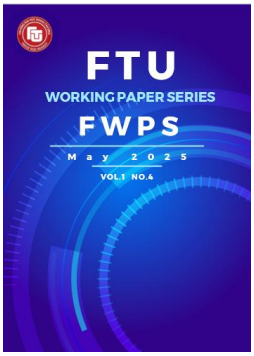

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TÁC ĐỘNG CỦA DOANH THU THUẾ ĐẾN DÒNG VỐN FDI TẠI CÁC NƯỚC APEC

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Tóm tắt

Mục đích của bài nghiên cứu là đánh giá tác động của doanh thu thuế đến dòng vốn đầu tư trực tiếp nước ngoài (FDI) của các nước thành viên APEC. Nhóm áp dụng phương pháp OLS với bộ dữ liệu thứ cấp trong giai đoạn 2003 – 2022 được lấy từ World Bank để đánh giá mối quan hệ giữa dòng vốn FDI với doanh thu thuế và các yếu tố vĩ mô khác như GDP, tăng trưởng dân số, chỉ số thượng tôn pháp luật và độ mở thương mại. Kết quả nghiên cứu cho thấy: (i) doanh thu thuế ảnh hưởng tiêu cực tới dòng vốn FDI; (ii) chỉ số Thượng tôn pháp luật, mức tăng trưởng kinh tế và FDI của năm trước đó có tác động tích cực đối với dòng vốn FDI; (iii) tỉ lệ gia tăng dân số có tác động ngược chiều đối với dòng vốn FDI. Nghiên cứu khuyến nghị các nước APEC nên giảm phụ thuộc vào ưu đãi thuế để thu hút FDI mà cần ưu tiên ổn định tình hình kinh tế, xây dựng khung pháp lý chặt chẽ và nâng cao chất lượng lao động. Bên cạnh đó, các quốc gia cần đảm bảo dòng vốn FDI đó sẽ tạo ra công ăn việc làm, thúc đẩy chuyển giao công nghệ và phát triển kinh tế đất nước.

Từ khóa: doanh thu thuế, FDI, APEC, phương pháp bình phương nhỏ nhất

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THE IMPACT OF TAX REVENUE ON FOREIGN DIRECT INVESTMENT INFLOW IN THE APEC COUNTRIES

Abstract

The aim of this quantitative research paper is to investigate the impact of tax revenue on foreign direct investment (FDI) inflows in APEC countries. The author applies an OLS regression analysis based on secondary data from the World Bank during the 2003–2022 period to examine the relationship between tax revenue and FDI, along with some macroeconomic factors such as GDP, population growth, Rule of Laws and trade openness. The findings reveal that: (i) tax revenue impacts FDI inflows negatively which means attracting FDI is associated with lower tax FDI collections; (ii) the Rule of Law index, economic growth and previous year's FDI inflows all have positive impacts on FDI, which emphasizes the importance of institutional stability, potential for economic development and foreign investment for increased working foreigner capital; (iii) the relationship between population growth and FDI inflows is negative. Our findings recommend that APEC countries should reduce reliance on tax incentives and prioritize stable economic conditions, strong legal frameworks and skilled labor to attract sustainable foreign investments. In addition, governments, especially those of emerging countries should carefully assess the quality of FDI, ensure that they contribute to job creation, technology transfer and economic development rather than just short-term capital inflows.

Keywords: tax revenue, FDI inflows, APEC, ordinary least squares

1. Introduction

Foreign Direct Investment (FDI) has become a critical driver of economic growth, especially within the Asia-Pacific Economic Cooperation (APEC) region, more than half of which are developing countries. Facilitating trade and investments among countries remains one of the key goals of APEC, so countries, both highly advanced and developing, are striving their best to build conducive conditions to attract more FDI. FDI inflows allow them to take part in global value chains (GVCs), develop industries, increasing efficiency and competitiveness. As FDI inflows play a crucial role in enhancing economic competitiveness, understanding the determinants that influence FDI has been a persistent focus of research. Among these determinants, fiscal policies are often seen as key factors shaping the competitiveness of the investment environment (Simões et al, 2014). Governments with effective fiscal policies to distribute their tax revenue and expenditure have more capacity to boost their internal investment conditions and economic growth. According to Odhiambo and Olushola (2018), a feasible tax revenue mobilization reduces an economy's reliance on external streams. Thus, tax revenue is not only the main revenue source of the government budget, but also a cornerstone of internal revenue mobilization. Effective tax revenue systems can signal fiscal stability and government capacity, while excessive tax burdens may deter FDI. Therefore, understanding the correlation and causation between FDI and tax revenue is crucial for understanding how fiscal policies can influence investment flows.

