

Exploring Malaysia's Double Tax Deduction (DTD) for Research and Development Qualifying Expenses

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Abstract

This study explores the importance of Section 34B of Malaysia's Income Tax Act 1967, which must be complied to in conjunction with Section 2 of the same act. Section 34B introduces the principle of Double Tax Deduction (DTD) for eligible science and technology (S&T) research and development (R&D) activities. The study employed qualitative methodologies to examine the procedures involved in designing qualifying expenses for DTD, and its impact on the local innovation ecosystem. Insights were obtained from at least fifteen (15) selected local industry representatives and researchers who have received benefits from the DTD incentive by participating in contracted R&D projects during the previous five years. The results suggested that the DTD incentive provides benefits for "Approved Research Institutions (ARI)" by promoting increased collaborations, improving competitiveness, and fostering partnerships with local industries. Furthermore, it highlights the significance of being transparent and accountable by adhering to compliance and reporting obligations. Consequently, this enhances and maintains dynamicity in the innovation ecosystem. During the study, it was discovered that DTD is appealing but requires a comprehensive understanding in order to effectively incorporate eligible activities and expenses while adhering to the limitations of DTD. The study ultimately shows that the DTD fosters local innovation and stimulates national socioeconomic development, which in turn benefits local businesses and the innovation ecosystem. This leads to effective and sustainable socioeconomic progress in the country.

Key words: *Double Tax Deduction, Research and Development, Prosper Innovation Ecosystem*

1.0 INTRODUCTION

An effective tax system is essential for sustainable economic growth and the overall welfare of society. Taxes provide the necessary financial resources for vital public services, infrastructure projects, and social programs, which in turn promote economic growth and shape individual actions. Additionally, they contribute to the redistribution of wealth, the mitigation of income inequality, and the fostering of social stability. Taxes directly affect the amount of money individuals have available to spend and the choices they can make regarding their lifestyle, while simultaneously influencing businesses by impacting profitability and investment decisions. Taxes are crucial for governments to fund public services and ensure fiscal stability. An effectively structured tax system promotes economic stability, efficient allocation of resources, social welfare, and competitiveness, ultimately bolstering a prosperous and sustainable society.

To effectively utilize the Double Tax Deduction (DTD) under Malaysia's Income Tax Act, it is crucial to understand its purpose, eligibility criteria, and qualifying expenses. The DTD generally provides tax relief to encourage R&D investment, benefiting businesses by reducing tax burdens and enhancing

competitiveness. Additionally, it promotes collaboration between innovators and institutions, drives economic development, and impacts local R&D investment. Key considerations include complying with limitations, understanding the tax implications for domestic versus foreign income, and reviewing relevant case studies. Evaluating the DTD's effectiveness ensures that its benefits for innovation and growth are fully maximized.

1.1 Double Tax Deduction in Malaysia

In Malaysia, the government has actively embraced the promotion and incentivization of research and development (R&D) activities to enhance the country's global market presence and socioeconomic growth. To bolster the local innovation ecosystem, the existing provision of Section 34(7) in the Income Tax Act, which initially allowed a single deduction for non-capital expenses related to scientific research, was considered insufficient to drive substantial R&D investment. Consequently, the government introduced a comprehensive set of incentives, including the double deduction provision outlined in Sections 34A and 34B of the Income Tax Act, 1967 (ITA), specifically targeting qualifying R&D expenses.

Sections 34A and 34B serve as compelling incentives for business entities by providing financial advantages when they seek innovative solutions through research. These sections allow companies to benefit from tax deductions, which support their investment in research and development, thereby encouraging the pursuit of advanced and creative solutions. Thus, qualifying local companies to claim a double deduction for expenses or payments made towards qualifying R&D services provided by approved research institutions (ARI). It is important to note that only companies (not an individual) that are subject to corporate tax and are actively paying taxes are eligible for the DTD; companies that are not taxed do not qualify for this benefit. By incorporating R&D incentives within the framework of the Income Tax Act of 1967, the government not only encourages R&D activities but also fosters collaboration between business entities and R&D service providers. This approach helps cultivate a dynamic ecosystem that is conducive to innovation and development.

Demonstrating the government's commitment to economic growth and technological advancement, the Double Tax Deduction (DTD) incentivizes companies to invest in R&D, thereby enhancing the local innovation ecosystem (Zainol Ariffin et al., 2023). By offering tax benefits, the DTD encourages partnerships between local business entities and research institutions, allowing them to fund advanced technology projects. This not only boosts market competitiveness but also supports technology transfer and talent development. Overall, the DTD provision stimulates industry-academia collaborations, drives technological progress, and fosters economic growth.

