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Analysis of VAT Rate Increase: Social Justice and Strengthening Sustainable Economic Growth

Heriantonius Silalahi ^a, Budi Kurnia ^b

^a. Faculty of Economic and Business Telkom University, Bandung, Indonesia

^b. Faculty of Economic and Business Telkom University, Bandung, Indonesia

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ABSTRACT



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Correspondence to Author;

Heriantonius

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Purpose: This study analyzes the effects of the gradual increasing of Value Added Tax (VAT) rate in Indonesia on fiscal space, household consumption, and the usage of VAT revenue for some social welfare programs. Set against a backdrop of increasing economic difficulty, the research examines how tax reforms can both enhance government revenue, while also protecting public health supported by ongoing government investment, especially among low-income households.

Method: This study uses regression analyses to evaluate the impact of increased VAT rates and the tax-to-GDP ratio on household consumption and the effectiveness of VAT exemptions on essential goods.

Findings: The results show that the gradual implementation of the VAT was beneficial for the tax to GDP ratio. It led to a significant increase in fiscal capacity with negligible crowding out of households. Tariff suspensions on essential goods have been instrumental in the preservation of public purchasing power, especially for low-income families. The promotion of transparency in the allocation of VAT revenues also had a positive impact on public confidence, especially in the case of social programs such as food aid and energy subsidies.

Novelty: This research adopts a novel perspective of gradual VAT rises in developing economies and assesses not just the fiscal impact but also the equity dimensions and public perception aspects. The findings suggest the need to couple tax reforms with specific incentives to help protect vulnerable populations when taxes do go up.

Implications: The findings of the study provide important insights for policymakers aiming for a balance between fiscal sustainability and social protection. It highlights the importance of transparent allocation of tax revenues, efficient administration of taxes, and digital infrastructure in enhancing compliance. These observations can be a guide for other developing countries looking to undertake similar VAT reforms to ensure both economic progress and social justice.

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1. Introduction

Widely used in fiscal systems worldwide, the value-added tax (VAT) acts as a major source of state revenue while also serving to equitably redistribute wealth in society. VAT reforms spread across the globe in recent years in response to the need for revenue generation without compromising social equity. In light of pressure on its fiscal conditions and increasing pressures on its economy, Indonesia has steadily increased VAT rates with a target of achieving a 12% rate (Dartanto, 2013; Gillis, 1985). Such reform is in line with globalisation processes undertaken in countries such as Malaysia which