According to the authors' investigation, most studies try to shed light on the relationship between taxation and FDI, the relationship between fiscal policy and FDI, or the impact of FDI

on tax revenue; there is less literature studying the causal relationship between tax revenue and FDI inflows. Furthermore, the research model utilizes the model applied by Mooij and Ederveen (2008), Sato (2012), Tran and Nguyen (2024) to clarify the relationships between some broader macroeconomic and institutional factors such as GDP growth, population growth, rule of law index, trade openness and FDI. While the previous studies are focused on the corporate income tax, this research expands the scope to tax revenue, which encompasses both direct and indirect taxes. By incorporating tax revenue as a more comprehensive indicator, the study acknowledges the significant role of indirect taxes, which derive primarily from the sales of goods and services, in driving fiscal stability and economic activity. This broader approach allows for a deeper understanding of how fiscal policy impacts FDI inflows in the context of dynamic APEC economies.

The primary aim of this study is to answer the research question: Does tax revenue significantly impact FDI inflows in APEC countries? To address this question, the study hypothesizes that tax revenue, along with other macroeconomic factors namely GDP growth, population growth, rule of law index and trade openness, has a measurable influence on FDI inflows. The hypothesis posits that more effective tax revenue systems can either attract or deter FDI, depending on how fiscal policies are perceived and implemented in the context of overall economic conditions.

This research employs a quantitative approach, using Ordinary Least Squares (OLS) regression analysis to investigate the relationship between FDI inflows (dependent variable) and the independent variables of tax revenue, GDP growth, population growth, rule of law index and trade openness. The study utilizes secondary data sourced from the World Bank, covering the period from 2003 to 2022. Due to limitations in data availability, some APEC countries are excluded from the analysis.

The significance of this research lies in its potential contributions to both academic and policy discussions. By addressing the causal relationship between tax revenue and FDI inflows, this research provides a nuanced understanding of how fiscal policies and macroeconomic factors interact to influence investment flows in the APEC region. Additionally, the implication of the research can offer more insights for policymakers to design taxation policies to optimize FDI attraction.

2. Theoretical basis and literature review

2.1. Theoretical basis

2.1.1. FDI inflows

In the increasing globalization process, Foreign Direct Investment (FDI) has played a pivotal role in shaping the economic landscape of APEC (Asia-Pacific Economic Cooperation) countries. Research about FDI and APEC Economic Integration by the APEC Economic Committee (1995) posits that most FDI stocks of APEC countries are derived from APEC member economies, thus, increased FDI linkages between these countries will drive further

specialization, improve resource allocation and efficiency. According to Lai et al. (2022), FDI inflows facilitates technology transfer, boosts productivity, brings together the capital, skills, know-how and innovation, which altogether enhances their competitiveness in global markets. Developing countries which pursue an export-oriented development approach can better take part in the global GVC and integration. APEC economies have consistently been the main FDI recipients. However, the majority of FDIs are carried out by multinational enterprises through mergers and acquisitions (M&As) and greenfield investments, and FDI flows are less stable than trade flows due to the "lumpy" nature of large-scale investment projects and the influence of one-time events, such as sizeable mergers or acquisitions of domestic firms (Makin and Chai, 2018).

Over the 30-year span from 1989 to 2019, FDI inflows into the APEC region demonstrated significant growth, reflecting the region's increasing attractiveness as a hub for investment. This growth can be attributed to several factors, including the liberalization of trade policies, economic reforms and the expansion of regional supply chains.