1.2 Challenges with Double Tax Deduction in Malaysia

Despite the high importance placed on the Double Tax Deduction (DTD) incentive by the government, several challenges affect its effectiveness. Limited awareness among eligible business entities leads to underutilization and missed R&D investment opportunities. Complex eligibility criteria and detailed documentation requirements create confusion and compliance issues. The lack of clear guidance and support makes it difficult for companies to effectively utilize the DTD. Additionally, insufficient platforms for networking and collaboration hinder innovation and knowledge sharing. Smaller enterprises struggle with compliance due to resource constraints, which could be addressed by simplifying processes. The absence of robust evaluation and monitoring mechanisms means the DTD's impact on local innovation is not fully assessed, preventing necessary improvements. Addressing these challenges is crucial for maximizing the DTD's benefits, enhancing Malaysia's innovation ecosystem, and promoting sustainable economic growth.

2.0 LITERATURE REVIEW

The Impact of Tax Incentives on Research and Development A Case Study of Malaysia's Income Tax Act 1967 - Tax incentives have emerged as a popular policy instrument for governments aiming to boost research and development (R&D) activities and promote innovation (Klemm, 2010). These incentives are

designed to motivate businesses to invest in R&D projects by offering financial benefits such as tax deductions, credits, or exemptions. Malaysia's Income Tax Act 1967 includes several provisions intended to enhance the country's R&D landscape, particularly focusing on Sections 34B and 2.

As The Role of Section 34B in Promoting R&D, Section 34B of Malaysia's Income Tax Act 1967 introduces the Double Tax Deduction incentive, which enables companies to claim double deductions for specific R&D-related expenditures (Ngisau & Ibrahim, 2020). This provision motivates businesses to provide financial support to research institutions through cash donations to Approved Research Institutes, as stated in Section 34B(a) (Akoum, 2016; Ngisau & Ibrahim, 2020). Moreover, Section 34B(b) provides similar tax benefits for cash funding directed towards qualifying R&D activities in science and technology, aiming to stimulate investment in significant R&D projects and to advance technological progress and industrial competitiveness (Akoum, 2016).

Looking into the Significance of Section 2 in Defining Eligible R&D, in addition to the incentives offered in Section 34B, Section 2 of the Income Tax Act 1967 plays a key role in outlining the criteria for R&D activities that qualify for deductions. This section specifies that eligible R&D must involve systematic studies intended to gain new knowledge or improve processes, materials, or products, while excluding routine activities such as quality control, market research, and social science research. This targeted approach ensures that the tax incentives are aligned with the government's strategic objectives of promoting scientific and technological innovation.

Towards The Impact of R&D Incentives on Socioeconomic Development, The R&D incentives provided by Malaysia's Income Tax Act 1967 have the potential to significantly impact the country's socioeconomic development. By encouraging businesses to invest in R&D activities, these incentives can drive innovation, foster technological advancements, and improve the nation's industrial competitiveness (Akoum, 2016; Ngisau & Ibrahim, 2020). Consequently, this can lead to economic growth, job creation, and a stronger position for Malaysia in the global market.

In focus, Section 34B and Section 2 of the Income Tax Act 1967 play crucial roles in enhancing Malaysia's research and development (R&D) landscape. Section 34B introduces the Double Tax Deduction (DTD) incentive, which offers substantial benefits to local business entities by allowing them to claim double deductions for specific expenditures (Zainol Ariffin et al., 2023). Under Section 34B(1)(a), companies can receive tax relief for cash donations made to Approved Research Institutes (ARIs). This provision encourages businesses to support research institutions financially, thereby fostering collaboration and contributing to the growth of the national research ecosystem. Additionally, Section 34B(1)(b) provides a similar tax benefit for cash funding directed towards qualifying R&D activities in science and technology. This provision aims to stimulate investment in significant R&D projects, enhancing technological advancements and industrial competitiveness.

Complementing this, Section 2 defines the criteria for R&D activities eligible for deductions. It specifies that qualifying R&D must involve systematic studies aimed at acquiring new knowledge or improving processes, materials, or products, while excluding routine activities such as quality control and market research, as well as research based in social sciences. This targeted approach ensures that tax incentives are applied to high-risk, innovative research efforts rather than routine activities with minimal improvements.

