

Foreign Workers and Remittance Outflow in Malaysia

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Abstract: This conceptual paper reviews foreign workers and remittance outflows in Malaysia. Foreign workers in Malaysia, who remit a portion of their earnings back home, play a crucial role in the country's economic development. With approximately 1.5 million foreign workers engaged in various sectors such as manufacturing, plantation, construction, and agriculture, Malaysia relies heavily on foreign labor. Predominantly, these workers come from Indonesia, Nepal, and Bangladesh. Factors such as Malaysia's economic performance, government recruitment policies addressing labor shortages, and cultural and geographical proximity influence why these workers choose Malaysia. Despite concerns that foreign workers might negatively impact short-term labor market outcomes by taking jobs from locals and suppressing wages, the evidence suggests their presence does not significantly harm these outcomes. However, the growing number of foreign workers has led to a notable increase in remittance outflows. Remittance outflows represent a transfer of capital from host countries to the workers' countries of origin. Among the ASEAN-5 countries, Malaysia has recorded the highest remittance outflows, surpassing inflows. While research on remittance flows has expanded, the focus has traditionally been on inflows, with outflows receiving less attention due to their relatively small impact on the macroeconomic indicators of sending countries. Existing literature indicates that remittance outflows can influence the economic growth and inflation of sending countries, including Malaysia, despite varied findings.

Keywords: *Foreign Workers, Remittance Outflow, Economic Growth, Inflation*

1. Introduction and Background

Globalization and market integration have characterized the global economy over the past two decades. A significant aspect of this globalization is the integration of labor markets. It is estimated that approximately 272 million people live and work outside their countries of origin (UNDESA, 2019). Malaysia serves as both a destination for immigrants and a source of labor migrants (Young and Konishi, 2006). From 2018 to 2020, Malaysia hosted between 1.4 million and 2 million documented migrants, with unofficial estimates ranging from 1.2 million to 3.5 million additional migrants (International Organization for Migration (IOM), 2019) positioning Malaysia as one of the largest migrant-receiving countries in Southeast Asia. The country also ranks high in terms of the migrant-to-population ratio within the Asia-Pacific region. However, a significant portion of the migrant population in Malaysia has relatively low educational qualifications, with only 52 percent holding tertiary education.

Despite Malaysia's relatively high population growth, the rapid expansion of its economy, increasing urbanization, high educational attainment among its citizens, and the relatively low labor force participation of women have led to a substantial demand for migrant workers to fill low-wage positions. There is significant discourse about the reluctance of local workers to undertake 'dirty, dangerous, and difficult' (3D) jobs. According to official data from the Immigration Department and Ministry of Home Affairs, as of September 2019, Malaysia employed approximately 1.98 million regular migrant workers. About one-third of these workers are employed in the services sector, with 25 percent working in agriculture (World Bank Group, 2020). Migrant workers in Malaysia primarily come from Indonesia, Bangladesh, Nepal, Myanmar, and, to a lesser extent, India, Cambodia, and Lao PDR. They are engaged across various sectors, including manufacturing, plantation, agriculture, services (such as hospitality and security), and domestic work. These labor migrants are vital to the economies of both Malaysia and their home countries, constituting around 20 percent of the Malaysian workforce (International Labor Organization, ILO, 2022) and predominantly filling low-skilled and semi-skilled positions (International Organization for Migration, IOM).

According to Bernama (2023), the anticipated arrival of 500,000 foreign workers in Malaysia this year is not expected to impact job opportunities for Malaysian citizens. These workers will be recruited from 15 Asian

countries and assigned to sectors that generally attract few local workers, such as plantation, agriculture, and construction. Despite the high dependence on foreign labor in these industries, local workers have shown little interest in these roles. Without an adequate influx of foreign workers, the effective functioning of these sectors could be jeopardized, leading to significant operational disruptions and financial losses.

The urgent need to address the worker shortage is critical, as the COVID-19 pandemic led to the return of over 700,000 foreign workers to their home countries. To mitigate this issue, the Human Resources Ministry and the Home Affairs Ministry have streamlined and expedited the foreign worker hiring process, which now takes only three days. Many businesses face potential closures due to insufficient labor. Despite the lifting of restrictions on foreign workers, Malaysia has not seen a significant influx of migrant workers. This is largely due to delays in government approvals and prolonged negotiations over the Memoranda of Understanding (MOUs) with Indonesia and Bangladesh regarding the recruitment and protection of migrant workers. In April 2022, out of 475,000 requested migrant workers, only 2,065 applications were approved (International Labor Organization (ILO), 2022).

The growing number of foreign workers has led to a substantial rise in remittance outflows. Since 1983, the United States has been the top global remittance sender annually, with Russia, Saudi Arabia, and Switzerland following as major contributors since 2007. On a broader scale, the outflow of workers' remittances can negatively impact a country's economic growth by reducing consumption and investment activities within the host country. Remittance outflows represent a leakage from the circular flow of income, diminishing the funds available for economic activity. Excessive leakage can hinder economic growth, as the substantial sums transferred by foreign workers to their home countries are not utilized for consumption or investment in the host country. Consequently, these outflows act as withdrawals from the circular flow of money, reducing overall economic activity and negatively affecting aggregate demand (Termos et. al, 2013 and Alkhatlan, 2013). Many low-skilled foreign workers in Gulf Cooperation Council (GCC) countries live away from their families, which contributes to their tendency to send a significant portion of their earnings back home (Naufal & Genc, 2017).