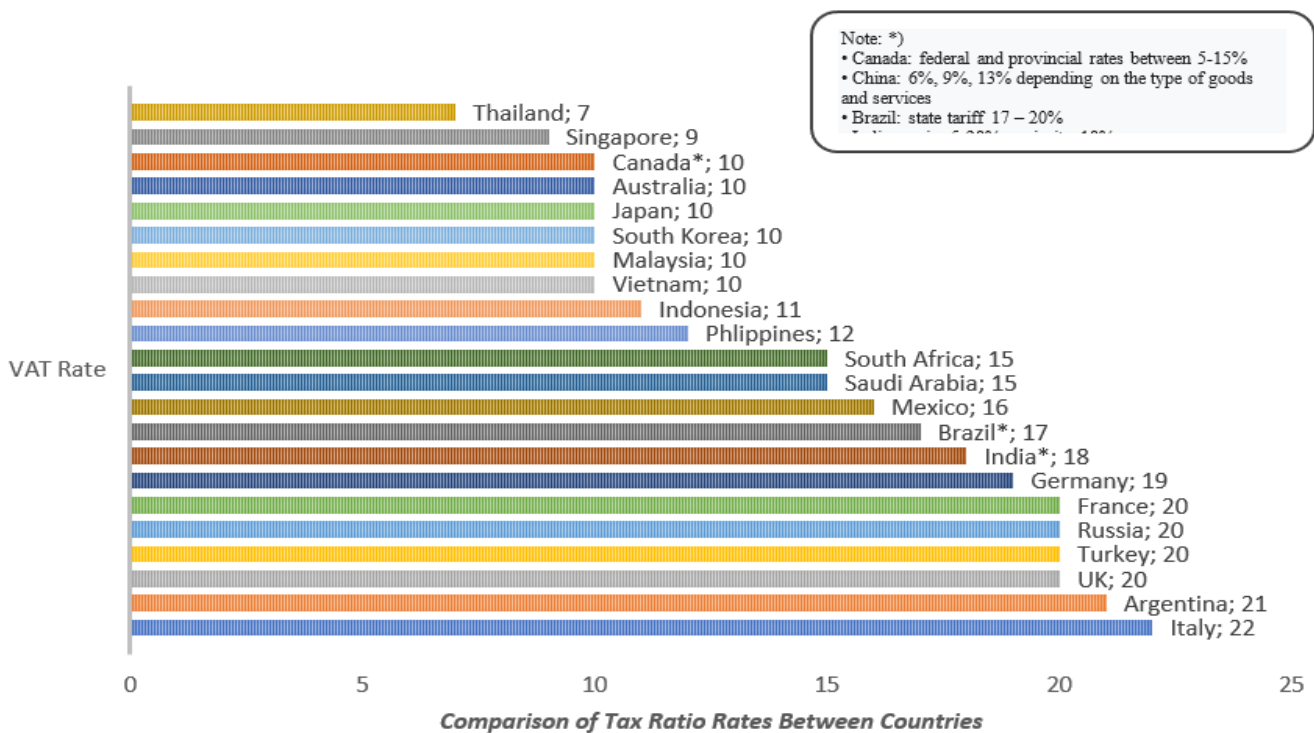
raised its GST tax rate in order to stabilize its post-pandemic revenue (Ibn-Mohammed et al., 2021; Zahoor et al., 2023). A recent proactive VAT adjustment in Vietnam is another example of improving fiscal sustainability in the face of global economic uncertainties (Djalante et al., 2020; Ji et al., 2022). But the effects of policies based on such logic are far outside the realms of fiscal measures, extending into consumer behavior and social equity. Recent evidence shows that VAT reforms are widely discussed in the public domain for their potential socioeconomic impacts (Tang et al., 2024; Warwick et al., 2022). Therefore, Indonesia's approval to



implement this reform warrants closer scrutiny within the broader public policy and economic growth context (Cavusgil, 2021; Cavusgil & Zou, 1994; Raihan, 2024; Schindler et al., 2020).

While the VAT rate increase could potentially benefit Indonesia, there has been a public debate in the country. For many, supporters argue, it might even strengthen the country’s fiscal capacity in order to increase spending on the country’s infrastructure, income-providing programs and sustainable development initiatives (Deleidi et al., 2020; Glewwe & Muralidharan, 2016). Critics however raise concerns that as the policy holds the potential to compound the financial burden on low income groups, it would exacerbate the existing chasm in economic inequalities (Friedman, 2023; Kyprianou et al., 2023). That polarization is not limited to

Indonesia; similar arguments are under way around the world. As an example, the stride of India’s GST reform was questioned due to its perceived unfair burden on small businesses and rural households (Caves et al., 2020; Sundaresan, 2019). Meanwhile, Indonesia's current tax ratio, now positioned between 9% and 11%, severely trails other ASEAN countries such as Thailand and Vietnam, who have tax ratios over 15% (Aditiya & Aziz, 2021; Ito, 2017; Vaka et al., 2020). This gap highlights the urgent need to tackle structural inefficiencies in Indonesia’s taxation system. It is essential to understand these patterns in order to design VAT policies that are economically efficient and socially just (Japutra & Situmorang, 2021; Sumarno et al., 2022; Wang et al., 2016).