Together, these sections create a comprehensive framework that not only provides financial incentives for R&D investment and support for research institutions but also ensures that the benefits are directed towards impactful and advanced research activities. This dual approach supports the growth of Malaysia's innovation ecosystem and drives broader economic development through targeted and substantial research and development efforts.

Over the last 20 years, government support for R&D activities in the business sector has increased significantly, with the total government allocation for R&D rising by more than 1.5 times (Taş et al., 2023). In 2000, the allocation was \$258,449.10 (in constant prices, PPP), and by 2020, it had grown to

\$398,300.41. Additionally, from 2006 to 2018, most countries saw an increase in both direct funding and tax support for business sector R&D as a percentage of GDP (Taş et al., 2023).

The success of R&D investments depends on local business entities identifying profitable opportunities, while governments address underinvestment with various support mechanisms, including public-private partnerships, direct subsidies, and fiscal incentives like double tax deductions (Makeeva et al., 2019). This particular incentive allows local business entities to claim a tax deduction on both R&D expenditures and associated costs, effectively doubling the tax benefits and reducing the financial burden of innovation.

According to Makeeva (2019), who used the Blundell-Bond model incorporating a lagged performance variable, corporate taxation significantly impacts performance, though the direction of this impact is unclear. Generally, the corporate tax rate negatively affects performance, which aligns with findings for non-innovative companies. However, an analysis of firms with different R&D tax incentives shows that the impact of corporate tax becomes positive only under the patent box program. Additionally, the effect of key control variables varies depending on the R&D tax incentive program (Makeeva et al., 2019).

Government funding tools, such as grants and subsidies, are designed to direct resources toward high-impact R&D projects. However, these tools come with challenges, including high administrative costs and potential lobbying influences. Additionally, direct funding can distort market competition and may reduce private R&D investment. Despite these drawbacks, it provides essential stability for businesses, particularly small and emerging local entities, helping them overcome financial barriers (Dai et al., 2021).

To address these challenges and enhance the effectiveness of R&D support, many governments now favor tax incentives, such as the double tax deduction. These incentives not only lower R&D costs but also improve the net present value of future projects, thereby effectively encouraging greater private sector investment in innovation.

According to Jose (2019), his study found that in India, technology imports, raw material imports, competition, profitability, firm age, and leverage positively affected R&D intensity, though it was limited to listed manufacturing firms in India. It aided policymakers by evaluating innovation policies and provided evidence on how R&D tax incentives impacted firm innovation, highlighting their effectiveness across different industries and firm sizes (Jose et al., 2019).

In conclusion, government funding tools such as grants, subsidies, and tax incentives are crucial for supporting research and development (R&D) efforts. The Double Tax Deduction (DTD) under Malaysia's Income Tax Act 1967, particularly Sections 34B and 2, plays a significant role in reducing costs and fostering innovation. These targeted incentives not only stimulate R&D investment but also encourage collaboration between businesses and research institutions, driving technological advancements and growth across industries. As Malaysia strives for sustained economic development, the effective implementation and continuous evaluation of these R&D incentives will be essential in securing the country's long-term competitiveness and sustainability.

3.0 METHODOLOGY

The study employed qualitative methods to explore the impact of Section 34B of Malaysia's Income Tax Act 1967, which provides the Double Tax Deduction (DTD) for eligible S&T R&D activities. Insights were gathered amongst 15 local business entities representatives and researchers who received the DTD incentive in recent R&D projects. They were comprised of 60% researchers from UTM and 40% the business representatives. The data collection process consisted of conducting semi-structured interviews, which were then analysed to evaluate the effectiveness and challenges of the DTD. Review the study flow process shown in Figure 1.