A local economic think tank has warned that Malaysia's current account balance could slip into deficit in the latter part of 2017 if export performance does not improve and if the outflow of ringgit due to foreign workers' remittances continues to rise. In the second quarter of 2016, Malaysia's net current account balance fell to RM1.9 billion, a decrease from RM5 billion in the first quarter. Despite steady growth in exports when measured in ringgit, they have been declining in US dollar terms for over 20 months. Rising remittance outflows are intensifying concerns about a potential current account deficit as early as 2017, particularly if global trade remains sluggish. These remittance outflows are viewed as a form of economic leakage, reducing the amount of capital available for domestic consumption and investment, which in turn diminishes local demand.

Nevertheless, there are alternative views on remittance outflows that may challenge prevailing assumptions. While some view remittances as a financial drain on Malaysia, they can offer economic benefits. For example, the government can impose a six percent Goods and Services Tax (GST) and corporate tax on these remittances. Moreover, as the remittance sector grows, it can create positive spillover effects, supporting various service industries and providing additional revenue to the Malaysian economy (Rosli, 2018).

This paper aims to review recent empirical research on the impact of foreign workers and remittance outflows in Malaysia. Section 2.0 outlines the trends in foreign workers in Malaysia and their effects on the local economy. Section 3.0 explores the impact of remittance outflows on Malaysia's economy and their influence on other countries' economies. The final Section 4.0 provides concluding remarks. While much of the existing research on remittance outflows has concentrated on Gulf Cooperation Council (GCC) countries, especially regarding their effects on economic growth and inflation, there is a notable lack of studies focusing specifically on Malaysia and other significant remittance-sending nations such as the USA, Russia, Germany, and Switzerland.

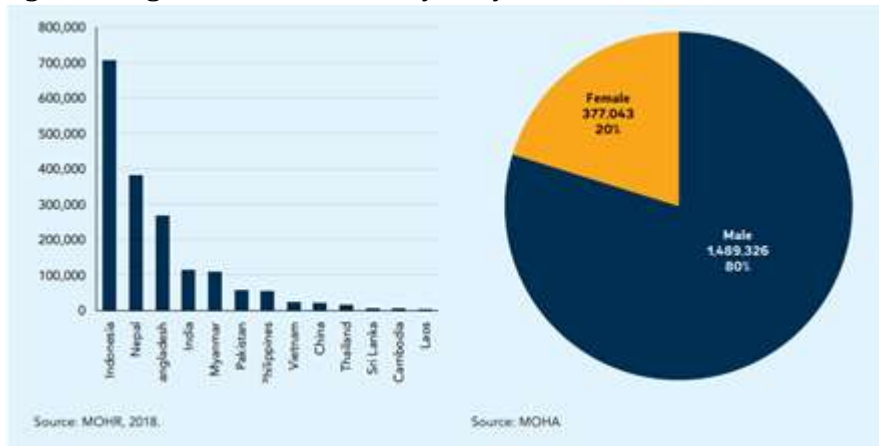
2. Foreign Workers

The Trend Theories and The Determinants of Foreign Workers in Malaysia

The rise in migrant workers has been significantly influenced by demographic changes, internal conflicts, climate change, and income inequality (Edrees, 2015). Numerous theoretical models have been proposed to explain international migration, though many have been developed independently of one another. These theories include the Neoclassical Theory of Migration, Human Capital Theory, New Economics of Labor Migration Theory, Dual Labor Market Theory, Trade Theory, and Gravity Model Approaches. Additionally, various models such as the Ricardian model, the Specific Factors model, the Heckscher-Ohlin model, and the Push and Pull Factors model also offer explanations for the migration process (Jajri and Ismail, 2014).

Figure 1 illustrates the distribution of migrants in Malaysia for the year 2018. The largest group of migrants originates from Indonesia, totaling 700,000 individuals. Following Indonesia are migrants from Nepal, Bangladesh, India, Myanmar, Pakistan, and the Philippines. The data also indicates that the number of male workers exceeds that of female workers.

Figure 1: Migrant Workers in Malaysia by 2018



The migration of unskilled and short-term labor from Bangladesh to Malaysia has been a persistent trend with significant economic implications for both countries: it provides vital remittances to Bangladesh and helps meet Malaysia's demand for '3D' (dirty, dangerous, and difficult) labor (Mannan and Farhana, 2015). For Nepali migrant workers, Qatar has been the top destination, receiving 32% of them, followed by Malaysia at 24%, and the UAE and Saudi Arabia, each attracting 17% from 2015 to 2019. Male migrants primarily head to the UAE, Qatar, Malaysia, Jordan, Cyprus, Saudi Arabia, Kuwait, and Turkey. In contrast, female migrants, who mostly work as domestic helpers, tend to migrate to the UAE, Qatar, Malaysia, Kuwait, Jordan, and Cyprus, which together account for approximately 75% of female migrant workers (IOM, 2019). Indonesian migrants are driven abroad by high domestic unemployment, with Malaysia being a significant destination. Additionally, increased remittances to Indonesia often encourage Indonesians to either seek or maintain employment abroad (Abd. Rahim, et. al., 2017).

