS	LVEH
FDI	1.000							
GDP	0.761	1.000						
TRD	-0.752	-0.954	1.000					
DEXP	0.414	0.191	-0.084	1.000				
DIMP	-0.623	-0.592	0.662	-0.571	1.000			
CONT	0.500	0.743	-0.693	-0.224	-0.214	1.000		
DEKS	0.812	0.814	-0.844	0.501	-0.862	0.411	1.000	
LVEH	0.624	0.461	-0.431	0.372	-0.433	0.323	0.612	1.000

Table 3: Correlation Analysis

Note: FDI is Foreign Direct Investment in billion USD, GDP is Gross Domestic Product in billion USD, TRD is trade (% of GDP) in billion USD, DEXP is export duty, DIMP is import duty, CONT is consumption tax, DEKS is excise duty and LVEH is vehicle levy in billion Ringgit Malaysia.

To ensure data stationarity, the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests were conducted (see Table 4). The findings indicate that all variables are stationary at first difference (I(1)), except for DIMP, CONT, and DEKS, which exhibit stationarity at level I(0).

	Augmented Dickey-Fuller (ADF) Test				Phillips-Perron (PP) Test			
	Level		First Difference		Level		First Difference	
	C	C & T	C	C & T	C	C & T	C	C & T
FDI	-1.909	-3.228	-5.214***	-5.163***	-1.806	-3.091	-8.784***	-9.326***
GDP	2.675	-0.456	-3.413**	-5.553***	7.463***	0.198	-3.415**	-5.812***
TRD	-0.634	-3.021	-4.072***	-4.000**	-0.636	-1.984	-4.080***	-4.010**
INDT	-1.593	-2.226	-3.200**	-3.857**	-1.652	-2.376	-2.983*	-2.992**
DEXP	-2.497	-2.401	-3.308**	-3.453*	-2.265	-2.100	-3.296**	-3.349*
DIMP	-1.262	-1.013	-3.322**	-3.922**	-2.559	-1.504	-3.305**	-3.872*
CONT	1.896	-5.978***	-5.901***	-5.865***	-1.744	-2.415	-3.836*	-3.866*

DEKS	-1.735	0.224	-5.520***	-3.945*	-1.811	-1.216	-5.498***	-6.568***
LVEH	-2.293	-2.727	-4.038***	-3.895**	-2.268	-2.567	-4.462***	-4.536***

Table 4: ADF Unit Root Test

Note: FDI is Foreign Direct Investment in billion USD, GDP is Gross Domestic Product in billion USD, TRD is trade (% of GDP) in billion USD, DEXP is export duty, DIMP is import duty, CONT is consumption tax, DEKS is excise duty and LVEH is vehicle levy in billion Ringgit Malaysia, INDT is indirect tax derived from the mean of DEXP + DIMP + CONT + DEKS + LVEH. C is constant without trends, C & T is constant with trends. Asterisks *, ** and *** denote significance at 10%, 5% and 1% critical value, respectively.

Given the mixture of $I(0)$ and $I(1)$ variables, the ARDL approach is appropriate for testing long-run relationships between variables (Duasa, 2007; Adom et al., 2012). Table 5 shows the results of the ARDL Bound Cointegration Test, which confirms a long-run relationship among the variables, as the F-statistic exceeds the upper bound critical value at a 1% level in all five models.

	F-statistic	Critical Value	Statistic
Model 1: $TAX = INDT$	9.779***	1%	4.66
Model 2a: $TAX = DEXP$	9.812***	5%	3.67
Model 2b: $TAX = DIMP$	9.477***	10%	3.20
Model 2c: $TAX = CONT$	9.486***		
Model 2d: $TAX = DEKS$	10.061***		
Model 2e: $TAX = LVEH$	7.170***		

Table 5: Bound Cointegration Test

Note: Model 1 proxied by the mean of export duty, import duty, consumption tax, excise duty and vehicle levy, Model 2a proxied by export duty and Model 2b proxied by import duty, Model 2c proxied by consumption tax, Model 2d proxied by excise duty, Model 2e proxied by vehicle levy. Asterisk *** denotes significant at 1% critical value. The critical values are taken from Pesaran et al. (2001).

To verify the long-run relationship, an Error Correction Model (ECM) was estimated. The error correction term (ECT) is negative and significant for all models except Model 1, confirming that variables adjust to long-run equilibrium. The speed of adjustment ranges between 75.5% and 94.9% per year, indicating a rapid convergence to equilibrium following short-term deviations.