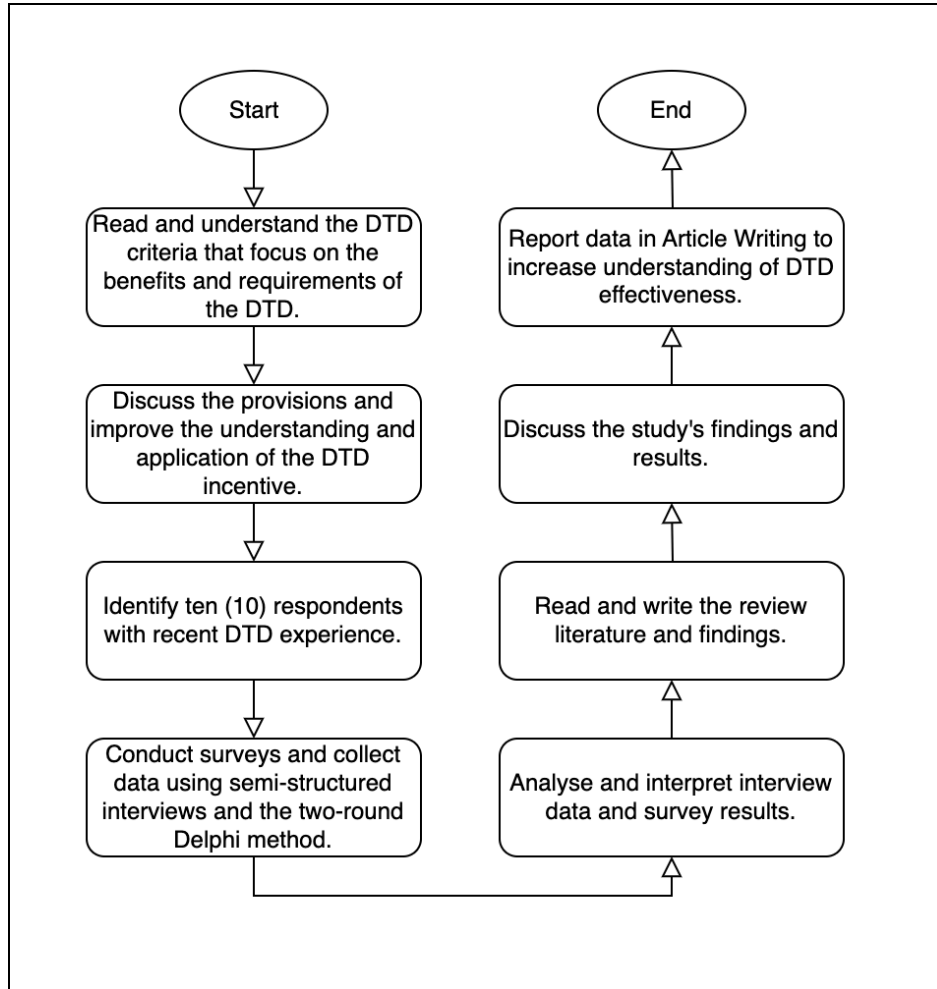


Fig. 1 Process involved in the study

In summary, the study involved fifteen (15) representatives amongst local business entities and researchers who had utilized the DTD in their R&D projects over the past five years. Semi-structured interviews were conducted to gain detailed insights into their experiences, focusing on aspects such as designing qualifying expenses, compliance challenges, and the overall impact of the DTD. Thematic analysis of the interview transcripts identified recurring themes and patterns related to the DTD's effectiveness and challenges.

Comparing these findings with existing literature on tax incentives and R&D revealed that the DTD significantly fosters collaboration, enhances competitiveness, and supports a dynamic innovation ecosystem. However, the study also emphasized the need for a better understanding of DTD requirements to maximize its benefits. The results suggest that while the DTD is beneficial for promoting local innovation and socioeconomic development, simplifying the application process and improving understanding could further enhance its effectiveness. In conclusion, the study highlights that the DTD is crucial for supporting local innovation and driving socioeconomic progress, emphasizing the need for effective implementation and continuous evaluation.

4.0 RESULTS

While the study revealed that there are insufficient channels to effectively increase awareness and confidence in the DTD among researchers and industry players, it also highlighted that at UTM, those who did become aware of the Double Tax Deduction (DTD) incentive did so through a variety of channels,

including institutional initiatives, ARI talks, government announcements, and tax submissions. While current efforts have helped spread awareness, the findings indicate that more targeted and coordinated communication strategies are needed. Collaborative initiatives like sharing sessions and integrating industry grants have been particularly effective in improving understanding and application of the DTD, highlighting the importance of strong support mechanisms. The DTD has proven to be an effective tool for driving research and development (R&D) and fostering innovation. Despite challenges in awareness and application, respondents recognized its substantial benefits, suggesting that with enhanced communication and support, the DTD could have an even greater impact on Malaysia's innovation landscape. Refer to Figure 1 for factors of capacity involved, including Physical Capital, Financial Capital, Social Capital, Intellectual Capital, Institutional Capital, Cultural Capital, and Technological Capital.