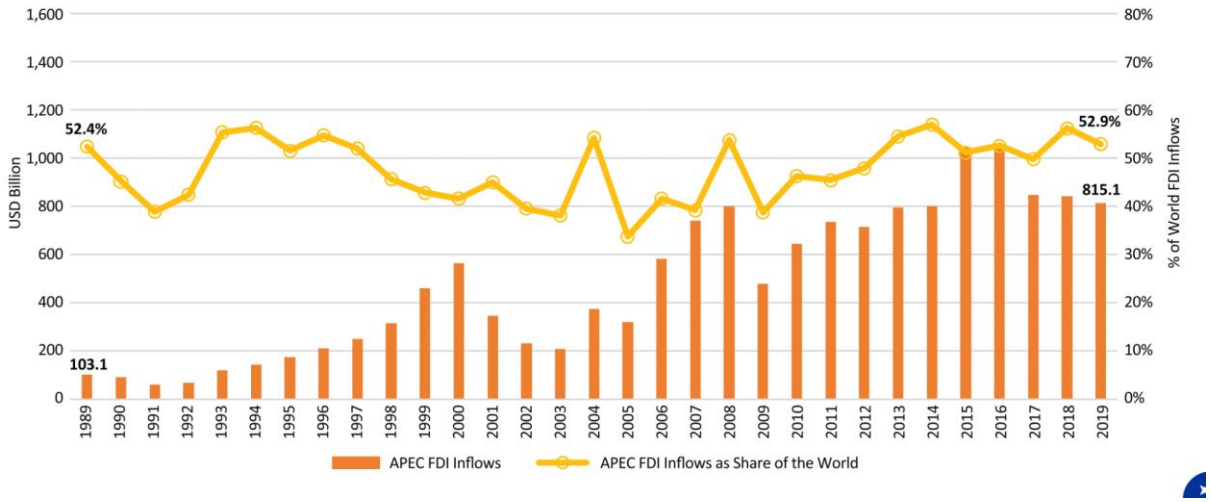

Figure 1. APEC's FDI inflows from 1989 to 2019***Source:*** *APEC Secretariat, APEC Policy Support Unit (2020)*

FDI inflows in APEC economies fluctuated significantly from 2019 to 2023 due to global challenges like the COVID-19 pandemic. After reaching USD 815.8 billion in 2019, inflows dropped to USD 610.4 billion in 2020. A sharp recovery in 2021 brought inflows to USD 1,152.3 billion, but they gradually declined to USD 1,086.6 billion in 2022 and USD 1,000.5 billion in 2023, reflecting ongoing economic uncertainties.

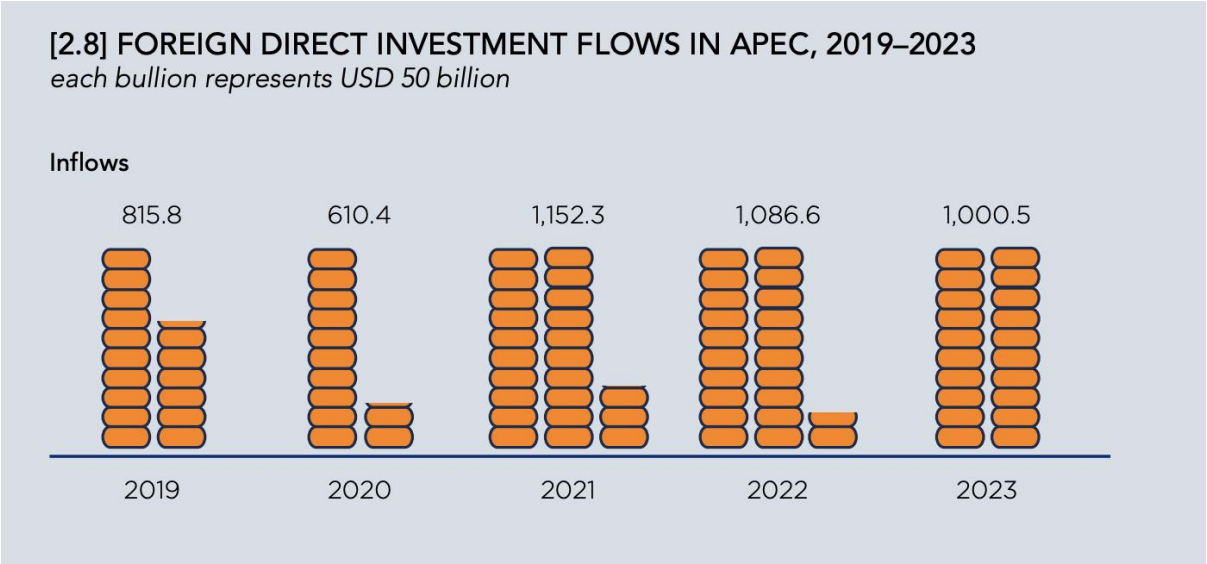

Figure 2. APEC's FDI inflows from 2019 to 2023

Source: APEC Secretariat, APEC Policy Support Unit (2024)

Developed countries with strong economic influence such as The United States, Hong Kong and Singapore stand out as the largest recipients of FDI. Meanwhile, countries like Brunei Darussalam, Papua New Guinea and Peru receive minimal FDI. Major concern regarding FDI attraction in these regions is the government policy regarding barriers on market entry, which indirectly prohibit FDI facilitation such as high corporate tax (APEC Secretariat, APEC Policy Support Unit, 2024), lack of appropriate investment policy implementation and lack of resources such as infrastructure, labor and investment initiatives (Makin, 2021).