Panel I: Error Correction Models

$$\text{Model 1: } \Delta FDI_t = -1.051ECT_{t-1} + 1.10\Delta GDP_t^{***} + 5.28\Delta INDT_t^*$$

$$\text{Model 2a: } \Delta FDI_t = -0.806ECT_{t-1}^{***} + 9.11\Delta GDP_t^{***}$$

$$\text{Model 2b: } \Delta FDI_t = -0.755ECT_{t-1}^{***} + 1.12\Delta GDP_t^{***}$$

$$\text{Model 2c: } \Delta FDI_t = -0.949ECT_{t-1}^{***} + 1.11\Delta GDP_t^{***} - 3.13\Delta VAT_t^*$$

$$\text{Model 2d: } \Delta FDI_t = -0.899ECT_{t-1}^{***} + 1.13\Delta GDP_t^{***} + 1.72\Delta DEKS_t$$

$$\text{Model 2e: } \Delta FDI_t = -0.916ECT_{t-1}^{**} + 1.03\Delta GDP_t^{***} + 2.52\Delta LVEH_t^*$$

	Panel II: Model Criteria					
	Model 1	Model 2a	Model 2b	Model 2c	Model 2d	Model 2e
Adj-R ²	0.912	0.791	0.782	0.811	0.814	0.744
Std. Dev.	904.58	1377.18	1396.16	1340.80	1318.61	1536.83
Autocorrelation	0.151	0.124	0.168	0.126	0.114	0.558
Heteroscedasticity	0.521	0.550	0.448	0.727	0.320	0.917
Normality	0.451	0.709	0.429	0.183	0.367	0.354
Stability	0.124	0.383	0.318	0.394	0.734	0.116

Table 6: ECM

Note: FDI is Foreign Direct Investment in billion USD, GDP is Gross Domestic Product TRD is trade (% of GDP). Model 1 proxied by the mean of export duty, import duty, consumption tax, excise duty and vehicle levy, Model 2a proxied by export duty and Model 2b proxied by import duty, Model 2c proxied by consumption tax, Model 2d proxied by excise duty, Model 2e proxied by vehicle levy. Asterisk *** denotes significant at 1% critical value. Δ indicates the first difference. Autocorrelation is using the LM test (i.e., $LM = nR^2 \sim \chi_k^2$ where k is the degree of freedom), H_0 : “no autocorrelation”), Heteroscedasticity is using the Breusch-Pagan-Godfrey test (i.e., $BPG = \frac{1}{2}(\text{explained sum of squares}) \sim \chi_{k-1}^2$, H_0 : “homoscedastic”), Normality is using the Jarque-Bera test (i.e., $JB = \frac{n}{6} \left(S^2 + \frac{1}{4}(K - 3)^2 \right) \sim \chi_2^2$, where S is skewness, and K is kurtosis, H_0 : “normal distribution”), and stability is based on the Ramsey Reset test (i.e., given the auxiliary equation of $y_i = x_i\delta + \sum_{j=2}^J \gamma_j \hat{y}_i^j + \eta_i$, F-statistic on $H_0 = \gamma_j$ or “no misspecification”). They are represented by the p-value.

The long-run equation estimates (Table 7) reveal differentiated effects of indirect taxes on FDI inflows. Export duty (DEXP) positively influences FDI, contradicting past findings (Koojaroenprasit, 2013; Akinwunmi et al., 2017). Since less than 1% of Malaysian goods are subject to export duty, its revenue generation enhances economic stability and attracts FDI through improved public infrastructure investment. Import duty (DIMP) negatively affects FDI, in contrast to Khan and Nawaz (2010). High import duties increase production costs, making Malaysia less attractive for new foreign investors, especially in capital-intensive industries that rely on imported machinery. Consumption taxes (CONT) also exhibit a negative relationship with FDI, supporting the findings of Nistor & Paun (2013) and Shukla & Shukla (2019). Higher consumption taxes reduce consumer purchasing power and increase operational costs, discouraging investment in consumer-driven industries. Excise duty (DEKS) positively influences FDI, contradicting Akinwunmi et al. (2017) and Eiya & Okaiwele (2019). Since excise duties primarily apply to harmful and non-essential goods, they create a stable regulatory environment that supports sustainable investment in alternative industries. Vehicle levy (LVEH) also positively affects FDI, as it supports infrastructure development and enhances the business environment, particularly in the automotive sector.