Malaysia is a significant destination for economic migrants from Myanmar, including those from Chin State. For these migrants, remittances are vital for supporting their families' livelihoods. Research indicates that the main reasons for migration among residents of Chin State are poverty, decreased agricultural productivity due to climate change, and limited local job opportunities. Additionally, migrants from Chin State experience systemic discrimination in Myanmar, including ethnic and religious biases, military oppression, and human rights abuses. The higher wages available in Malaysia enable these migrants to repay debts and fulfill their families' essential needs and welfare (Khai and Sawm, 2023).

Malaysia attracts foreign workers due to its robust economic performance and government policies aimed at addressing labor shortages. Cultural and geographical proximity also play important roles in this trend. The

country's rapid economic growth, coupled with high labor demand, lower costs, and industrialization, has made Malaysia an appealing destination for foreign workers (Noor et. al., 2011). The ongoing economic expansion and the continued need for unskilled labor are expected to keep drawing migrants from neighboring countries. Significant economic and educational disparities between Malaysia and its more populous neighbors, such as Indonesia and the Philippines, are key drivers behind these migration patterns. The demand for foreign unskilled labor in Malaysia is driven by several important factors. Firstly, there has been a notable advancement in the education and skill levels of the Malaysian workforce. Secondly, certain sectors continue to be critical and labor-intensive, including agriculture, low-skill and low-technology manufacturing (such as wood products), and domestic services like construction (Carpio et al, 2015).

Jajri and Ismail (2014) identify the real wage ratio between Malaysia and the ASEAN-3 countries (Indonesia, Thailand, and the Philippines) as a key factor influencing migration patterns. They found that a higher wage ratio negatively impacts migration, with a stronger effect observed in Indonesia and the Philippines compared to Thailand. The exchange rate is also crucial, as a stronger exchange rate tends to reduce migration. Additionally, high unemployment rates in the migrants' home countries act as a push factor, encouraging people to seek opportunities in Malaysia. The real wage ratio is closely linked to the GDP levels of the countries involved. If Malaysia's GDP grows faster than that of its ASEAN-3 neighbors, the resulting decrease in the wage ratio is likely to lead to increased migration.

The Advantages and Disadvantages of Foreign Workers in Malaysia

Migrant workers play a crucial role in driving economic growth in host countries by broadening the workforce, stimulating new business ventures, and supporting various developmental activities. They enhance economic efficiency by filling both low- and high-skill labor markets. The influx of foreign workers contributes to greater human capital accumulation, which in turn facilitates technology transfer in the host countries (Edrees, 2015). Foreign labor has a significant positive impact on labor productivity and does not merely serve as a direct substitute or complement to domestic labor (Noor et. al. 2011). At the enterprise level, the presence of foreign workers has been vital for the expansion of many sectors, especially within export-oriented manufacturing industries (Carpio et al., 2015).

The influx of foreign labor in Malaysia has generated considerable debate about its effects on Malaysian workers and businesses. One major concern is that foreign workers might displace local workers or drive down their wages. Additionally, the abundance of inexpensive labor may reduce firms' motivation to invest in advanced technologies and improve their operations. The rise in undocumented foreign workers—those who have either entered Malaysia without proper permits or overstayed their visas—presents further challenges. A large number of undocumented workers can complicate the enforcement of minimum wage laws and the management of sector-specific visa quotas and levies (Carpio et al., 2015). Moreover, Malaysia's heavy dependence on foreign labor may hinder local companies from advancing up the value chain and enhancing the country's economic competitiveness. There are also significant socioeconomic impacts, as the influx of low-paid, unskilled foreign workers can suppress wages for Malaysian workers at the lower end of the labor market (The Straits Times, 2016).

In contrast, existing empirical research on the impact of foreign workers tends to be positive, with limited evidence supporting significant negative economic effects. Numerous studies have highlighted a discrepancy between public perceptions and the findings of economic research regarding foreign workers. These workers typically occupy unskilled positions, which minimizes direct competition with Malaysians, who generally hold semi-skilled and skilled roles. As a result, foreign workers do not significantly affect employment opportunities or wages for local workers. However, the long-term implications of foreign labor remain uncertain. The availability of a large pool of unskilled labor could potentially pose risks to Malaysia's economic structural transformation. Industries that rely heavily on foreign workers often show lower levels of investment in technology. Persistent dependence on low-cost foreign labor might deter investment in innovation and high-skill jobs, potentially hindering Malaysia's progress toward becoming a high-income nation (Allen and Tan, 2019).