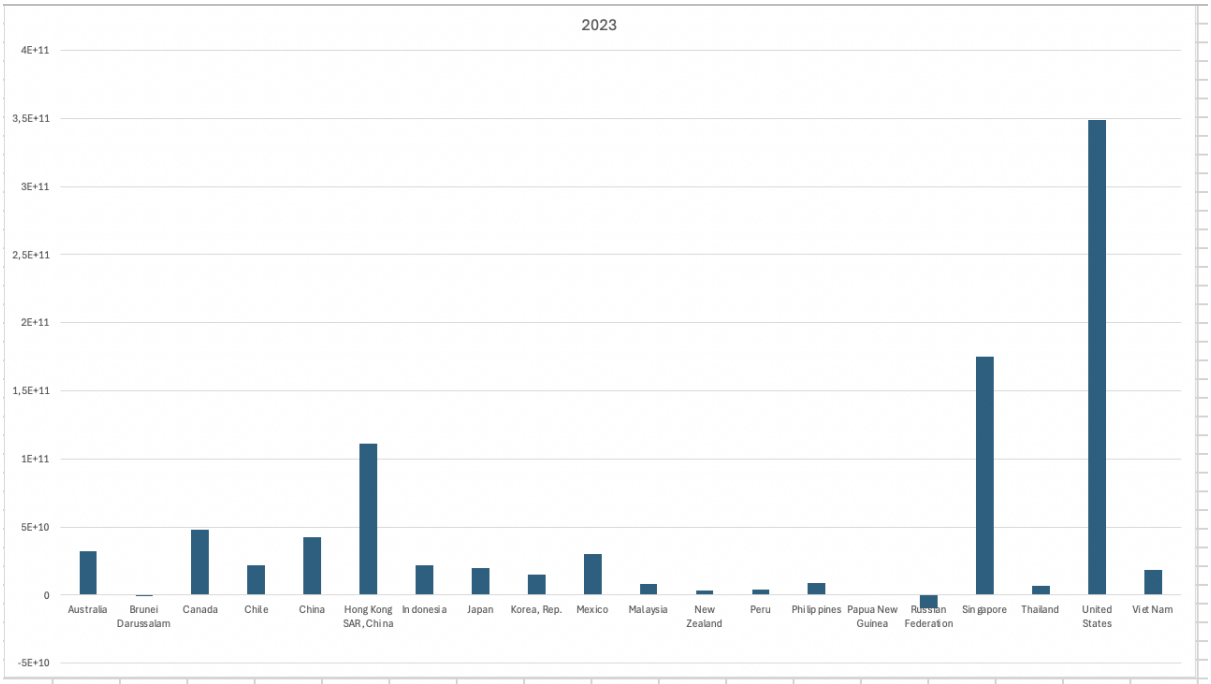

Figure 3. FDI inflows by APEC countries in 2023

Source: Authors curated from The World Bank (2024)

2.1.2. The Eclectic Theory/ The OLI (Ownership - Location - Internationalization) Theory

The OLI framework, developed by John H. Dunning, is one of the most prominent models for understanding why and how firms engage in FDI. It outlines three components that collectively determine a firm's decision to invest abroad: Ownership, Location, and Internalization advantages. Ownership advantages refer to firm-specific capabilities, such as proprietary technology, unique products or managerial expertise. FDI inflows are influenced by a firm's ability to leverage its ownership advantages in a supportive host-country environment. Location-specific advantages encompass the economic, institutional and policy-related factors that make a country attractive to foreign investors. The determinants examined in this research, namely tax revenue, GDP growth, population growth, rule of law and trade openness align closely with this concept. Tax revenue, as a critical component of fiscal policy, plays a dual role: while it signals governmental capacity and supports public services, excessive taxation may create disincentives for foreign investment. Internalization advantages explain why firms prefer direct investment over alternative entry modes, such as exporting or licensing. While not the primary focus of this study, internalization advantages are inherently influenced by host-country conditions. For example, strong institutional frameworks, including rule of law and transparent tax policies, can lower transaction costs and risks, encouraging firms to internalize their operations through FDI rather than relying on external partnerships.

2.1.3. Tax revenue

Fiscal policy is a critical factor that influences foreign investor behaviors. According to Göndör and Nistor (2012), fiscal policy has a considerable bearing on the business environment of a country to attract FDI. Among different determinants, tax revenue is an integral component of fiscal policy.