	Model 1	Model 2a	Model 2b	Model 2c	Model 2d	Model 2e
Constant	4.167 (3.812)***	3.590 (2.427)***	2.343 (1.822)*	-6.812 (-0.432)	3.013 (0.628)	2.476 (1.805) *

GDP	-0.001 (-4.413)***	-0.001 (-1.676)	-0.001 (-1.078)	0.001 (1.593)	-0.001 (-1.397)	-0.001 (-1.437)
TRD	-6.161 (-4.824)***	-1.772 (-2.806)***	-2.925 (-1.316)	-5.331 (-0.104)	-3.816 (-0.830)	-6.044 (-2.217)* *
INDT	4.051 (5.142)***	-	-	-	-	-
DEXP	-	9.504 (2.507)***	-	-	-	-
DIMP	-	-	-7.696 (-2.271)**	-	-	-
CONT	-	-	-	-3.636 (-2.883)***	-	-
DEKS	-	-	-	-	6.671 (3.123)***	-
LVEH	-	-	-	-	-	6.447 (2.174) **

Table 7: Long-Run Equation [DV: FDI]

Note: FDI is Foreign Direct Investment in billion USD, GDP is Gross Domestic Product TRD is trade (% of GDP). Model 1 proxied by the mean of export duty, import duty, consumption tax, excise duty and vehicle levy, Model 2a proxied by export duty and Model 2b proxied by import duty, Model 2c proxied by consumption tax, Model 2d proxied by excise duty, Model 2e proxied by vehicle levy. Asterisks *, ** and *** denote significance at 10%, 5% and 1% critical values, respectively. Parentheses represent t-statistic.

Discussion of Findings

The findings of this study highlight the significant impact of indirect taxation on FDI inflows in Malaysia, demonstrating that different types of indirect taxes have varying effects on foreign investment decisions. The results confirm that higher import duties and consumption taxes discourage FDI, while higher export duties, excise duties, and vehicle levies are associated with increased FDI inflows. These findings emphasize the need for a balanced and well-targeted tax strategy to ensure that Malaysia remains competitive as an investment destination.

The negative relationship between import duties and FDI suggests that high tariffs on imported goods, machinery, and raw materials increase the cost of doing business, making Malaysia less attractive compared to regional competitors such as Thailand and Vietnam. Similarly, the negative impact of consumption taxes (SST/GST) on FDI indicates that higher indirect taxes on goods and services reduce business profitability and create uncertainty for investors, especially with frequent changes in Malaysia's tax policy. These findings align with the OLI paradigm, where investors consider locational disadvantages such as high tax burdens before deciding where to invest.

Conversely, the study finds that higher export duties, excise duties, and vehicle levies encourage FDI inflows. The positive impact of export duties on FDI suggests that foreign investors in resource-based industries such as palm oil, petroleum, and minerals continue to invest in Malaysia despite the taxation on exports, as these industries remain profitable and strategically important. Similarly, excise duties, which target specific goods such as alcohol, tobacco, and petroleum, do not discourage investment, as they mainly affect consumer demand rather than production costs. The vehicle levy, which applies to commercial goods vehicles entering or leaving Malaysia, plays a key role in logistics and supply chain investment, making Malaysia an attractive hub for regional trade and distribution.

The RMCD plays a critical role in managing indirect taxation and trade facilitation. As the agency responsible for collecting import duties, export duties, consumption taxes, excise taxes and vehicle levy, RMCD influences the ease of doing business and the efficiency of trade-related investment. To attract FDI, RMCD must continue simplifying customs procedures, improving digital tax administration, and ensuring transparency in tax enforcement. A more investor-friendly tax environment, combined with efficient trade facilitation measures, can help Malaysia maintain its competitive position within ASEAN.

The study confirms that not all indirect taxes discourage FDI—some can actually support economic growth and attract investment when applied strategically. To strengthen Malaysia's investment climate, policymakers should consider reducing import duties and consumption taxes to lower business costs while optimizing revenue collection through excise duties, export duties, and vehicle levies. Ensuring policy stability and enhancing customs efficiency under RMCD's leadership will further improve Malaysia's FDI attractiveness. Future research should explore sector-specific tax policies, digital tax reforms, and Malaysia's role in regional trade agreements to further enhance its investment competitiveness.

Policy Implications

The findings of this study highlight the critical role of indirect taxation in influencing FDI inflows into Malaysia. As Malaysia strives to position itself as a regional investment hub, policymakers must strike a balance between revenue generation and investment competitiveness. A sector-specific approach to indirect taxation is necessary to ensure that tax policies enhance investor confidence, promote industrial growth, and sustain fiscal stability. The study emphasizes the need for strategic reforms in import duties, export duties, consumption taxes, excise duties, and vehicle levies, given their differentiated effects on investment inflows.

The negative relationship between import duties and FDI suggests that high import tariffs on capital goods, machinery, and industrial inputs deter foreign investors, particularly those engaged in high-value manufacturing and technology-driven industries. Malaysia, as a key player in the ASEAN supply chain, must ensure that its tariff structure remains competitive with regional economies such as Thailand and Vietnam. Policymakers should consider reducing import duties on strategic sectors aligned with the New Industrial Master Plan (NIMP) 2030, such as semiconductors, renewable energy, and digital technology. Additionally, providing duty exemptions for priority industries and streamlining customs clearance processes can enhance Malaysia's attractiveness for foreign investors seeking efficient market access and lower production costs.