The Challenges of Foreign Workers in Malaysia

One major challenge for foreign workers in Malaysia is the depreciation of the ringgit. According to Malaysia's

leading private-sector employers' association, foreign workers are demanding higher wages to offset the reduced value of the ringgit. Sectors such as services, construction, and plantations are particularly affected. Due to the unfavorable exchange rate, some foreign workers are sending less money back home (Shamsundari, 2016). Consequently, many workers are considering returning to their home countries rather than continuing to earn in a devalued currency. While large companies are exploring wage adjustments and subsidies to support remittances, workers employed by smaller firms are less inclined to renew their permits due to the high associated costs (The Straits Times, 2016).

Some foreign maids are using the devaluation of the Malaysian ringgit as leverage to demand wage increases of up to 40 percent. Industry insiders observe that workers from Indonesia and Vietnam are primarily employed in manufacturing, while those from Thailand are concentrated in the services sector. Workers from Nepal, Bangladesh, and Cambodia mainly work in construction. The foreign maid sector is predominantly staffed by Indonesian workers. However, those most inclined to leave due to the ringgit's decline are from Thailand, Indonesia, and Vietnam. As a result of the currency's depreciation, Malaysia has fallen out of the top three preferred destinations for these workers. Indonesian workers, in particular, are now seeking employment opportunities in Singapore, Hong Kong, Taiwan, or the Middle East instead (Kong, 2015).

3. Remittance Outflow

The Theory of Remittances

The Neoclassical Theory posits that individuals migrate to other countries in pursuit of higher-paying job opportunities, sending remittances back home to support their families and enhance their standard of living. This migration is considered a rational economic choice aimed at maximizing income (Gheasi and Nijkamp, 2017). In contrast, the New Economics of Labor Migration (NELM) theory highlights that migration decisions are often made collectively by households rather than individuals alone. Remittances are seen as a strategy to diversify income sources and mitigate risks in the home country. These funds can be invested in areas such as education, healthcare, and other productive activities (Taylor, 1999).

Transnationalism theory emphasizes that migrants continue to maintain robust social, cultural, and economic connections with their home countries even after relocating abroad. Remittances are viewed as a means to sustain these transnational ties and foster development in both the sending and receiving countries (Martiniello, 2021). On the other hand, dependency theory suggests that remittances can reinforce dependency relationships between sending and receiving countries. Although remittances provide essential income, they may also hinder the development of domestic industries and obstruct the structural changes necessary for economic growth (Abby, 2020).

Certain theories highlight that remittances can act as a source of investment capital for development projects in the home country. Migrants may use these funds to invest in businesses, infrastructure, or financial assets that support economic growth (Chami et. al., 2003). Network theory underscores the importance of social networks in facilitating both migration and remittance flows. Migrants often depend on personal connections within their communities abroad to secure employment and send money back home (Sha, 2021).

The Trend and Determinants of Remittance Outflow in Malaysia

According to Neoclassical Theory, an increase in remittances constitutes non-labor income. When non-labor income rises, laborers tend to prefer leisure, which is considered a normal good, leading to a reduction in labor supply and agricultural output. However, if increased remittances are invested in capital goods and advanced technology, they can boost production levels (De Brauw, 2010).

Due to the growing number of foreign workers, Malaysia experienced higher remittance outflows compared to inflows. From January to September 2014, foreign workers remitted approximately RM23.07 billion out of Malaysia through around 113 million transactions (Malaysia Kini, 2015). Among the recipients, Nepal received the largest number of remittances, totaling Rs132.75 billion, making Malaysia the most favored destination for Nepali migrant workers. According to the Nepal Rastra Bank (NRB), Nepali migrant workers sent home Rs132.75 billion in the first 11 months of the last fiscal year, which accounts for 22 percent of the total remittances received by Nepal.

Table 1: Comparing Malaysian Remittance Outflow with the Other Top Remittance Sending Countries

Years	Outward remittance flows (US\$ million)							
	United States	Saudi Arabia	Switzerland	Germany	China	Russian Federation	France	Malaysia
2010	50,527	27,069	18,512	14,682	1,455	21,454	12,026	8,628
2011	50,854	28,475	23,680	16,126	1,618	26,010	12,858	9,422
2012	52,371	29,493	23,740	15,581	1,788	31,648	12,561	8,958
2013	55,003	34,984	25,338	19,977	1,714	37,217	13,425	8,982
2014	57,239	36,924	26,817	20,084	4,155	32,640	13,730	10,192
2015	60,719	38,787	26,031	18,249	5,718	19,689	12,792	10,483
2016	62,870	37,843	26,049	19,348	6,211	16,244	13,284	10,105
2017	64,058	36,119	26,935	21,699	16,253	20,610	13,799	9,394
2018	67,009	33,882	27,675	24,351	16,548	22,308	15,075	10,916
2019	71,562	31,197	28,180	23,936	15,135	22,217	15,088	11,377
2020	68,000	34,596	27,965	22,024	18,121	16,895	15,038	9,066

Source: GDP data from IMF World Economic Outlook, Outward Remittance Flow from Knomad. Date: May 2021

Table 1 provides a comparison of Malaysia's remittance outflows with those of other leading remittance-sending countries in 2021. The United States leads in remittance outflows, followed by Saudi Arabia, Switzerland, Germany, China, the Russian Federation, and France. In 2020, Malaysia's remittance outflow was 9,066 million USD. Over the past decade, Malaysia has experienced a general increase in remittance outflows, rising from 8,628 million USD in 2010 to 11,377 million USD in 2019.

