

# Does Taxing Shadow Economy Helps Increase Wages?



## Summary

- ◆ It is the fact that the Malaysia's total revenue and tax revenue as a percentage to GDP has been on a declining trend for the pass more than 10 years. Taxing the shadow economy is an alternative way to increase government tax revenue to the amount of RM50.8 billion in 2019.
- ◆ In 2019, the size of the shadow economy in Malaysia is 28.2% of GDP. Empirical evidence clearly illustrates the inverse relationship between wages and the size of the shadow economy. The estimated wage elasticity, that is, the percentage changes in wages as a result in the percentage changes in the size of the shadow economy ranges from -0.23% to -0.39%. A 10% reduction in the size of the shadow economy will raise wages between 2.3% to 3.9%.
- ◆ Digitalisation, cashless transactions and electronic payments system and formalising the shadow economy are good strategies to mitigate the shadow economy. Acknowledging the shadow economy's existence and accommodating the sector as a permanent feature of the overall economy, and incorporating shadow economy in the National Development Plan can be a long-term strategy to combat the growth of the shadow economy.

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## Does Government Revenue Support Wage Increment in Malaysia?

Malaysia has been in the upper-middle-income trap since 1992. Gill and Kharas (2007) exert that a country can grow beyond the middle-income status if competitiveness is based on high wages and high value added. However, higher wages mean higher cost of production. To remain competitive with the increase in wages requires an increase in productivity. On the other hand, productivity increases require increases in the sophistication of technology, an educated workforce, and changes in work organization and motivation (Vandenberg et al., 2015). This contention is supported by empirical work reported in the Economic Outlook 2003 (Ministry of Finance, 2023: pp. 19-31).

Low wage economy can be observed using the ratio of compensation of employee (CE) to GDP. In 2019, Malaysia's CE to GDP is 35.9% which is relatively low as compared to Singapore (39.9%), Australia (47.2%), South Korea (47.5%), United Kingdom (48.7%), and Germany (53.4%) (Ministry of Finance, 2023). All these countries are high-income country, except Malaysia. Thus, Malaysia has every effort and opportunities to increase its CE to GDP ratio in order to embrace a developed nation status.

Recently, the Congress of Unions of Employees in the Public and Civil Services (CUEPACS) has conveyed the demand of the civil servants for a salary increment. To increase wages and salaries (such as revision of salary and wages) of the public sector, the Federal Government has to increase its revenue. The fact is that, Malaysia's total revenue as a percentage to gross domestic product (GDP) has been declining from 20.8% in 2008 to 15.9% in

2020; similarly total tax revenue as a percentage to gross domestic product (GDP) has been declining from 14.7% in 2008 to 10.9% in 2020. This justify the statement made by the Malaysia's 10th Prime Minister Anwar Ibrahim that any revision of the civil servant salary and wages can be made when the Malaysian economy improves. In other words, the Federal Government has to increase its revenue/tax revenue to be able to support the wage and salary increment.

The worrying positions of the Malaysia's decreasing total revenue and tax revenue collection relative to GDP has called for revenue reforms in Malaysia. According to the Fiscal Outlook 2022 (Ministry of Finance, 2022), the government is formulating a revenue framework, that is, the Medium-Term Revenue Strategy (MTRS). The MTRS is to address issues relating to Federal Government revenue with respect to narrow tax base, ineffective tax incentives, tax avoidance and tax evasion and untapped informal sectors (Ministry of Finance, 2022).

This policy brief aims to propose an alternative source of Federal Government revenue and/or tax revenue in which to support, say the wage increment in the public sector. We look first at the role of the shadow economy as potential sources of income. We further provide empirical evidence indicating that reducing the size of the shadow economy would increase wages in Malaysia. Finally, we provide several implementation issues and policy recommendations that policy-makers need to consider.