The positive impact of export duties on FDI suggests that, when strategically implemented, export taxation can serve as a tool for economic stability and revenue generation without

detering foreign investment. Since Malaysia imposes export duties on selective commodities, such as palm oil and petroleum, these revenues can be reinvested into infrastructure, trade facilitation, and industrial development programs, further strengthening long-term investment attractiveness. However, policymakers should ensure that export duties remain competitive, particularly for industries with high levels of foreign participation, such as electronics and electrical (E&E) exports. A well-calibrated export duty regime will maintain a favorable balance of trade while preventing capital flight and sustaining investor confidence.

The negative relationship between consumption tax (SST/GST) and FDI highlights the challenges posed by frequent tax policy changes in Malaysia. Over the past decade, Malaysia has experienced multiple shifts between SST and GST, creating uncertainty among foreign investors. This inconsistency affects long-term investment decisions, particularly for firms operating in consumer-driven sectors such as retail, hospitality, and logistics. To enhance investor confidence, the government must ensure stability in its consumption tax framework and avoid abrupt tax policy shifts that disrupt business planning. Implementing a tiered tax structure, where essential goods and business inputs are taxed at lower rates, could mitigate the negative effects of consumption taxes while maintaining revenue efficiency. Additionally, targeted tax incentives for foreign investors in key sectors can counterbalance the adverse effects of high indirect taxation, fostering a more business-friendly tax environment.

The positive influence of excise duties on FDI suggests that taxation policies aligned with public health, sustainability, and environmental goals can attract responsible and long-term investment. Malaysia's increasing focus on sustainable development and green technology investment provides an opportunity to utilize excise tax revenues for projects that support clean energy, electric vehicle (EV) infrastructure, and carbon reduction initiatives. Higher excise duties on non-essential goods such as alcohol, tobacco, sugary drinks and high-carbon-emission products align with global trends in responsible taxation and create an investment climate favorable to ESG (environmental, social, and governance) investors. The government can further optimize excise tax policies by reinvesting these revenues into public infrastructure, renewable energy projects, and industrial innovation hubs, reinforcing Malaysia's position as a leader in sustainable investment.

The vehicle levy's role in FDI attraction is distinct from other forms of indirect taxation, as it is imposed exclusively on commercial goods vehicles entering or leaving Malaysia under the Goods Vehicle Levy Act 1983. This levy directly affects trade, logistics, and supply chain investments, particularly for foreign investors involved in freight, transportation, and regional distribution networks. The positive relationship between vehicle levy and FDI inflows suggests that a well-managed levy system can support efficient cross-border trade and logistics infrastructure development. To further optimize its impact on investment attraction, policymakers should ensure that revenues collected from vehicle levies are reinvested into logistics infrastructure, border facilities, and digital trade facilitation systems. Strengthening Malaysia's role as a regional logistics hub will attract foreign investors in supply chain management, transport corridors, and bonded warehouse operations. Additionally, harmonizing vehicle levy structures with ASEAN trade agreements can improve regional trade flows and encourage multinational logistics firms to establish regional headquarters in Malaysia.

Conclusion

This study examined the impact of indirect taxation on FDI inflows into Malaysia from 1999 to 2023, applying the ARDL approach to assess both short- and long-term relationships. The

research aimed to address the question: Has Malaysia's indirect tax restructuring contributed to the decline in FDI inflows? Despite the economic significance of indirect taxation, its relationship with FDI inflows in Malaysia remains underexplored in the existing literature. By filling this research gap, the study provides valuable insights into the differentiated effects of indirect taxes—export duty, import duty, consumption tax, excise duty, and vehicle levy—on FDI inflows, with particular attention to the role of RMCD as the governing authority in tax administration and enforcement.

The findings reveal that each indirect tax component influences FDI inflows differently, reinforcing the need to analyze them individually rather than collectively. The results confirm that higher import duties and consumption taxes discourage FDI, as these increase business costs, production expenses, and investment barriers. This aligns with the OLI paradigm, which emphasizes the significance of locational advantages in FDI decision-making. Investors seeking cost-effective production hubs will consider the burden of import tariffs and consumption taxes, which directly impact operational profitability. Although Malaysia reduced the consumption tax rate from 10% (SST) to 6% (GST), the overall tax collection from consumption taxes increased, indicating an expanded tax base that may have further deterred investment.

Conversely, higher export duties, excise duties, and vehicle levies are associated with greater FDI inflows. These taxes are typically imposed on specific industries rather than broad-based transactions, making them less restrictive to general investment activity. Export duties, when strategically applied, support fiscal stability without discouraging foreign investment, particularly in resource-based sectors. Similarly, excise duties and vehicle levies, which target select industries such as luxury goods, fuel, and commercial vehicles, do not impose widespread cost burdens on investors. Instead, revenues generated from these taxes can be reinvested in infrastructure and economic development initiatives, enhancing Malaysia's attractiveness as an investment destination.