Table 2: Comparing Malaysia with Other Countries; Remittances as a share of GDP in 2020 (%)

Countries	Remittances as a share of GDP in 2020 (%)
Timor-Leste	22.2%
Luxembourg	19.4%
United Arab Emirates	12.2%
Qatar	7.4%
Tonga	5.7%
Seychelles	4.0%
Solomon Island	4.2%
Saudi Arabia	4.9%
Switzerland	3.7%
Malaysia	2.7%

Source: GDP data from IMF World Economic Outlook, Outward Remittance Flow from Knomad. Date: May 2021

Table 2 shows the remittances as a share of GDP in 2020 in percent. The highest share is Timor-Leste, followed by Luxembourg, United Arab Emirates, Qatar, Tonga, and other countries. Remittance outflow sums are large but in relative terms, the picture can be different. Typically outflows go from wealthier economies to developing countries. So, the GDP of the sending economies is usually large (Naufal and Genc, 2017).

Table 3: Remittance Outflows and Remittance Inflows in the ASEAN-5 Countries

Years	Outward remittance flows (US\$ million)				Years	Migrant remittance inflows (US\$ million)			
	Malaysia	Indonesia	Thailand	Philippines		Malaysia	Indonesia	Thailand	Philippines
2010	8,628	2,840	3,027	109	2010	1,103	6,916	4,433	21,557
2011	9,422	3,164	2,921	135	2011	1,211	6,924	5,256	23,054
2012	8,958	3,634	2,893	152	2012	1,294	7,212	5,657	24,610
2013	8,982	3,951	3,289	210	2013	1,423	7,614	6,585	26,717
2014	10,192	4,119	3,620	183	2014	1,580	8,551	6,524	28,691
2015	10,483	4,605	3,992	153	2015	1,644	9,659	5,895	29,799
2016	10,105	5,151	4,155	196	2016	1,604	8,907	6,270	31,142
2017	9,394	5,177	4,397	246	2017	1,649	8,990	6,720	32,810
2018	10,916	5,148	4,924	259	2018	1,686	11,215	7,466	33,809
2019	11,377	5,071	8,913	226	2019	1,638	11,666	8,162	35,167
2020	9,066	4,547	7,898	211	2020e	1,454	9,651	8,067	34,913

Table 3: Remittance Outflows and Remittance Inflows as Share of GDP in 2020 (%)

Outward remittance flows (US\$ million)				Migrant remittance inflows (US\$ million)			
Malaysia	Indonesia	Thailand	Philippines	Malaysia	Indonesia	Thailand	Philippines
2.7	0.4	1.6	0.1	0.4	0.9	1.6	9.6

Source: Knoema

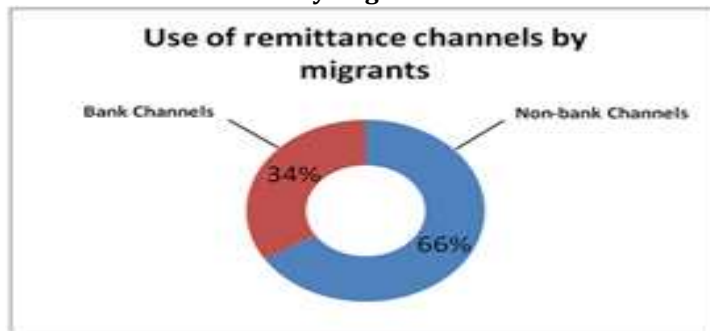
Table 3 shows the inward and outward remittance flows in ASEAN-5 countries excluding Singapore. It shows that in 2019 the remittance outflow and its share of GDP from Malaysia are the highest, followed by Thailand, Indonesia, and the Philippines. As for the remittance inflow, the Philippines recorded the highest followed by Indonesia, Thailand, and Malaysia.

Foreign workers in Malaysia frequently send a significant portion of their earnings back to their home countries. According to Mustapa and Pasquire (2007), immigrant construction workers typically spend less than their Malaysian counterparts and remit the majority of their income abroad. This high level of remittances can be attributed to the nature of their work and their transient lifestyle. Sayed Mahadi et. al. (2017) found that Indonesian migrant workers in Sabah who had families were less inclined to send money back to their families in Indonesia, as they needed to address family needs in Malaysia. This indicates that migrants with families tend to spend more locally and support the Malaysian economy rather than remit funds to their home countries.