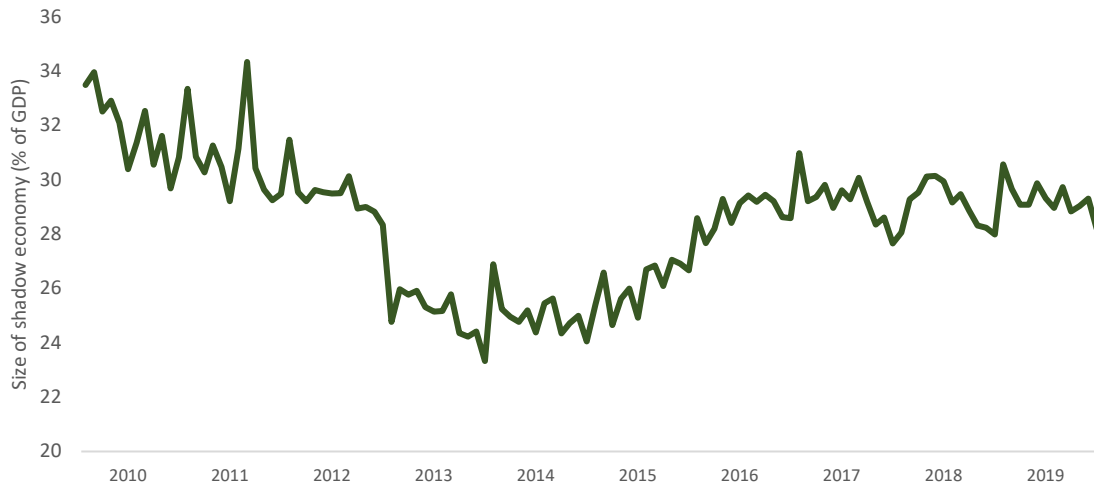
## The Size of Shadow Economy in Malaysia

The shadow economy has been referred to in a wide range of terms in the literature. A broader definition of the shadow economy encompasses all economic activities that are currently unregistered, which have contributed "to the officially calculated (or observed) gross national product" (Schneider & Enste, 2000). Smith (1994) views the shadow economy as "market-based production of goods and services, whether legal or illegal, that escape detection in the official estimates of GDP". Recent studies (e.g., Schneider, 2005, 2009) adopted a relatively narrow definition of the shadow economy as follows: "all market-based legal production of goods and services that are deliberately concealed from public authorities for the following reasons; (i) to avoid payment of income, value added or other taxes; (ii) to avoid payment of social security contributions; (iii) to avoid having to meet certain legal labour public authorities market standards such as minimum wages, maximum working hours,

safety standards, etc; and, (iv) to avoid complying with certain administrative procedure, such as completing statistical questionnaires or administrative forms". We have estimated the size of the shadow economy in Malaysia for the period January 2010 to December 2019 and presented in Figure 1 (for the computation of the size of the shadow economy, see Habibullah et al., 2022). In the early 2010, the size of shadow economy is 34%, decreasing to the lowest level at 23.3% by December 2013 and rising through the next five years, and the size of the shadow economy starts to decline again through the month of 2019, and registering 28.2% in December 2019. For Malaysia's GDP at RM1,513 billion in 2019, and tax rate of 11.9%, the estimated loss of tax revenue is about RM50.8 billion. This amount is more than enough if the collected tax revenue from the shadow economy is use to support the wage increment in the public sector in Malaysia.

Figure 1

Trend of the size of shadow economy, January 2010 to December 2019



Source: Refer to Habibullah et al. (2022) for the calculation of the size of the shadow economy in Malaysia. Data on currency and demand deposits used to calculate the size of shadow economy were collected from various issues of the Monthly Highlights and Statistics published by the Bank Negara Malaysia.

### The Size of Shadow Economy Around the World

In the following infographic, we present the size of the shadow economy around the world estimated for the World Bank by Elgin et al. (2021) using the multiple indicators multiple causes model (MIMIC) approach for the year 2018. The United States and Switzerland registered the lowest size of the shadow economy with 8.2% and 8.3% respectively.

The largest share of shadow economy to the gross domestic product were found for Georgia and Bolivia with 61.2% and 62.8% respectively. As for Malaysia, the estimated size of the shadow economy using the MIMIC model is 29.3%, and this figure is quite close with our estimate using the modified-cash-deposit-ratio (MCDR) with 29.1%.