The RMCD plays a pivotal role in implementing and enforcing indirect tax policies, ensuring compliance while facilitating efficient trade and investment operations. As the primary authority responsible for collecting indirect taxes, managing cross-border trade, and overseeing tax regulations, RMCD is instrumental in shaping Malaysia's tax environment for foreign investors. Its ability to simplify customs procedures, introduce investor-friendly tax mechanisms, and enhance trade facilitation directly impacts Malaysia's investment competitiveness. To attract FDI, RMCD must continue modernizing tax administration, reducing bureaucratic inefficiencies, and aligning tax policies with regional economic frameworks such as ASEAN Trade Agreements. Strengthening customs digitalization and automation, such as through electronic customs clearance and tax reporting systems, can significantly enhance transparency and ease of doing business, further positioning Malaysia as a preferred FDI destination.

The implications of these findings suggest that policymakers must adopt a targeted approach to indirect taxation to sustain Malaysia's FDI competitiveness. To attract more foreign investment, the government should lower import duties and consumption taxes, particularly for industries crucial to high-value manufacturing, digital economy, and export-driven production. At the same time, revenue generation through indirect taxation should focus on export duties, excise duties, and vehicle levies, ensuring that these taxes remain strategically applied without deterring industrial growth. The study also highlights the importance of tax stability, as frequent policy changes in Malaysia's consumption tax structure (SST vs. GST) have created regulatory uncertainty, impacting long-term investment planning. RMCD, as the custodian of indirect tax

administration, must play a proactive role in balancing revenue collection with investment facilitation, ensuring that tax enforcement does not burden businesses unnecessarily but instead encourages long-term capital inflows.

In conclusion, this study provides empirical evidence that indirect taxes cannot be treated as a homogeneous category, as each tax mechanism has distinct economic effects. By considering the unique nature and impact of each indirect tax, policymakers can design a balanced tax framework that optimizes both FDI attraction and revenue sustainability. The role of RMCD remains central in enhancing Malaysia's tax efficiency, ensuring that indirect tax policies support investment-friendly initiatives while maintaining strong fiscal discipline. Future research should further explore the sector-specific implications of indirect taxation, examining how targeted tax incentives and customs reforms can enhance Malaysia's role as a competitive FDI hub within ASEAN.

References

- Addison, T., & Heshmati, A. (2003). The new global determinants of FDI flows to developing countries: The importance of ICT and democratization (Issue 2003/45). WIDER Discussion Paper.
- Adom, P. K., Bekoe, W., & Akoena, S. K. K. (2012). Modelling aggregate domestic electricity demand in Ghana: An autoregressive distributed lag bounds cointegration approach. *Energy Policy*, 42, 530–537. <https://doi.org/10.1016/j.enpol.2011.12.019>
- Akinwunmi, A. J., Olotu, A. I., & Adegbe, F. F. (2017). Multiplicity of taxes and foreign direct investment: A relational analysis of Nigerian tax environment. *Social Sciences*, 6(4), 91–97.
- Anderson, J., & Sutherland, D. (2015). Entry mode and emerging market MNEs: An analysis of Chinese greenfield and acquisition FDI in the United States. *Research in International Business and Finance*, 35, 88–103.
- Angresano, J., Bo, Z., & Muhan, Z. (2002). China's rapid transformation: The role of FDI. *Global Business and Economics Review*, 4(2), 223–242.
- Asiedu, E. (2002). On the determinants of foreign direct investment to developing countries: Is Africa different? *World Development*, 30(1), 107–119.
- Aw, Y. T., & Tang, T. C. (2010). The determinants of inward foreign direct investment: The case of Malaysia. *International Journal of Business and Society*, 11(1), 59–76.
- Awad, A. (2020). Foreign direct investment inflows to Malaysia: Do macroeconomic policies matter? *Journal of International Studies*, 13(1), 196–211. <https://doi.org/10.14254/2071->
- Batschauer da Cruz, C. B., Eliete Floriani, D., & Amal, M. (2020). The OLI paradigm as a comprehensive model of FDI determinants: A sub-national approach. *International Journal of Emerging Markets*. <https://doi.org/10.1108/IJOEM-07-2019-0517>
- Beck, S., & Chaves, A. (2011). The impacts of various taxes on foreign direct investment. U.S. Bureau of Economic Analysis.
- Benassy-Quéré, A., Fontagné, L., & Lahrière-Révil, A. (1999). Exchange rate strategies in the competition for attracting FDI. *Citeseer*, 16.
- Bende-Nabende, A. (2002). Foreign direct investment determinants in Sub-Saharan Africa: A co-integration analysis. *Economics Bulletin*, 6(1).
- Bird, R. M., & Zolt, E. M. (2005). The limited role of the personal income tax in developing countries. *Journal of Asian Economics*, 16, 928–946.
- Boateng, A., Hua, X., Nisar, S., & Wu, J. (2011). Examining the determinants of inward FDI: Evidence from Norway. *Economic Modelling*, 28(6), 2396–2403.