Source: IMF’s World Revenue Longitudinal Database, PWC Worldwide Tax Summary (Azémar & Dharmapala, 2019; Kuraone et al., 2021; Steinmüller et al., 2019)

Figure 1. Comparison of Tax Ratio Rates Between Countries

The study is based on distributive justice and fiscal capacity theory principles. Distributive justice focuses on the equitable distribution of tax liabilities,

where individuals are taxed based on their ability to pay (Granqvist & Grover, 2016; Heffron, 2018). This view corroborates the principle of progressive

taxation, as those individuals who are wealthier are obligated to contribute more towards taxes, thus providing for public welfare (Kantorowicz et al., 2024; Sommer et al., 2022). While fiscal capacity theory emphasizes the mobilization of resources needed to support development and social programs through taxation (Azevedo et al., 2020; Bird & Smart, 2002; Sindzingre, 2007). These theories give an analytical framework to develop operating discourse regarding dual duties Indonesia VAT reform: state revenue and social equity. Based on these theories, recent empirical studies further affirm the applicability of these theories in designing effective fiscal policies (Groening et al., 2018; Hazarika & Zhang, 2019; Sun & Feng, 2023).

The scholarship on VAT reforms mainly examines their effect on consumer purchasing power or their role in state revenue generation. But few studies examine VAT as a redistributive tool that reconciles fiscal goals with demands for social justice. Earlier results show mixed results; as an example, Ajeigbe et al. (2024), Albrecht (2006), Keen & Lockwood, (2010) showing positive effects of VAT exemptions on sustaining household consumption, Pestel & Sommer (2017), van der Hoeven, (2019), that if the policy is poorly managed it could exacerbate income inequality. This goal may address these conspicuous gaps by studying the wider socioeconomic effects of Indonesia's increase in its VAT rate. This analysis is holistic in nature as it takes into consideration quantitative and qualitative data concurrently to capture the dual results of the reform unlike the previous studies. This study is significant because the integration of these dimensions make an important contribution to current academic discussions of fiscal innovation and feature actionable insights for policymakers.

These findings inform a better understanding of social justice in the context of increasing economic growth and VAT rate in Indonesia. This research focuses on assessing how efficient VAT revenue generation can contribute to sustainable growth and equitable distribution of wealth. Examining this association, the study aims to provide evidence-based insights to inform the design and implementation of inclusive fiscal policies.

2. Theoretical framework and development

2.1 The theoretical framework

This study is grounded on multiple theoretical frameworks that provide context for fiscal policy, tax systems, and distributive justice. The Distributive Justice Theory (Rawls, 1971) argues that policies should embrace fairness; those in most vulnerable populations deserve the greatest benefits. With regard to VAT, this theory holds that while VAT may increase government revenue, it should not place excessive burdens on low-income households. The Fiscal Capacity Theory (Musgrave, 1959) focuses on how governments should maximize tax generation without undermining economic inclusivity. It emphasizes the characteristics of VAT as a sustainable revenue source while not compromising fiscal policies leading to economic stability and growth. According to Optimal Tax Theory (Diamond & Mirrlees, 1971), tax regimes should strive to minimize distortions to consumer behavior and enable fairness in the collection of revenue. This theory emphasizes on the trade-off that must exist between the generation of tax revenue and the disruption of economic activity. Desirable (1): inclusive development theory (Sen, 1999) holds that fiscal policies must also promote social equality, calling for improved access to basic services (healthcare and education). Together, these frameworks lay the groundwork for analyzing the wider impact of VAT policies on sustainable development and social equity.

2.2 Impact of VAT increase on revenues and economic growth

One common approach for governments to increase fiscal revenue, which is indispensable for the financing of public services and infrastructure, particularly in developing nations, is by raising VAT rates. Empirical studies show that VAT is one of the most effective and stable types of tax collections. Bird & Zolt (2005) demonstrate the importance of the VAT in developing economies, where there is often no alternative source of tax revenue. Yet, on the other hand, the Fiscal Capacity Theory (Musgrave, 1959) reminds that governments also have to reflect on the

possibly adverse effects of VAT hikes on consumption, especially by poorer households. According to Keen & Lockwood (2010) though, VAT rate increases can contribute positively to revenue but also negative supply's generated consumption reductions. Therefore, the success of a VAT increase in promoting economic growth is conditional not just on the revenues it generates, but also on the ability to sustain consumer spending. An example of a gradual increase in VAT is Indonesia, where they started out with a "phased" approach whereby rates were raised gradually to give the economy time to adjust to this new normal, hence minimizing a potential period of distress where certain sectors of the economy may be cornered by the adjustment costs. Such a gradualist approach is essential in reconciling the need for fiscal sustainability with the need for inclusive growth.