It refers to income generated by governments through taxes such as taxes on income and profits, social security contributions, taxes levied on goods and services, payroll taxes, taxes on the ownership and transfer of property, and other taxes (OECD, 2025). There are typically two main types of tax: direct and indirect tax. Most countries receive revenue from indirect tax, which is imposed on the sale of goods and services. Excessive indirect taxes can increase operational costs and reduce consumer purchasing power, which can make the market less attractive for foreign investors to enter.

2.2. Literature review

2.2.1. The positive impact of tax revenue on FDI inflows

There have been a number of studies on the impact of tax revenue on FDI inflows in a specific country. These existing studies, using different methods, have observed the positive impact of tax revenue on FDI inflows. Mahmood and Chaudhary (2013) used the Autoregressive Distributed Lag (ARDL) model and its error correction model to evaluate long run and short run relationships in the tax revenue model. The findings indicate that long run and short run relationships exist in the tax revenue model and that FDI has a positive and significant impact on tax revenue in Pakistan. Joseph et al. (2019), adopting Ordinary Least Squares (OLS) regression technique, found out that tax revenue has a significant impact on GDP in Nigeria.

The study also revealed a strong positive relationship between GDP and FDI. Consequently, there is a positive relationship between tax revenue and FDI in Nigeria. Pamba (2022) used linear ARDL results and concluded that tax revenue had positive links with FDI in South Africa in the long-run.

2.2.2. The negative impact of tax revenue on FDI inflows

However, a body of existing research showed contrasting findings. In the short-run, tax revenue had a negative relationship with FDI according to the linear ARDL results (Pamba, 2022). In addition, tax revenues and FDI were found to have negative relationships in Jordan for the period of 1991–2017 by using VECM, CCR and FMOLS (Mukhtarov et al., 2020).

2.2.3. Factors affecting FDI inflows

Studies focusing on the determinants of FDI revealed mixed results. Tran and Nguyen (2024) based their model on prior empirical research conducted by Mooij and Ederveen (2008) and Sato (2012). The independent variable included the independent variable representing the effective corporate income tax rate while GDP growth rate, population, number of people of working age, ownership index, transparency index, and trade openness of each country were control variables. According to Abdioğlu et al. (2016), variables that affect FDI were GDP growth, inflation, population growth, unemployment, corporate tax rate, tax revenue, openness and Kaufmann, Kraay and Mastruzzi (KKM) governance indicators. Following the frameworks established by Buchanan et al. (2012), Dellis et al. (2017), and Asongu et al. (2018), Lee et al. (2024) employed a model with six variables including corruption, regulation, political stability, rule of law, accountability, and government.

2.3. Research gap

The review of past literature has identified some important research gaps.

Firstly, while existing research has thoroughly examined the relationship between FDI inflows and tax revenue, the findings are ambiguous and mixed. There remains a notable gap in understanding and clarifying the role of tax revenues in driving FDI.

Secondly, although previous studies have explored the relationship in a specific country, the role of taxation in attracting FDI has received little attention in APEC countries, and there has been less research into the influence of tax revenue on FDI inflows.

Thirdly, although previous studies have explored various factors affecting FDI inflows, there is a lack of research focusing specifically on tax revenue despite its crucial role in attracting foreign investment and fostering economic growth.

2.4. Research objectives

The primary goal of this research is to examine the impact of tax revenue on FDI inflows in APEC countries in the period 2011-2022 using a gravity model approach. Specifically:

- Assess how tax revenue has impacted FDI inflows in APEC countries from 2003 to 2022

- Provide policy recommendations that can enhance APEC countries' FDI inflows

3. Methodology

3.1. Research Method

We use the OLS estimators to estimate the impact of tax revenue on FDI inflows. However, since panel data has a time dimension, it includes time-specific effects and individual effects, which are not accounted for in the OLS estimation. If these unobserved effects are correlated with your independent variables, they can lead to heteroskedasticity. Moreover, if these unobserved factors are stable over time, they can cause autocorrelation in error terms.

To identify these issues, we will use the Arellano-Bond test for autocorrelation and Breusch-Pagan/Cook-Weisberg test for heterogeneity. We will also use the variance inflation factor (VIF) test to detect the multicollinearity. If they exist, the heteroskedasticity and autocorrelation consistent (HAC) estimation method shall be used to address the autocorrelation and heteroskedasticity.