- Bobonis, G. J., & Shatz, H. J. (2007). Agglomeration, adjustment, and state policies in the location of foreign direct investment in the United States. *The Review of Economics and Statistics*, 89(1), 30–43.
- Çak, M., & Karakaş, M. (2009). Definitions of foreign direct capital investments and its effects. *Marmara University Journal of the Faculty of Economic & Administrative Sciences*, 26(1).
- Cambazoglu, B., & Karaalp, H. S. (2014). Does foreign direct investment affect economic growth? The case of Turkey. *International Journal of Social Economics*, 41(6), 434–449. <https://doi.org/10.1108/IJSE-02-2012-0173>
- Cheng, S., Lin, K., & Simmons, R. (2017). A city-level analysis of the distribution of FDI within China. *Journal of Chinese Economic and Foreign Trade Studies*.
- Choong, C.-K., & Lam, S.-Y. (2010). The determinants of foreign direct investment in Malaysia: A revisit. *Global Economic Review*, 39(2), 175–195.
- Chung, W., & Alcácer, J. (2002). Knowledge seeking and location choice of foreign direct investment in the United States. *Management Science*, 48(12), 1534–1554.
- Cochrane, S. G. (2019). Foreign direct investments in Asia: Trends and prospects. *Moody's Analytics*. De Mooij, R. A., & Ederveen, S. 2003. Taxation and Foreign Direct Investment: A Synthesis of Empirical Research. *International Tax and Public Finance*, 10(6), 673–693. DOI: 10.1023/A:1026329920854
- Desai, M. A., Foley, C. F., & Hines, J. R. (2002). *International joint ventures and the boundaries of the firm*. National Bureau of Economic Research, Cambridge, Mass., USA.
- Duasa, J. (2007). Determinants of Malaysian trade balance: An ARDL bound testing approach. *Global Economic Review*, 36(1), 89–102. <https://doi.org/10.1080/12265080701217405>
- Dunning, J. H. (1980). Toward an eclectic theory of international production: Some empirical tests. *Journal of International Business Studies*, 11(1), 9–31.
- Dunning, J. H. (1993). *Multinational enterprises and the global economy*. Wokingham, England: Addison-Wesley.
- Eden, L., & Dai, L. 2010. Rethinking the O in Dunning's OLI/eclectic paradigm. *Multinational Business Review*.
- Eiyya, O., & Okaiwele, I. (2019). Taxes and foreign direct investment (FDI) in Nigeria. *Journal of Applied Business and Economics*, 21(3), 16-30. DOI: 10.33423/jabe.v21i3.2077.
- Fedderke, J. W., & Romm, A. T. (2006). Growth impact and determinants of foreign direct investment into South Africa, 1956–2003. *Economic Modelling*, 23(5), 738–760.
- Friedman, J., Gerlowski, D. A., & Silberman, J. (1996). Foreign direct investment: The factors affecting the location of foreign branch plants in the United States. *Global Finance Journal*, 7(2).
- Gao, G. Y., Wang, D. T., & Che, Y. (2018). Impact of historical conflict on FDI location and performance: Japanese investment in China. *Journal of International Business Studies*, 49(8), 1060–1080.
- Ghosh, I. (2007). The Relation between Trade and FDI in Developing Countries--A Panel Data Approach. *Global Economy Journal*, 7(3).
- Gorter, J., & Parikh, A. (2003). How sensitive is FDI to differences in corporate income taxation within the EU? *De Economist*, 151(2), 193–204.
- Hajkova, D., Nicoletti, G., Vartia, L., & Yoo, K.-Y. (2007). Taxation and business environment as drivers of foreign direct investment in OECD countries. *OECD Economic Studies*, 2006(2), 7–38.
- Ho, C. S. F., & Booth, L. (2017). Fundamentals and country specific determinants of FDI: Evidence from United States and Malaysia. *Pertanika Journal of Social Sciences and Humanities*, 25(2), 705–722.
- Ibrahim, A. (2023). Excise Duties (Amendment) Order 2023. Government of Malaysia. Retrieved from <https://www.businesstoday.com.my/2023/04/01/e-cigarettes-vape-with-nicotine-tax-in-effect-from-today/>
- Jones, C., & Temouri, Y. (2016). The determinants of tax haven FDI. *Journal of World Business*, 51(2), 237–250. DOI: 10.1016/j.jwb.2015.09.001