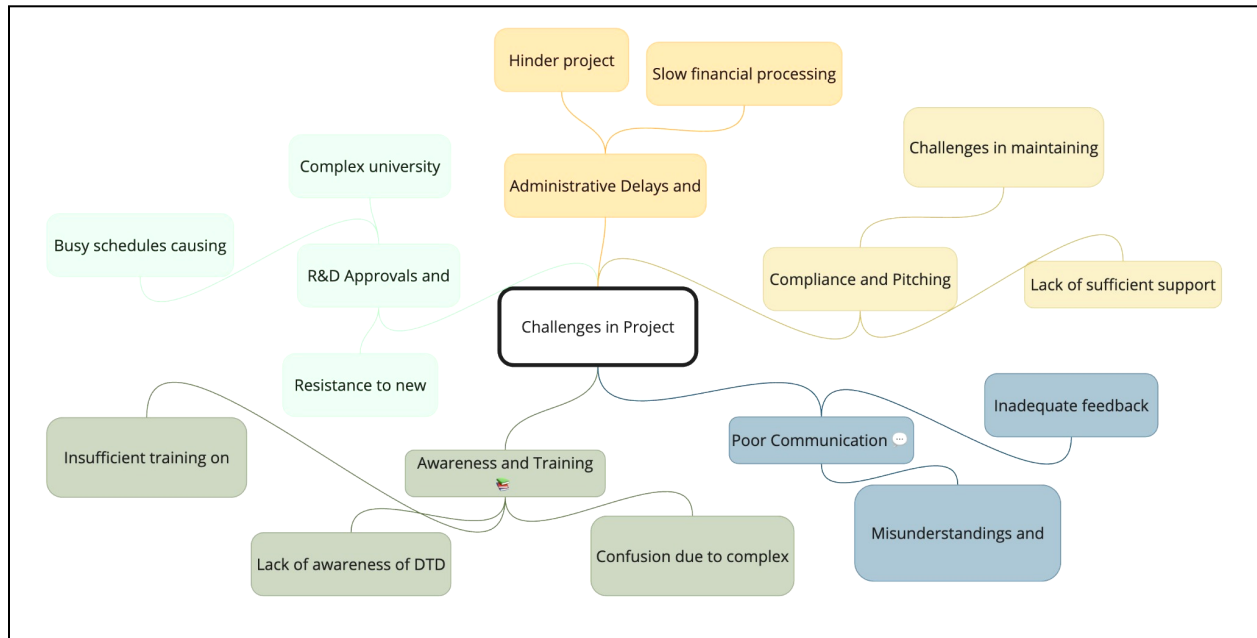


Figure 1: Double tax deduction capacity challenges factors

Figure 1 illustrates the significant challenges UTM faces in implementing the DTD, including administrative delays and inefficiencies, particularly in the evaluation process of DTD eligibility and compliance through the proposal submission to the panel. Financial processing obstacles hinder project management and delay timelines. Additionally, the struggle to maintain accurate compliance documentation, coupled with insufficient support, further complicates efforts to ensure compliance and effectively proposed projects. Miscommunication and poor coordination among researchers, administrators, and finance units exacerbate these issues, often leading to misunderstandings and additional delays, made worse by the absence of effective feedback mechanisms. Furthermore, many researchers are either unaware of the benefits provided by DTD and Section 32B or find these incentives irrelevant due to the confusion caused by complex tax deductions, inconsistent procedures, and vague guidelines. The complexity of university processes, resistance to new procedures, and the busy schedules of key stakeholders contribute to extended delays in R&D approvals and compliance. Additionally, the lack of successful case studies and inadequate training on pitching, tax benefits, and DTD compliance weaken motivation and further complicate these challenges.