Figure 2

Size of shadow economy around the world, 2018



Source: Illustrated by EU-ERA based on World Bank estimates. In the case of Malaysia, both estimates from the World Bank and EU-ERA are provided.

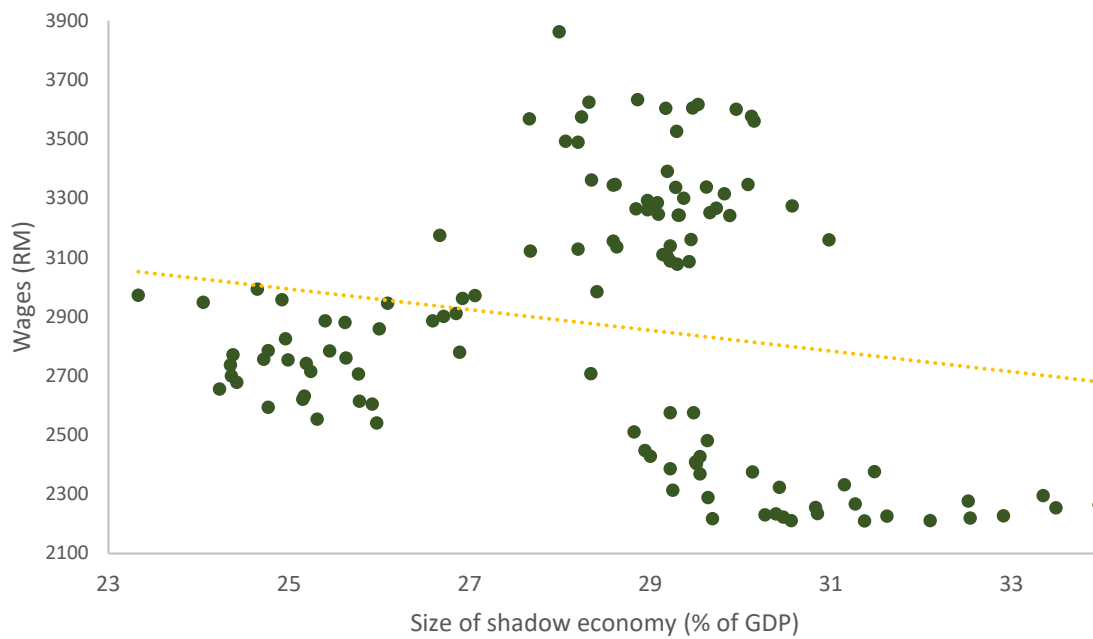
### Mitigating Shadow Economy, Increase Wages?

Figure 3 demonstrate that there is an inverse relationship between wages and the size of the shadow economy. Our empirical evidence presented in Table 1 supports this scenario. The size of the shadow economy has a negative impact on the level of wages. Increase (decrease) in the size of shadow economy will decrease (increase) the level of wages in Malaysia. The estimated wage

elasticities with respect to changes in the size of the shadow economy in Malaysia for the period January 2010 to December 2019, ranges from -0.23% to -0.39%. For example, a 10% reduction in the size of the shadow economy will able to raise the level of wages by 2.3% to 3.9%. This implies that by mitigating the size of the shadow economy, wages will increase in the labour market.

Figure 3

Correlation between wages and the size of shadow economy



Source:

1. Data on wages in the manufacturing sector was collected from Bank Negara Malaysia (National Summary Data Page for Malaysia, available at <https://www.bnm.gov.my/national-summary-data-page-for-malaysia>).
2. Data on real GDP and employment rate were computed from World Development Indicator database (available at <https://data.worldbank.org/indicator?tab=all>).