3.2. Research Model

Based on the model defined in the research of Tran and Nguyen in 2024, we made some adjustments and identified the estimated model as follows:

$$\boldsymbol{lnFDI_{it} = \beta_0 + \beta_1 rev_{it} + \beta_2\, lnFDI_{i(t-1)} + \beta_3 X_{it} + \varepsilon_{it}} \quad \textbf{(1)}$$

Or

$$\boldsymbol{lnFDI_{it} = \beta_0 + \beta_1 rev_{it} + \beta_2\, lnFDI_{i(t-1)} + \beta_3 gdp_{it} + \beta_4 pop_{it} + \beta_5 right_i + \beta_6 open_i + \varepsilon_{it}} \quad \textbf{(2)}$$

Where:

FDI_{it} (dependent variable) represents the value of foreign direct investment (FDI) inflow of country i in the year t

rev_{it} is the corporate tax revenue as percentage to GDP of country i in the year t. As is mentioned in the literature review, the impact of tax revenue on FDI inflow is still a debatable topic since each research shows different results about it.

$FDI_{i(t-1)}$ stands for the FDI inflow of country i in the previous year.

X_{it} is other FDI inflow determinants that had been studied by previous research. In our research, those determinants:

- gdp_gr_{it}: annual growth rate of gross domestic product of country i in the year t
- pop_gr_{it}: annual population growth rate of country i in the year t. We choose to use variable population growth rather than population since population is relevant to market size and FDI is an increase to market size. Hence, population growth is a more suitable indicator to estimate the variation of FDI.

- $rights_{it}$: Rule of Law index for country i in the year t. The Rule of Law Index measures how well countries adhere to the rule of law through various factors. Compared to the variables Property rights index and Government integrity used in the research of Tran and Nguyen (2024), the Rule of Law index cover a more comprehensive about the adherence to government legal framework as well as its effectiveness.
- $open_{it}$: degree of trade openness in country i in the year t. This indicator is measured as the ratio of imports and exports to GDP

ε_{it} is the error terms

3.3. Research Data

We use the World Development Indicator of World Bank (WDI) for data on FDI, tax revenue and other variables in the model (annual GDP growth, annual population growth, Rule of Law index and trade openness). The WDI includes around 1,600 indicators for 217 economies, with the data going back as far as 1960 for some indicators. This database covers all economic, social and environmental dimensions of the world's development landscape.

However, due to the availability of data from all APEC countries, our research only uses data from 2003 to 2022.

4. Empirical result

4.1. Correlation analysis

The correlation matrix is used to assess the linear correlation between the dependent variable and the independent variables. The correlation coefficient ranges from -1 to 1, where a value less than 0 indicates a negative correlation, a value greater than 0 indicates a positive correlation, and a value of 0 between the two variables shows no correlation. The strength of the association between the variables is classified as shown in the Table 1 below.

Table 1. Classification of correlation

Absolute value of correlation	**Strength of relationship**
< 0.20	Very weak
0.20 - 0.39	Weak
0.40 - 0.59	Moderate
0.60 - 0.79	Strong
> 0.80	Very strong

Source: Wuensch amd Evans (1996)

The authors constructed a correlation matrix to assess the relationship between FDI with tax revenue and the control variables. The results are presented in Table 2 below.

Table 2. Correlation matrix

	ln_FDI	rev	ln_FDI_1	gdp_gr	pop_gr	rights	open
ln_FDI	1.0000						
rev	-0.3643	1.0000					
ln_FDI_1	0.8828	-0.3866	1.0000				
gdp_gr	0.0743	-0.0870	-0.1025	1.0000			
pop_gr	-0.2404	0.1028	-0.1910	-0.0101	1.0000		
rights	0.2350	0.3985	0.2167	-0.2024	0.1665	1.0000	
open	-0.0200	-0.0664	-0.0299	0.1480	0.2844	0.2608	1.0000

Source: Authors' calculation

According to the correlation matrix results in Table 2, tax revenue, population growth and trade openness are negatively associated with FDI, while the other three variables have positive associations. The correlation between tax revenue and FDI is weak, with a correlation coefficient of -0.3643. Among the control variables, the amount of FDI inflows in the previous year has the highest correlation coefficient with current-year FDI inflows, while trade openness has the weakest correlation, with the coefficient close to 0.

4.2. Estimated result

Based on the model built in Section 3, the authors conducted the pooled OLS regression analysis to evaluate the relationship between tax revenue and FDI. The regression results are shown in Table 3 below.