- Khan, R. E. A., & Nawaz, A. (2010). Economic Determinants of Foreign Direct Investment in Pakistan. *Journal of Economics*, 1(2), 99-104. DOI: 10.1080/09765239.2010.11884929
- Koojaroenprasit S. (2013). Determinants of foreign direct investment in Australia. *Australian Journal of Business and Management Research*, 3(8), 20–30.
- Masron, T. A., & Abdullah, H. (2010). "Institutional Quality as a Determinant for FDI Inflows: Evidence from ASEAN." *World Journal of Management*, 2(3), 115-128.
- Masron, T. A., & Yusop, Z. (2012). "The ASEAN Investment Area, Other FDI Initiatives, and Intra-ASEAN Foreign Direct Investment." *Asian-Pacific Economic Literature*, 26(2), 88-103.
- Masron, T. A. (2017). "Relative Institutional Quality and FDI Inflows in ASEAN Countries." *Journal of Economic Studies*, 44(1), 112-126.
- Merz, J., Overesch, M., & Wamser, G. (2017). The location of financial sector FDI: Tax and regulation policy. *Journal of Banking and Finance*, 78, 14–26. DOI: 10.1016/j.jbankfin.2017.01.001
- Mohanasundaram, T., & Karthikeyan, P. (2015). Foreign direct investment and economic growth: Empirical evidence from India. *Afro-Asian Journal of Finance and Accounting*, 5(4), 344–355. DOI: 10.1504/AJFA.2015.073487
- Mohd Ghazi, R., Khalid, N., & Yussof, I. (2017). Kesan Pelaburan Langsung Asing Terhadap Pertumbuhan Ekonomi: Perbandingan Antara Negara Berpendapatan Tinggi dengan Sederhana Menggunakan Pendekatan Kointegrasi Asimetri. *Jurnal Ekonomi Malaysia*, 51(2), 179-193.
- Moosa, I. A., & Cardak, B. A. (2006). The determinants of foreign direct investment: An extreme bounds analysis. *Journal of Multinational Financial Management*, 16(2), 199–211.
- Moray, R., Pabalkar, V., & Patnaik, A. (2019). Does indirect tax revenue influence FDI affecting GDP ? An empirical analysis with reference to Automobile industry. *Journal of Xi'an University of Architecture & Technology*, XI(Xii), 808–828.
- Nasution, R. A. (2020). the Impact of Tax Cut on Foreign Direct Investment: a Case Study in Southeast Asian Countries. *Info Artha*, 4(1), 13–27. DOI: 10.31092/jia.v4i1.618
- Nguyen, H. N., Tham, J., Khatibi, A., & Ferdous Azam, S. M. (2020). Conceptualizing the effects of corporate tax rate differentials on transfer pricing activities of fdi enterprises in vietnam. *Accounting*, 6(3), 291–300. DOI: 10.5267/j.ac.2020.2.006
- Nistor, I., & Paun, D. (2013). Taxation and its effects on foreign direct investments – The case of Romania. *Nanki O Finansach Financial Sciences*, 3 (16), 37 – 47.
- Nonnemberg, M. B., & de Mendonça, M. J. C. (2004). The determinants of foreign direct investment in developing countries. *Anais Do XXXII Encontro Nacional de Economia [Proceedings of the 32nd Brazilian Economics Meeting]*, 061.
- Onyeiwu, S., & Shrestha, H. (2004). Determinants of foreign direct investment in Africa. *Journal of Developing Societies*, 20(1–2), 89–106.
- Owens, J. (2006). Fundamental tax reform: an international perspective. *National Tax Journal*, 59(1), 131–164.
- Raluca, D. A., & Alecsandru, S. V. (2012). Main Determinants of Foreign Direct Investments in Romania - A Quantitative View of the Regional Characteristics Involved in the Investment Strategies of Foreign Companies. *Procedia - Social and Behavioral Sciences*, 58, 1193–1203. DOI: 10.1016/j.sbspro.2012.09.1101
- Ramsey, J. (1969). Tests for Specification Errors in Classical Linear Least-Squares Regression Analysis. *Journal of the Royal Statistical Society. Series B (Methodological)*, 31(2), 350-371. Retrieved July 21, 2021, from <http://www.jstor.org/stable/2984219>
- Razafimahefa, I., & Hamori, S. (2005). An empirical analysis of FDI competitiveness in Sub-Saharan Africa and developing countries. *Economics Bulletin*, 6(20), 1–8.