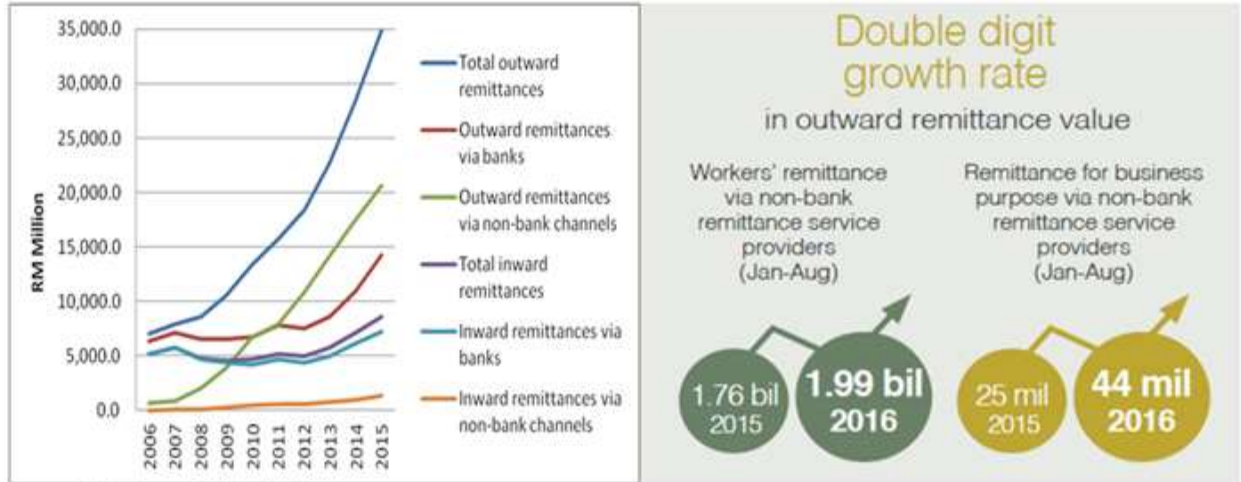
Remittance Channels to Remit Money from Malaysia to the Host Countries

Figure 2 illustrates the methods used by migrants to send remittances to their home countries. According to the data, 34% of migrants utilize bank channels for their remittances, whereas 66% use non-bank channels.

Figure 2: Use of Remittance Channels by migrants



Source: apmigration.ilo.org (2017)



Source: Bank Negara Malaysia (2016)

Figure 2 illustrates the preferred methods used by foreign workers in Malaysia for remitting money. In 2016, 1.99 billion USD was sent through non-bank remittance services, with an additional 44 million USD remitted for business purposes via these providers. Malaysia is among the few countries that have met the United Nations' Sustainable Development Goals (SDG) target of reducing the cost of cross-border remittances through non-bank services to 3% by 2030. This achievement is largely attributed to increased competition within the remittance sector and the rise of digital transfer methods, which enhance transparency and facilitate cost comparisons among service providers. By the end of 2017, Malaysia had 344 licensed money services companies operating a total of 2,979 branches. Of these, 34 are direct remittance service providers, and 17 offer digital remittance options (Rosli, 2018).

The adoption of e-remittance services provided by remittance companies saw substantial growth in 2020. The total value of e-remittance transactions surged to RM6.6 billion, more than double the RM3.2 billion recorded in 2019, and represented 25% of total outward remittances, up from 14% the previous year. This increase was driven by the reduced costs associated with e-remittance services and the ease of the electronic onboarding process (e-KYC), which enhanced the user experience. The expansion of e-remittance capabilities also played a key role in the industry's rapid recovery from the pandemic, with total outward remittances reaching RM26.5 billion, a 12% increase from 2019. Despite a general decline in remittances due to weaker economic conditions, the sector saw growth in outward remittances through remittance providers, with individual remittances rising by 9% and business remittances by 89% compared to the previous year (BNM Annual Report, 2021).

The Effects of Remittances Outflow

Table 4: The Effects of Remittance Outflow on Economic Growth

Author	Dependent Variables	Independent Variables	Data	Methodology	Results
Alkhatlan (2013)	Real GDP	Outflow of workers' remittances, government expenditure, export, inflation	Saudi Arabia, 1970 - 2010	Autoregressive distributed lag (ARDL), Error Correction Model (ECM)	Negative but statistically insignificant relationship between the outflow of workers' remittances in the long run but a negative and statistically significant relationship between workers' remittances and economic growth in the short run.
Edrees	Natural log	Natural log of	United Arab	Autoregressive	The negative impact is in