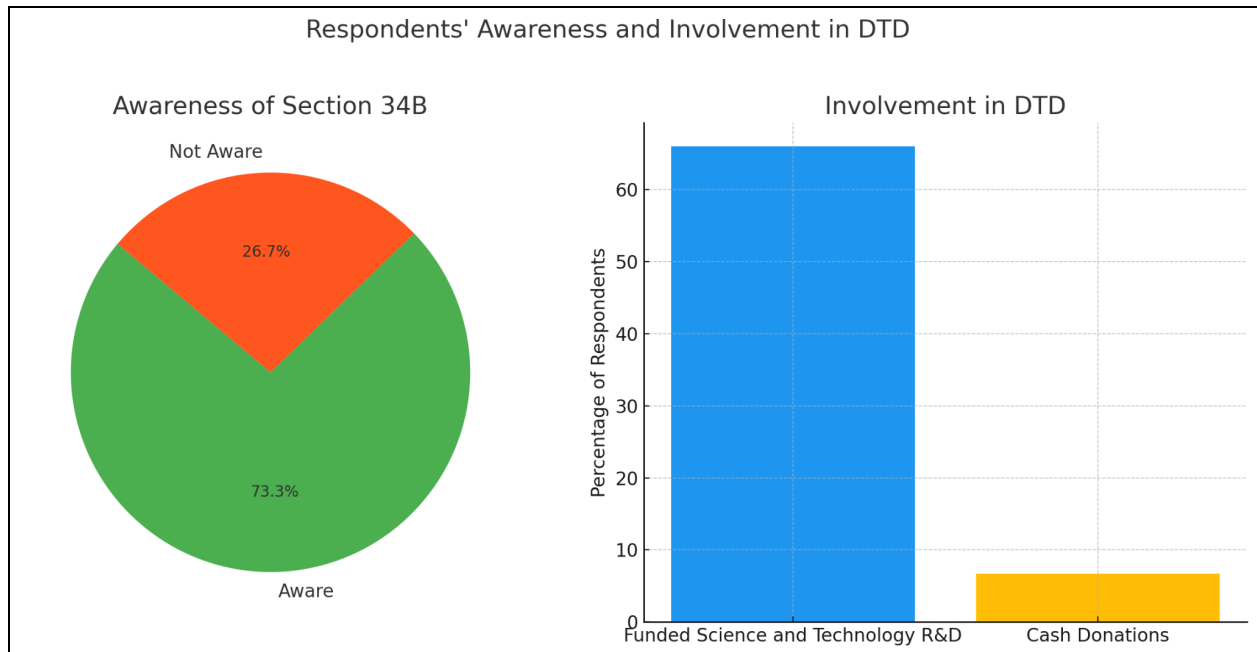


Figure 2: Respondents awareness and involvement in DTD

Shown in Figure 2, the respondents' awareness of Section 34B, which offers two (2) ways for companies to benefit from the DTD—either through cash donations to an ARI or by providing cash funding for Science and Technology R&D to an ARI—varies significantly. The survey results show that 25% of respondents were not aware of these options, while 68.8% were aware.

Among the fifteen (15) respondents, their involvement in the DTD mainly took two (2) forms. 66% percent funded Science and Technology R&D at ARI, while only 6.7% contributed through cash donations. The respondents primarily highlighted the tax deduction benefits, rather than the solutions provided by ARI. However, they recognized the in-kind benefits such as networking opportunities, innovation boosts through new solutions, R&D support using university resources, access to university researchers' expertise, and a talent pool of students and graduates. They also valued the enhanced reputation from partnering with a respected university, potential funding opportunities like UTM Matching grants, technology transfer, CSR alignment, and continuous learning through training programs.

The respondents' understanding of the DTD compliance requirements varied significantly, underscoring the need for clearer communication and guidance. Some recognized that the incentive is tied to research purposes and R&D, particularly in areas like Green Technology or other high-priority agendas set by the government, and that it is available to Sdn Bhd companies with tax deductions as a key benefit. However, others were less certain or had only a vague understanding. This inconsistency suggests that while there is general awareness, many lack a full grasp of the specific compliance criteria. This highlights the need for targeted awareness and support to ensure all stakeholders fully understand and can effectively benefit from the DTD incentive.

The respondents offered several suggestions for improving the current DTD process. While some were satisfied and did not suggest changes, others emphasized the need for greater exposure to the incentive, particularly among companies and SMEs, as a positive step forward. Recommendations included lowering the minimum funding requirements, as smaller companies may struggle to allocate substantial resources for R&D. Simplifying the compliance process was also highlighted as a way to make the DTD more accessible and encourage companies to fund projects. Broadening the R&D criteria to encompass product development and delivery activities was another key suggestion. Respondents also pointed out the need for quicker R&D timelines and more flexibility in the approval process, suggesting additional

tolerance time beyond the actual project implementation period. Additionally, there was a call for more frequent reviews and updates to the DTD criteria, ensuring it stays relevant to the evolving R&D landscape, with an emphasis on engaging industry stakeholders for feedback to make the incentive more responsive to emerging needs.