- Royal Malaysia Customs Department [RMCD]. (1999). Laporan Tahunan 1999. Cawangan Perhubungan Awam: Putrajaya
- Royal Malaysia Customs Department [RMCD]. (2000). Laporan Tahunan 2000. Cawangan Perhubungan Awam: Putrajaya
- Royal Malaysia Customs Department [RMCD]. (2001). Laporan Tahunan 2001. Cawangan Perhubungan Awam: Putrajaya
- Royal Malaysia Customs Department [RMCD]. (2002). Laporan Tahunan 2002. Cawangan Perhubungan Awam: Putrajaya
- Royal Malaysia Customs Department [RMCD]. (2003). Laporan Tahunan 2003. Cawangan Perhubungan Awam: Putrajaya
- Royal Malaysia Customs Department [RMCD]. (2004). Laporan Tahunan 2004. Cawangan Perhubungan Awam: Putrajaya
- Royal Malaysia Customs Department [RMCD]. (2005). Laporan Tahunan 2005. Cawangan Perhubungan Awam: Putrajaya
- Royal Malaysia Customs Department [RMCD]. (2006). Laporan Tahunan 2006. Cawangan Perhubungan Awam: Putrajaya
- Royal Malaysia Customs Department [RMCD]. (2007). Laporan Tahunan 2007. Cawangan Perhubungan Awam: Putrajaya
- Royal Malaysia Customs Department [RMCD]. (2008). Laporan Tahunan 2008. Cawangan Perhubungan Awam: Putrajaya
- Royal Malaysia Customs Department [RMCD]. (2009). Laporan Tahunan 2009. Cawangan Perhubungan Awam: Putrajaya
- Royal Malaysia Customs Department [RMCD]. (2010). Laporan Tahunan 2010. Cawangan Perhubungan Awam: Putrajaya
- Royal Malaysia Customs Department [RMCD]. (2011). Laporan Tahunan 2011. Cawangan Perhubungan Awam: Putrajaya
- Royal Malaysia Customs Department [RMCD]. (2012). Laporan Tahunan 2012. Cawangan Perhubungan Awam: Putrajaya
- Royal Malaysia Customs Department [RMCD]. (2013). Laporan Tahunan 2013. Cawangan Perhubungan Awam: Putrajaya
- Royal Malaysia Customs Department [RMCD]. (2014). Laporan Tahunan 2014. Cawangan Perhubungan Awam: Putrajaya
- Royal Malaysia Customs Department [RMCD]. (2015). Laporan Tahunan 2015. Cawangan Perhubungan Awam: Putrajaya
- Royal Malaysia Customs Department [RMCD]. (2016). Laporan Tahunan 2016. Cawangan Perhubungan Awam: Putrajaya
- Royal Malaysia Customs Department [RMCD]. (2017). Laporan Tahunan 2017. Cawangan Perhubungan Awam: Putrajaya
- Royal Malaysia Customs Department [RMCD]. (2018). Laporan Tahunan 2018. Cawangan Perhubungan Awam: Putrajaya
- Royal Malaysia Customs Department [RMCD]. (2019). Laporan Tahunan 2021. Cawangan Perhubungan Awam: Putrajaya
- Royal Malaysia Customs Department [RMCD]. (2020). Laporan Tahunan 2021. Cawangan Perhubungan Awam: Putrajaya
- Royal Malaysia Customs Department [RMCD]. (2021). Laporan Tahunan 2021. Cawangan Perhubungan Awam: Putrajaya

- Royal Malaysia Customs Department [RMCD]. (2022). Laporan Tahunan 2017. Cawangan Perhubungan Awam: Putrajaya
- Royal Malaysia Customs Department [RMCD]. (2023). Laporan Tahunan 2018. Cawangan Perhubungan Awam: Putrajaya
- Salanie, B. (2003). *The Economics of Taxation*. Massachusetts: The MIT Press.
- Shukla, V., & Shukla, S. K. (2019). Impact of GST on Foreign Direct Investment : An Appraisal. *CASS Studies*, 3 (1).
- United Nations Conference on Trade and Development (UNCTAD). (2025). Foreign direct investment: Inward and outward flows and stocks, annual. UNCTADstat. Retrieved from <https://unctadstat.unctad.org>
- Vernon, R. (1966). International Investment and International Trade in the Product Cycle. *The Quarterly Journal of Economics*, 80(2), 190–207. DOI: 10.2307/1880689
- Whiteaker, J. (2020). The Relationship Between FDI and International Trade. *Investment Monitor*, September 23.
- World Bank. (2025). World Development Indicators. Retrieved Feb 3, 2025, from <https://databank.worldbank.org/indicator/BN.KLT.DINV.CD/1ff4a498/Popular-Indicators#>
- Yi, C. F., Idris, S., & Lily, J. (2019). Determinants of Foreign Direct Investment (FDI) in ASEAN-5 Countries: A Review. *Malaysian Journal of Business and Economics*, 6(2), 77–90.
- Yiyun Jiang, Xiufeng Wang, Toong Hai Sam, Credit markets, strict financial regulation, and the financialization of listed firms. *Finance Research Letters*, Volume 61, 2024, 104920, ISSN 1544-6123. <https://doi.org/10.1016/j.frl.2023.104920>.