(2016)	of GDP per capita	foreign workers and natural log of outflow remittances	Emirates, Saudi Arabia, and Qatar, 1985 to 2014	Distributed Lag approach (ARDL)	the long term. It is not significant in the short term.
Al Kaabi (2016)	Real GDP	Real remittances outflow, CPI inflation rate, government spending as a percentage of GDP, exports as a percentage of GDP, previous year investment as a percentage of GDP	Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (GCC countries), 2004 - 2014	Panel Data	Growth in remittance outflows affects growth in real GDP only in the case of Saudi Arabia.
Rahmouni and Debbiche (2017)	real per capita gross domestic product	Personal remittance outflows, gross fixed capital formation, general government final consumption Expenditure, trade openness, human capital	Saudi Arabia during the period 1970 to 2014	Autoregressive Distributed Lag approach to Error correction modeling (ARDL-ECM)	Both in the long and short term, remittances outflows have no significant effect on GDP.
Naidu, et. al. (2017)	GDP growth rate	remittance outflows	Japan	Granger Causality Model	In the long run, a 1% increase in remittance outflows will decrease the GDP growth rate by 0.000793%. In the short run, a 1% increase in remittance outflows and inflows will decrease the GDP growth rate by 0.000599% and 0.000327% respectively.
Ouni and Miniaoui (2019)	Economic Growth	Remittance Outflow	GCC Countries	Panel Techniques	Remittances have a +ve and significant impact on economic growth.
AlHarbi (2022)	non-oil economic growth (NOGDP)	Labor force, capital formation, remittance outflows,	Saudi Arabia, 1990 to 2020	Nonlinear Autoregressive Distributed Lags (NARDL)	Remittance outflows in the Saudi economy have an unbalanced and considerable impact on NOGDP. However, the positive coefficients of negative and positive shocks in remittance outflows indicate the benefits of remittance outflows to the Saudi non-oil sector.

Islam & Alhamad (2023)	economic growth	Remittance outflow	Saudi Arabia 1985 to 2019	Nonlinear Autoregressive Distributed Lags (NARDL) technique	Confirm a cointegrating association among variables and reveal that RO has mixed but negative resultant impacts on the EG in the short run, while in the long run, EC growth is augmented if remittance outflows decline.
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The Effects of Remittance Outflow Worldwide

Overall, research on remittance flows has expanded, but the emphasis has predominantly been on remittance inflows. The limited focus on outflows is attributed to their relatively small impact on major macroeconomic indicators in sending economies and the preference of policymakers and development economists for studying the development impacts of inflows. Studies on remittance outflows are relatively recent, with the earliest research emerging in 2013. Current literature primarily examines the effects of remittance outflows on macroeconomic variables such as economic growth, monetary policy, and inflation, with most empirical evidence concentrated in Gulf Cooperation Council (GCC) countries (Naufal & Genc, 2017).

Among the existing research, studies by Alkathlan (2013), Edrees (2015), Al Kaabi (2016), Rahmouni and Debbiche (2017), Naufal and Genc (2017), and Al Harbi (2022) examine the impact of remittance outflows on GDP. Table 3.1 provides a summary of the variables used, the data sources, study periods, methodologies, and key findings of these studies. Overall, the findings regarding the effects of remittance outflows on economic growth are mixed. Most of these studies employ the ARDL (Autoregressive Distributed Lag) approach to analyze both the long-term and short-term relationships among the relevant variables.

Termos, Naufal & Genc (2013) and Al Kaabi (2016) investigate the impact of remittance outflows on inflation in the countries from which remittances originate. Table 5 outlines the variables examined, data sources, study periods, methodologies, and key findings of these studies. Both studies utilized panel data to analyze the relationship between remittance outflows and inflation.

Table 5: The Effects of Remittance Outflow on Inflation

Author	Dependent Variable	Independent Variables	Data	Methodology	Results
Termos et. al. (2013)	Inflation	Past inflation, remittance outflows, GDP, trade, current account, national debt, price of oil, interest rate	Six GCC countries, 1972 - 2010	Ordinary least squares (OLS), fixed effects (FE), and Anderson - Hsiao (AH) estimations	Remittance outflows affect inflation negatively.
Al Kaabi (2016)	CPI inflation rate	Growth in nominal remittance outflows, crude oil price inflation rate, growth in money supply	Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (GCC countries), 2004 - 2014	Panel Data	Growth in remittance outflows affects inflation only in the case of Bahrain.
Sbia and Hamdi	Inflation Rate	Remittance Outflows	14 OPEC countries	Bias-corrected least-squares	Remittance outflows do not affect the inflation

(2021)			from 1980-2012	dummy variable (CLSDV) estimator	rate.
Al-Abdulrazag & Foudeh (2022)	Inflation	Remittance Outflow	Saudi Arabia from 1971-2019	Autoregressive distributed lag (ARDL) model	There is a significant negative impact of inflation on remittance outflows, and the short-run and long elasticities of remittance with respect to inflation are 0.26% and 0.32% respectively.

4. The Remittance Outflow Effects on the Malaysian Economy

A review of various databases reveals that research focusing specifically on remittance outflows in Malaysia is limited. Notable studies include Razali et al. (2016), who examined the short-run and long-run relationships between remittance outflows and economic growth in Malaysia from 1982 to 2014. Their findings indicated that remittance outflows had a significant positive impact both in the short and long term. Another key study by Taasim (2020) explored the relationship between per capita GDP and remittances in Malaysia from 1987 to 2018 using the nonlinear autoregressive distributed lags (NARDL) approach introduced by Shin et al. (2014). The results demonstrated that remittances have a substantial short-term and long-term effect on capital accumulation in Malaysia, indicating their role as a significant source of external capital and investment that supports economic development. Additionally, Mehmood et al. (2020) investigated whether remittance outflows and exchange rate fluctuations affect domestic private investment in ASEAN countries, employing panel cointegration techniques in their analysis.