Table 3. Regression results

ln_FDI	Coefficient	Std. err.	[95% conf. interval]	
rev	-0.0287392***	0.0108852	-0.050171	-0.0073074
ln_FDI_1	0.7968388***	0.0317275	0.7343709	0.8593067
gdp_gr	0.0795548***	0.0113255	0.0572561	0.1018534
pop_gr	-0.1608235***	0.0509092	-0.261058	-0.0605891
rights	0.2315757***	0.0502826	0.1325749	0.3305766
open	-0.0007973	0.0005018	-0.0017854	0.0001908
_cons	0.9043267***	0.2373354	0.4370398	1.371614

Significance: *** p < 0.01, ** p < 0.05, * p < 0.1

Source: Authors' calculation

After obtaining the OLS regression results, the authors conducted tests to evaluate the validity of the model. The authors used the VIF method to identify multicollinearity, the

Arellano-Bond test for autocorrelation, and the Breusch-Pagan/Cook-Weisberg test for heteroscedasticity. First, the results of the multicollinearity test are shown in Table 4 below.

Table 4. Multicollinearity test results

Variable	VIF	1/VIF
rights	1.82	0.548110
rev	1.80	0.556383
ln_FDI_1	1.61	0.622203
open	1.29	0.773214
pop_gr	1.16	0.862995
gdp_gr	1.10	0.912391
Mean VIF	1.46	

Source: Authors' calculation

Table 4 shows that both the VIF value of each independent variable and the mean value of VIF are below 2, indicating that multicollinearity does not exist in the model. Following the VIF test, the results of the Arellano-Bond test and results from the Breusch-Pagan/Cook-Weisberg test are illustrated in Table 5 below.

Table 5. Autocorrelation and heteroskedasticity test results

Arellano-Bond test for AR(1):	z = -3.71	Pr > z = 0.0002
Arellano-Bond test for AR(2):	z = -0.89	Pr > z = 0.3749
Arellano-Bond test for AR(3):	z = 1.71	Pr > z = 0.0873
Arellano-Bond test for AR(4):	z = 0.46	Pr > z = 0.6476
Arellano-Bond test for AR(5):	z = 2.42	Pr > z = 0.0156
Arellano-Bond test for AR(6):	z = 1.16	Pr > z = 0.2479
Arellano-Bond test for AR(7):	z = 1.05	Pr > z = 0.2950
Arellano-Bond test for AR(8):	z = 1.21	Pr > z = 0.2258
Arellano-Bond test for AR(9):	z = 0.69	Pr > z = 0.4918
Arellano-Bond test for AR(10):	z = 0.74	Pr > z = 0.4600
Arellano-Bond test for AR(11):	z = 1.62	Pr > z = 0.1057
Arellano-Bond test for AR(12):	z = -1.01	Pr > z = 0.3119
Arellano-Bond test for AR(13):	z = 2.32	Pr > z = 0.0205
Arellano-Bond test for AR(14):	z = 0.12	Pr > z = 0.9023
Arellano-Bond test for AR(15):	z = 0.81	Pr > z = 0.4155

Arellano-Bond test for AR(16):	z = -0.09	Pr > z = 0.9256
Arellano-Bond test for AR(17):	z = -0.32	Pr > z = 0.7497
Arellano-Bond test for AR(18):	z = -0.28	Pr > z = 0.7767
Arellano-Bond test for AR(19):	z = 0.61	Pr > z = 0.5388
Breusch-Pagan/Cook-Weisberg test for heteroskedasticity		Prob > chi2 = 0.0000

Source: Authors' calculation

The Arellano-Bond test shows that the p-value for first-, fifth- and thirteenth-order autoregression are lower than 0.05. This indicates the existence of autocorrelation at the 1st, 5th and 13th order. According to Gujarati and Porter (2009), in the presence of autocorrelation, the OLS estimators are still linearly unbiased as well as consistent and asymptotically normally distributed, but they are no longer efficient (i.e., minimum variance). This makes the OLS result no longer be the best linear unbiased estimator. Similarly, the Breusch-Pagan/Cook-Weisberg test results also show that the p-value is less than 0.05, which means the model has heteroskedasticity. This problem suggests that the coefficient estimates are neither optimal nor efficient, as they do not achieve minimum variance (Gujarati and Porter, 2009).

To address these issues, the authors applied the heteroskedasticity and autocorrelation consistent (HAC) estimation method which results are shown in the Table 6 below.