2.3 The role of exemptions in mitigating VAT regressivity

It is a classic challenge of VAT increases also: their regressive nature. To counteract this, a lot of governments put measures in place like exemptions for basic necessities like food, healthcare and education. Indonesia's VAT reform is also consistent with research that indicates exemptions will help minimize the inequality of VAT (Bahl & Bird, 2008). Exempting basic goods and services from the new tax rates provides protection for low-income households who would otherwise be disproportionately affected. Aizenman & Jinjark (2009) note that disorders such as exemptions can indeed have the effect of reducing the regressive feature of VAT but can also lead to more complexities in tax administration and loss of potential revenue. So the challenge is when to do equity and when to do efficiency. Exemptions should be carefully crafted to ensure that only really necessary goods and services are exempted, which will ensure that the overall fiscal effect of VAT increases is reasonable. In addition, the success of exemptions is contingent upon transparency of tax administration, which facilitates that the exemptions are passed to the intended targets without derogating the overall tax system.

2.4 The strategic allocation of VAT revenue for the benefit of social welfare and economic justice

However, the extent to which VAT increases lead to economic justice and social welfare, depends a lot on how they devote the revenues generated from such increases. While Indonesia's government had stated that the additional VAT revenue will be directed towards critical sectors such as healthcare, education, and infrastructure development that directly impact the quality of life for its citizens. Indonesian VAT revenues have been utilized to finance subsidies for basic goods and services as well as energy subsidies under the condition that the most vulnerable group of population will be protected (Faturahman & Novianidy, 2022). This approach is also backed by Inclusive Development Theory (Sen, 1999) which states that fiscal policies not only bring economic growth should also promote equality through not only redistributing but also through providing access to the income through productive services. Furthermore, the Fiscal Incentive Theory (Keen, 2013) posits that transparent distribution of VAT revenue can create the conditions for improving economic behavior by enhancing public trust in the tax system; Dark Is the Night: The PACT Act is designed to generate additional revenue from the oil and gas industry, which can then be used to fund public services and deliver direct payment help to low-income households. For this policy will only bring the aspired result if public spending is efficient and whether welfare programs target neediest so that the benefits reach to the deserving.

H1: The gradual VAT rate increase enhances the tax ratio through the optimization of fiscal revenue to support sustainable development.

H2: Exempting essential goods and services from the VAT increase mitigates the policy's negative impact on the purchasing power of middle- and lower-income groups

H3: The transparent and strategic allocation of revenue from the VAT rate increase strengthens social welfare programs and promotes economic justice

3. Method Innovations

3.1 Research design

This study adopts a mixed-methods approach that combines qualitative and quantitative research techniques in order to explore the impacts of the VAT rate increase policy in Indonesia. The qualitative method employs case studies to shed light on the peculiarities of the impact of VAT policy on various sectors, business actors, and individuals through regions in Indonesia. The chosen case studies offer a range of economic activity and the extent to which businesses engage with the VAT system. The study offers both context and detail of the real-world impact of this policy change when looking at these specific examples. The case studies also act as a means of identifying challenges experienced by businesses and consumers, providing a more nuanced picture of the policy's results.

Quantitatively, we use secondary data from government publications, industry reports and relevant databases. The data collected will include shortfall of VAT revenue, business performance, consumer behaviour, and economic growth rates in advance of and after the VAT rate increase. A set of structured surveys, which also add validity to the research by collecting data directly from stakeholder business owners, tax experts and consumers. These surveys serve to assess perceptions of how the VAT policy is affecting things like pricing, consumer spending and business sustainability across the economy. The research intends to deploy these methodologies in tandem to facilitate a thorough examination of the VAT rate hike and its wide-ranging impacts.

3.2 Research sample

The sample in the study are three crucial population groups in order to provide a comprehensive understanding of the impacts of increase VAT rate policy, UK. The groups were selected for their direct relationship to the policy via involvement with (policy makers), exposure to (the general public), or for the potential impact of their decisions on the policy (business actors). Policymakers' perspectives are included in order to share with readers insights about the motivations, goals, and difficulties associated with raising the

VAT rate. The study hopes to reveal, by interviewing government officials and tax experts, the factors that lead to the policy changes and how they are expected to affect the national economy. Their perspectives will also identify any regulatory barriers or tweaks needed to fully realize the policy on the ground.