Compared to remittance outflow, the existing literature on the effects of remittance inflow on the Malaysian economy is more. It was studied by Chandio et al., (2023), Hien (2017), and Koay and Choong (2013). Chandio et al., (2023) found that remittance inflows significantly boost agricultural output in the estimation of the long run in selected emerging Asian economies including Malaysia. Hien (2017) found that remittance influences the trade balance positively. Malaysia did not face a symptom of Dutch disease impacted by the remittance. Koay and Choong (2013) found that remittances and financial development are statistically significant in affecting the economic growth of Malaysia. While Fagerheim and Garvik (2015) found that remittances have a mixed impact on economic growth. Other studies on remittance outflow in Malaysia were conducted by Mosfi et. al. (2013) and Fara Diva (2008) as in Table 6.

Table 6: Other studies related to remittance outflow in Malaysia

Author	Objective	Results
Mosfi et. al. (2013)	Descriptively analyze the demographic and socioeconomics of foreign workers in the oil palm plantation sector on remittances.	Demographic and socioeconomic characteristics are significant in explaining the pattern, decisions, and motivations for sending money to the homeland.
Mustapa & Pasquire (2007)	Identify the spending and remittance patterns of construction immigrant workers in Malaysia.	These workers spend less than Malaysian nationals and remit most of their income to their home country.

5. Conclusion

Effectively managing foreign workers and optimizing remittance outflows for Malaysia's benefit requires a comprehensive, multifaceted approach that addresses economic, regulatory, and social aspects. It is essential

to streamline and modernize the immigration and labor documentation processes to ensure that all foreign workers are properly registered. This would help to reduce illegal employment, facilitate the monitoring of labor flows, and mitigate human trafficking. Strengthening enforcement against the employment of undocumented workers is also crucial to ensure that companies hire through legal channels, which would enhance the regulation and oversight of remittance flows. Furthermore, the implementation of training and upskilling programs for foreign workers would enable them to contribute more effectively to Malaysia's economy, reducing dependence on lower-skilled labor and fostering more productive work environments. Additionally, improving the living conditions of foreign workers can lead to higher productivity and foster positive economic contributions, thereby alleviating social tensions between foreign workers and the local population.

To encourage foreign workers to retain a larger portion of their earnings within Malaysia, the government can implement a range of financial incentives. For example, banks could be encouraged to offer competitive savings account rates specifically designed for foreign workers, while partnerships with businesses could provide discounts or reward programs, further motivating local expenditure. Additionally, foreign workers should be incentivized to invest part of their earnings in local financial products, real estate, or businesses. This could include participation in government bond schemes or other secure investment instruments, ensuring that a portion of their income remains in Malaysia, thereby contributing to the domestic economy.

To ensure the stability of the financial system and to effectively track remittance outflows, most remittance transactions must occur through formal channels such as banks or regulated remittance companies. Collaboration between the government, banks, and money transfer operators could focus on reducing transaction fees and simplifying the remittance process, thereby encouraging the use of these formal pathways. Furthermore, the implementation of a minimal tax on remittance outflows could generate additional revenue that can be reinvested in initiatives benefiting both local populations and foreign workers. However, such taxes must be applied cautiously to avoid driving transactions into informal channels, which could undermine the regulatory framework.

Bilateral agreements with countries such as Indonesia, Bangladesh, and Nepal, which are key sources of foreign labor, could incorporate cooperative frameworks aimed at managing remittances and fostering shared development programs. Joint investment initiatives or projects could ensure that remittance outflows are utilized productively in both Malaysia and the workers' home countries. In the long term, Malaysia should work towards reducing its dependence on low-skilled foreign labor by increasing investments in automation and technology, particularly in key sectors like agriculture, construction, and manufacturing. This shift would enhance productivity while decreasing the need for foreign workers.

Additionally, creating incentives for Malaysians to engage in sectors that are currently reliant on foreign labor could further reduce dependency on foreign workers. Targeted vocational training programs, especially for individuals in underserved rural areas, could help develop the local workforce, enabling Malaysians to fill labor gaps in industries such as construction and agriculture. These measures would not only bolster Malaysia's labor market resilience but also contribute to long-term economic sustainability.

Malaysia should also improve data collection on the number of foreign workers, their countries of origin, remittance behavior, and economic contribution. This data can help in making more informed policies related to labor migration and remittance outflows. Implementing a labor market matching system can ensure that only the required number of foreign workers are brought in to fill specific gaps in the economy, preventing oversupply and social tensions. Employers should be incentivized to ensure the well-being of their foreign workers. This includes ensuring fair wages, appropriate accommodations, and adequate healthcare. Encouraging a partnership approach between the government, employers, and workers can help create a sustainable and balanced system. By focusing on these areas, Malaysia can better manage its foreign workforce and redirect remittance outflows in a way that supports both the domestic economy and the well-being of foreign workers.

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