In conclusion, the study highlights the respondents' diverse perspectives on the DTD incentive, with some satisfied and others identifying areas for improvement. Key suggestions include increasing awareness, especially among SMEs, lowering minimum funding requirements to accommodate smaller companies, and simplifying the compliance process. Broadening the R&D criteria to include product development, accelerating R&D timelines, and allowing more flexibility in approval processes were also emphasized. Additionally, respondents called for more frequent reviews and updates to the DTD criteria to keep it relevant to the evolving R&D landscape, with stakeholder engagement as a crucial element. These recommendations point to the need for targeted improvements to enhance the effectiveness and accessibility of the DTD incentive, fostering greater innovation across Malaysia's industries.

5.0 DISCUSSION

The Development Tax Deduction (DTD) under Section 34B of Malaysia's Income Tax Act plays a vital role in enhancing research and development (R&D) by offering tax relief for a range of qualifying expenses. This provision encompasses several critical areas, including research equipment, personnel costs, consumables, research studies, and collaborative projects. Specifically, expenses related to acquiring and maintaining research equipment, such as laboratory tools and specialized machinery, are eligible. Additionally, salaries and wages for employees directly involved in R&D, including researchers and technical staff, can be claimed. Costs for consumables and materials necessary for R&D, such as chemicals and prototypes, are also covered. Moreover, expenditures related to research studies and feasibility investigations aimed at advancing scientific knowledge or developing new technologies qualify for the deduction. Collaborative R&D projects with other organizations, including universities and research centers, further enhance the scope of the DTD by promoting partnerships and facilitating technology transfer.

Nevertheless, there are specific exclusions to the DTD claims that businesses must be aware of. Capital expenditures, such as those related to the acquisition or improvement of fixed assets like land and buildings, are not eligible, as these are considered investments rather than direct R&D costs. Routine operating expenses, including general administrative costs and utilities, also fall outside the scope of the DTD, as they are not directly tied to R&D activities. Similarly, marketing and sales expenses, including advertising and promotional campaigns, are excluded from the deduction. While legal costs for intellectual property protection are crucial, they are not typically covered under the DTD, though there may be separate provisions for such costs. Additionally, expenses related to activities that do not meet the specific R&D criteria outlined in the Act are ineligible for the deduction.

The benefits of the DTD extend significantly to both business entities and the broader innovation ecosystem. By reducing the tax burden on companies engaged in R&D, the DTD enables them to allocate more resources towards innovation, fostering technological advancements, increased productivity, and enhanced competitiveness. Furthermore, the provision encourages collaboration between innovators and beneficiaries, strengthening partnerships between businesses, research institutions, and other stakeholders. This collaboration facilitates knowledge sharing and technology transfer, contributing to a dynamic and robust innovation ecosystem. By driving innovation, the DTD plays a key role in economic development, creating high-value job opportunities, attracting investments, and positioning Malaysia as a competitive player on the global stage. It is important to note, however, that the DTD applies only to income generated within Malaysia and excludes foreign income, with specific conditions required for claiming the deduction. Despite its limitations, the DTD has a significant impact on local innovation and R&D investment, strengthening Malaysia's research capabilities and innovation landscape. By enabling companies to invest more in R&D, the DTD boosts their competitive advantage through technological advancements and product development, positioning them ahead in the market. This investment not only benefits individual companies but also promotes broader economic growth, creating jobs and enhancing

economic stability. Additionally, the DTD encourages collaboration between industry and academia, driving applied research and practical innovations. Moreover, a strong R&D ecosystem, supported by the DTD, attracts foreign investment, further stimulating local industries and contributing to national economic growth.

6.0 CONCLUSION

In conclusion, the Development Tax Deduction (DTD) under Section 34B of Malaysia's Income Tax Act serves as a crucial incentive for advancing research and development by covering essential R&D expenses, including research equipment, personnel costs, consumables, and collaborative projects. While it excludes certain costs such as capital expenditures and routine operating expenses, the DTD significantly benefits businesses and the broader innovation ecosystem by reducing tax burdens, encouraging increased investment in R&D, and fostering valuable collaborations. This provision not only enhances technological advancements and competitiveness but also contributes to economic development by creating high-value jobs and attracting investments. Despite its limitations, the DTD plays a pivotal role in strengthening Malaysia's innovation landscape and driving sustained growth in the research sector.

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