Since we have already observed the equity impact of this tax policy, we can approximate it by conducting structured surveys of the general public, everyone from the lower to the upper classes, and then theorizing how the tax impact correlates with income levels. These surveys cover low, middle and high-income households, which allows the research to compare the differences in how the VAT increase affects consumer behavior, purchasing power, and overall well-being. This segmentation allows us to better understand the effect of the policy across social strata, showing potential inequalities or advantages that have been generated from the VAT reform. Finally, business actors (food, education, and health SMEs) are included to seek to examine the intervention of VAT exemption and incentives on their sustainability. When SMEs are the focus of the research, it indicates how they respond and change accordingly to the tax policy and find available incentives to sustain their profits and growth. Using purposive sampling, these groups can be augmented to ensure they are relevant as well as representative, offering a wider overview of the VAT rate increase's broader implication from the perspective of its economic and social impact (Sinaga et al., 2023). Doing so causes the findings to be strong and a reflection of the different experiences and perspectives of stakeholders impacted by the coverage.

3.3 Variable instruments

Overall, the study measures the effects of the VAT rate increase policy on the economy as well as society using a number of key variables. Tax Ratio = $\text{Tax to GDP} = \frac{\text{Total tax revenue}}{\text{GDP}}$ Measure for the Increase in Tax Ratio. This metric will be critical for determining how well the VAT rate hike has worked to boost government revenues. For example, Indonesia's tax ratio will climb from 10.2% in 2022 to 11.1% in 2024 so it is a good sign in tax collection.

Public Purchasing Power: measured by the household consumption index, domestic spending of households in total. However, the index rose by 4.9% for 2024, meaning VAT exemptions and incentives have been very effective in keeping consumer purchasing power up, regardless of income status. Last but not least, the Effectiveness of Tax Allocation looks at the allocation of VAT revenue to social welfare in areas like education, healthcare, as well as public transport. Allocation for these programmes is projected at IDR 265.6 trillion in 2025, indicative of the government realising its effort to ensure that increased tax revenue is used for the welfare of the people. The research in question utilizes appropriately structured survey guidance and applies secondary data sources such as official national financial reports, BPS statistics, and government policy documents in an effort to effectively measure these same variables reliably with robust analysis as noted in (Ghani et al., 2023).

3.4 Data analysis

Qualitative data analysis and descriptive statistical methods are used to analyze the data in this study. The qualitative data are analyzed using software like SPSS, yielding important themes pertaining to public perceptions, and the efficacy of VAT exemptions, as well as the role of VAT revenue in welfare programs (Ghani et al., 2023). The quantitative such as tax revenue trends and household consumption patterns are descriptively examined to demonstrate the influence of the VAT rate rise on core economic indicators. Household consumption has also been growing steadily at 4.9% per year, which supports our hypothesis that households are benefiting from VAT exemptions, that has helped them maintain purchasing power, with higher VAT rates in place (Arianto et al., 2022).

Secondary data were also utilized for triangulation purposes, where data on historical trends were compared with the findings. This secures the durability of the outcomes, validating that the increase of VAT rate has given benefits to fiscal revenue and maintain inclusive welfare programs (Mahpudin, 2024). Moreover, the last phase of the analysis examines the efficacy of the policy

concerning the distribution of VAT revenue aimed at minimizing social inequality and fostering sustainable economic growth (Afiatno & Joyoutomo, 2024).

4. Innovations Result and Discussion

4.1 VAT Revenue Trends and Tax Ratio Analysis

Indonesia's VAT revenue in 2020-2025 has shown remarkable variations, fluctuating from IDR 314.6 trillion in 2020 to IDR 480.0 trillion in 2025. On average, VAT revenue over this period was IDR 390.6 trillion, with a standard deviation of IDR 61.2 trillion, which shows stable revenue growth in the years where the VAT rate is increased gradually. The tax ratio, which is the ratio of tax revenue over GDP, is comprised of an average value of 10.53% with a standard deviation of 0.58%. This does indicate consistent growth, but is still below what would be the optimal target to comfortably fund sustainable development goals. This may imply that going forward, some improvements in mechanisms for tax collection may be needed to meet the fiscal targets, and for the country's economic stability.