Table 6. Regression results with HAC adjustment

		Newey-West		
ln_FDI	**Coefficient**	**std. err.**	**[95% conf. interval]**	
rev	-0.0287392**	0.01383	-0.055969	-0.0015094
ln_FDI_1	0.7968388***	0.0529104	0.6926641	0.9010135
gdp_gr	0.0795548***	0.0184381	0.0432523	0.1158572
pop_gr	-0.1608235***	0.053919	-0.266984	-0.0546631
rights	0.2315757***	0.0775504	0.0788877	0.3842638
open	-0.0007973	0.0004901	-0.0017623	0.0001677
_cons	0.9043267***	0.3331056	0.2484788	1.560175

Significance: *** p < 0.01, ** p < 0.05, * p < 0.1

Source: Authors' calculation

5. Discussion

The results from Table 6 show that while tax revenue, previous year's FDI inflows, economic growth level, population growth and rule of law index have an impact on an APEC country's FDI inflows in one year, trade openness is not statistically significant.

According to the regression results, tax revenue has a negative effect on FDI, which aligns with the previous research by Mukhtarov et al. (2020) and Pamba (2022). The coefficient of -0.0287392 shows that when the tax-to-GDP ratio of one APEC country increases by 1%, its FDI inflows will decrease by nearly 0.03%. The negative relationship can be explained by capital flight and tax competition. Maximizing profits has always been the main goal of businesses, and higher tax revenue, particularly when it results from increased corporate income tax rates, can lead firms to withdraw their capital. This occurs because higher taxes reduce after-tax profits and the return on investment, making the country less attractive for foreign investment. In response, firms may relocate their investments to countries with more favorable tax regimes. Furthermore, multinational corporations often engage in profit-shifting strategies, such as transfer pricing and using offshore tax havens, to minimize their tax liabilities. These practices further reduce the attractiveness and competitiveness of a country with high taxes, as investors seek jurisdictions where they can reduce their tax burden and maximize their returns.

For the remaining independent and control variables, the FDI inflows in the previous year, GDP growth rate and rule of law index positively affect current-year FDI inflows, which is consistent with the previous studies from Tran and Nguyen (2024) and Abdioğlu et al. (2016). A 1% increase in last year's FDI inflows leads to an increase of about 0.8% in this year's FDI inflows. This is the most influential factor among the independent variables. GDP growth rate also shows a positive effect with a coefficient of almost 0.08, which means FDI inflows go up by 0.08% when GDP goes up by 1%. The positive coefficient of the rule of law index (more than 0.23) indicates that an increase in the strength of rule of law is associated with a higher level of FDI attractiveness. On the other hand, the population growth rate of a country negatively affects the FDI inflows, in which a 0.16% decrease in FDI inflows results from a 1% increase in the population.

6. Recommendations and conclusion

This study analyzed the impact of tax revenue on FDI inflows in some APEC countries from 2011 to 2022. The results show that tax revenue has a negative effect on FDI. This implies that lower tax revenues result in higher FDI inflows. Other factors such as previous year's FDI inflows, economic growth level and rule of law index have a positive impact on an APEC country's FDI inflows in one year, while there is a negative relationship between FDI inflows and population growth. These findings align with several previous literature and theories. The HAC estimation method is employed for correcting errors in the model.

The findings indicate that tax revenue negatively impacts FDI, suggesting that a decrease in tax revenue leads to an increase in FDI inflows. Instead of merely taking tax revenue reduction measures to attract FDI, governments should also consider the effectiveness of tax reduction. The benefits a country obtains from an FDI project, such as job creation, technology transfer, and economic growth, should also be carefully evaluated to ensure that investments generate long-term value for the economy rather than merely short-term capital inflows.

APEC countries are also recommended to lower their dependence on tax incentives and instead focus on other incentive strategies, such as a stable economic and political climate, efficient legal framework, human capital development and reliable infrastructure. These non-tax incentives ensure sustainable and productive foreign investments.

For emerging APEC economies such as Vietnam, Indonesia, Thailand, and the Philippines, tax incentives remain a key tool to attract FDI. However, an over-reliance on tax-driven FDI may not be sustainable in the long term, as it can lead to revenue losses that limit government spending on essential public services and infrastructure. Instead, these countries should focus on attracting high-quality FDI by prioritizing investments in high-tech industries, infrastructure development, and skilled labor training. Encouraging innovation, research and development, and partnerships between foreign investors and local businesses can help create a more dynamic and competitive economic environment.

However, the study has some limitations. One key limitation is that it studies the relationship between the independent and dependent variables in the short term, which may not fully reflect the long-term dynamics of tax policy and FDI inflows. Therefore, further extensive research is needed to evaluate the long-term effects of tax revenue on FDI inflows in APEC countries.

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