Table 1

Estimated elasticity of wages with respect to changes in the size of shadow economy

Estimators:	OLS robust	Robust regression	ARDL	FMOLS	DOLS	CCR
Wage elasticities	-0.23***	-0.27***	-0.39***	-0.23**	-0.28***	-0.24**

Notes: Asterisks \*\*\* and \*\* denote statistically significant at the 1% and 5% level, respectively. ARDL, FMOLS, DOLS and CCR denote Autoregressive Distributed Lag, Fully Modified Ordinary Least Square (OLS), Dynamic OLS, and Canonical Cointegrating Regression. Wage elasticity was estimated using multiple regression consisting of  $wage = f(\text{size of shadow economy, real GDP, employment rate})$ . All variables are in logarithm. The regressions were estimated using 6 different estimators, namely OLS with robust standard error, Robust regression (M-estimation) ARDL, FMOLS, DOLS and CCR. All variables were tested for unit root and they are all I(1). All estimated regressions are cointegrated. All control variables - real GDP and employment rate are significant and show positive and negative impact on wages, respectively.

Source:

1. Data on wages in the manufacturing sector was collected from Bank Negara Malaysia (National Summary Data Page for Malaysia, available at <https://www.bnm.gov.my/national-summary-data-page-for-malaysia>).
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Formalising the shadow economy activities is one way to reduce the size of the shadow economy. Income from the formal (firm) economic activities are taxable. Thus, by formalising firms' activities from the shadow economy will reduce tax evasion. Additional tax revenue collected will able the government to increase wages, and provide quality public infrastructure and services. On the other hand, firms that shift out from the shadow economy to the formal economy will be able to

expand their business and conduct business at the international level. Banks are known to conduct their business by providing credit or loan to legitimate firms. Formal firm having access to credit and loan are able to increase their scale and expanding their businesses internationally and increase their profit. Increase in firm's profit, able to increase wages and consequently increase in productivity.

## Strategies to Address the Growth of Shadow Economy

Estimating the size of shadow economy and understanding the behaviour of its participants is important because the presence of shadow economy in any nation affects the economic decision of the government and the welfare of the public. Furthermore, studies have shown that shadow economy is harbouring criminal activities. In terms of economic growth, Eilat and Zinnes (2002) posit that shadow economy may cripple an economy by reducing the tax base and eventually reduces overall tax revenue which is much needed for government expenditure on public infrastructure and enhancing economic development. On the other hand, by excluding shadow economy from the official gross domestic product (GDP) statistics, the official GDP statistics will provide wrong indicators for macroeconomic policy decisions. Furthermore, in the labour market, since firms participate in the shadow economy are not subjected to labour regulations, workers are exploited and have to endure unhealthy and unsafe working conditions, receiving very low wages and with no job security (see Eilat & Zinnes, 2002). Thus, fighting shadow economy should be an important agenda for any government.

A number of strategies, at our disposal can be used to mitigate shadow economy in Malaysia:

**Formalising the shadow economy.** By addressing the root causes of shadow economy development, reduce the entry of new participants and foster the formalisation of existing participants may

encourage firms to move their activities from the shadow to the formal economy. This effort will increase the tax-base in which will increase the government coffers.

**Preventing the growth of shadow economy.** Finding effective detection and enforcement mechanisms that can contained and ultimately reduce the scale of the shadow economy by the governments and regulatory authorities.

**Bringing the shadow economy into the National Development Plan.** Acknowledging the shadow economy's existence and accommodating the sector as a permanent feature of the overall economy could be a long-term strategy to combat the growth of the shadow economy. Countries that adopt this approach include Papua New Guinea, Kwazulu-Natal of South Africa, and Turkiye.

**Education.** Educate the public about the importance and value of services provided by the government and the drawbacks of the shadow economy through the public education system and the media.

**Cashless transaction and digitalisation of payment system.** Cashless transactions and electronic payments are among the means that can be used to reduce the volume of cash transactions, both formal and informal. Electronic payments make in difficult for parties to operate in the shadow economy.

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## EU-ERA Policy Brief


EU-ERA Policy Brief offers a short note with combined analysis and policy recommendations in addressing developmental issues that are directly and indirectly affect the labor market in Malaysia. This policy brief aims to generate a forward-looking and proactive discussion among policymakers, researchers and stakeholders in identifying emerging trends, challenges, and opportunities in the economy. The orientation is toward the real-world policy challenges and opportunities, with an emphasis on providing practical recommendations that can help guide decision-making.

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