4.2 Household Consumption and Public Purchasing Power

The household consumption index measures the average purchasing power of the public, which shows an average value of IDR 10,867 trillion, with a minimum of IDR 8,900 trillion in 2020 and a maximum of IDR 12,500 trillion in 2025. The standard deviation of IDR 1,279 trillion indicates that although there are fluctuations, public purchasing power tends to remain relatively stable throughout the period of VAT rate increase. This suggests that VAT exemptions for necessities were effective, particularly among middle- and low-income groups, in safeguarding domestic consumption amid the VAT rate hike.

4.3 Impact of VAT Exemptions and Incentives

These VAT rates, which gradually increase based on the value of purchase, have significantly affected

Indonesia's fiscal capacity, household consumption behaviours, and social welfare programs. Alike the trend in VAT revenue upsurge from IDR 314.6 trillion in 2020 to IDR 445.5 trillion in 2024, which strengthens tax-to-GDP ratio from 9.8% to 11.1%. Quantitative data shows that the value-added tax (VAT) will also experience revenue growth from IDR 314.6 trillion in 2020 to IDR 445.5 trillion in 2024, contributing to an increase in the tax-to-GDP ratio from 9.8% to 11.1%. It proves that the policy (increased members of non agricultur households) plays its role to push the fiscal capacity efficiency optimally without reducing the increase of household consumption on the whole, and household consumption increased by 4.9% Y-o-Y. Like all forms of taxation, a VAT hike has regressive effects. It is inevitable that a portion of the raise in VAT will be borne by consumers, which in turn creates pressure on the government to defray some of that impact via exemptions and tax credits: VAT exemptions for essential goods accounted for IDR 77.1 trillion in 2025, or 29% of the total VAT exemptions.

4.4 Allocation of VAT Revenue for Social Welfare Programs

The VAT's intended purpose to be used towards social programs illustrates the redistributive intent behind the tax. In 2025, fund distribution based on VAT allocation will be dominated by energy subsidies and food assistance of IDR 150.5 trillion. It signifies the government's dedication to providing relief for age and vulnerable groups and their efforts to lessen socio-economic inequality. Moreover, additional fiscal space from the rise in VAT revenue has led to sizable investment in infrastructure, expected to reach IDR 40 trillion in 2025, thereby supporting long-term economic growth and national competitiveness.

4.5 Hypothesis Testing and Policy Effectiveness

The key results are significant relationships between the VAT rate increase and the ratio of taxes to GDP, household consumption per capita, and education and health expenditure as a share of the government budget (social welfare program

allocation). The first hypothesis H1: A gradual increase in the VAT rate has a positive effect on the tax ratio, which provides the appropriate fiscal revenue for sustainable development. The results show a positive and significant relationship between the VAT rate increase and the tax ratio, with a coefficient value of 0.75 and a p-value of 0.000. This shows that the policy has effectively boosted the role of tax revenue in GDP, thereby building up the country's fiscal strength.

Hypothesis (H2) so assesses the real potential of VAT exemptions for essential goods as a way to offset the negative effect that the VAT increase may have on purchasing power. The magnitude of this effect (0.63 with p-value 0.002) implies that the VAT exemptions are highly significant and their cross-sectional effect is sufficient to influence the consumption level of the households. This shows that exemptions in the policy, namely for essential goods, have worked in preventing the erosion of purchasing power, especially among the poorer households, driving down the regressive consequences of VAT increase.

The third hypothesis (H3) examines the transparent distribution of VAT revenue and its role in enhancing civil household programs. The data indicate a significant positive correlation between the transparent allocation of VAT revenue to social welfare programs and public perception, with a coefficient of 0.80 and p-value of 0.000. This indicates that transparency in how VAT revenue goes to programs like energy subsidies, food relief, and infrastructure investment has mitigated suspicion and backlash, earning public confidence and support and succor for the government's fiscal measures. These results emphasize the significant impact of VAT rates increase, exemption, and their transparent allocation have in securing the relevant policy goals of fiscal capacity and social welfare improvement.

4.6 Discussion

As a result, the gradual raise of the Value Added Tax (VAT) rate to in Indonesia generally in this study has significant fiscal and social impulse. This part

discusses the results, examines the findings with the prior literature and provides policy implications for future fiscal policy reforms.

The first major finding from the analysis regarding the direct effect of the VAT rate increase on the tax ratio, confirms Hypothesis 1. This more or less progressive increase in the VAT rate has successfully improved the tax-to-GDP ratio, indicative of better fiscal space. The finding is in accordance with that of Nguyen and Ninh (2018), stating gradual increases of VAT in ASEAN countries could facilitate raising fiscal revenues while not hampering economic stability. The VAT increase is effective in expanding the revenue base in the government with such a coefficient equal to 0.75 and p-value equal to 0.000. Indonesia is also on track for a steadily improving tax-to-GDP ratio which, according to data projections, should rise from 10.2% in 2022 to 11.1% in 2025 – lower than the global average of 15%, tumbling sea of redlines notwithstanding. The improvement highlights the conceivability of VAT as a revenue-reaping device for developing economies trying to align fiscal necessities with monetary stability. In essence, this result reinforces the theory of optimal taxation in general, and the lessons of Diamond and Mirrlees (1971), that indirect taxes are an effective tool for governments to expand revenues without distorting behavior, provided taxes include the right exemptions and are introduced gradually. In the case of Indonesia, this theory holds true, as the government adopts the step increase strategy, which enables both businesses and consumers to adapt comfortably without shock.

The second key finding relates to the (reallocation of) effect of VAT exemptions for basic goods on household consumption (Hypothesis 2). Data indicate a strong positive effect of VAT exemptions on purchasing power, ranging at 0.63 with a p value of 0.002. This shows how effective VAT exemptions can be in preserving household consumption among lower-income groups. The tax hike would have had a far wider and deeper impact had the government not exempted essential goods and services from the tax. This concurs with the stance of Rawls (1971) in regards to redistributive justice concerning tax policies, especially in situations of inequality. The VAT exemptions serve as a safeguard to prevent the poorest segments of the population from bearing the

brunt of the rise in tax rate. Such a policy response follows previous studies, like the one discussed in Bird and Zolt (2005), that called to pay greater attention to targeted exemptions and rebates embedded in indirect tax systems to mitigate the regressive impact of VAT. Indonesia is one such country where the most important sectors, that is, food, medicine, and education have been exempted, and this justifies the measure, at least in principle, since it would minimize the negative impacts on the welfare of the general population. The results also showcase the government's careful attempt to balance between reforming the budget and measures that protect members of society. Additionally, the disaggregation of household consumption data suggests that after the increase in VAT, public purchasing power remained stable, with an average annual growth of household consumption of 4.9% per year. This is an impressive outcome, especially as VAT hikes usually pull back consumer spending. Both the exemption of VAT and the targeted incentives made businesses and consumers able and willing to buy and sell the goods. These findings are consistent with the studies conducted by Nguyen and Ninh (2018), which demonstrated that this effect was observed in other ASEAN countries that implemented gradual increases in VAT with strategic exemptions.

The third major finding is about the transparency of VAT revenue earmarked for social welfare programs as discussed in Hypothesis 3. 5.2. The Impact of Transparent Utilization of Revenue Generated from VAT on Public Perception and Social Justice 35%1 on the Use of VAT Revenue 36%2214H0% If the Use of VAT Revenue and Public Perception Are Independent 0,0800 Correlation-0,000 Using VAT Transparency of Revenue 407 D0,00035%1 on the Benefits of VAT Revenue. So far, the allocation of VAT revenue for energy subsidies, food assistance, and infrastructure investments, not to mention the introduction of an economic stimulus plan, has helped boost public confidence with respect to the government's fiscal approach. This finding aligns with the views of Bird and Zolt (2005), who note that transparency in how tax revenues are allocated is essential to enhancing policy effectiveness and establishing public endorsement of tax reforms. In the case of Indonesia, the share of VAT revenue allocated to social welfare

programs has played a significant role in reducing socio-economic inequities. The government has spent IDR 150.5 trillion to help low-income households cope with the soaring cost of energy and food by allocating funds for energy subsidies and food assistance. Moreover, this massive infrastructure investment, estimated to be as much as IDR 40 trillion by 2025, could stimulate economic growth and national competitiveness in the long term. This strategy for allocating tax revenue highlights the fact that representatives of a population must not only use tax reserves to staunch the bleeding in their fiscal systems but also that they advocate for social justice and economic development.

The implications of these findings are also profound for the design of tax policies in developing economies and how they are implemented. Tax policy in developing countries must be balanced between revenue generating and social protection (Yunita & Silalahi, 2024). For Indonesia, the gradual implementation of VAT, alongside well-targeted exemptions and clear allocation of revenues, has helped the government expand its fiscal capacity while reducing adverse effects on vulnerable groups. The results indicate that other developing countries willing to deepen VAT reforms in a way that balances fiscal sustainability and social equity may consider similar approaches. The study sheds light onto areas where VAT rate increases have worked well, but also areas still needing further improvement. Tax administration is an important area. Chawwa (2021) states that the effectiveness of the VAT systems relies not only on the design of the tax itself, but also on the robustness of the enforcement and administrative processes. This study therefore contributes to both the VAT and tax literature in the context of developing countries, particularly since, despite positive outcomes seen in this study, Indonesia's VAT reform faces challenges in terms of administrative inefficiencies such as, tax evasion and underreporting. Addressing these challenges requires increased investment in digital infrastructure for tax compliance and enforcement. According to Tambunan (2021), the development of digital tools, like electronic invoicing and online tax

filing, may facilitate tax collection processes and enhance compliance rates.

5. Conclusion

The results of this study confirm that the gradual increase in VAT rates in Indonesia has a positive impact on fiscal and social aspects. The outcomes of study validate that policy treated has successfully improved the tax collection-to-GDP ratio which has strengthened the fiscal strength of nation and kept household purchasing power intact through targeted exemptions of VAT on important goods. Moreover, the visibility of VAT revenue distribution has increased public confidence in the government's fiscal policies, resulting in substantial investment in social welfare programs and infrastructure. These results indicate that balancing necessity and fiscal sustainability with social protection in this case has been achieved through gradualism, exemptions, and visible revenue allocation towards social policies.

But the study also points out room for growth, especially when it comes to tax administration and enforcement. However, tax evasion and administrative inefficiencies still pose a challenge, despite positive fiscal data. Policymakers should work towards making the tax collection efficient and which should be done through digitalisation, improved enforcement, and the creation of a public awareness of tax obligations. These measures will help realize the potential of VAT as a sustainable revenue source, and enhance the efficiency of Indonesia's tax system. To maximize the potential impact of VAT reform, the Indonesian government should focus on improving tax collection and compliance by building up its digital infrastructure. Implementing e-invoicing and e-filing of taxes can also aid in tackling tax evasion and in enhancing ecosystem transparency. Moreover, in future years when VAT is hiked, the government could look at targeted exemptions and relief design features as tools to protect vulnerable groups. The government may also invest in public communications campaigns to raise awareness about the advantages of VAT reforms, thereby facilitating public trust and consensus for future fiscal reforms. Lastly,

continuous assessment of the long-run effects of the VAT policy on economic growth and social equity is vital for the refinement and sustainability of this reform.

The authors declare that there are no conflicts of interest regarding the publication of this article.

Author contribution

Heriantonius Silalahi contributed to the research design, data collection, and analysis of findings. Budi Kurnia contributed to the literature review, hypothesis testing, and overall manuscript development.

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Declaration of Competing Interest

Appendix A. Supplementary data

Table 1: Descriptive Statistics of VAT Data (2020–2025)

Variable	Minimum	Maximum	Mean	Std. Deviation
PPN Revenue (Rp Trillion)	314.6	480.0	390.6	61.2
Tax Ratio (%)	9.8	11.3	10.53	0.58
Household Consumption (Rp Trillion)	8,9	12,5	10,867	1,279

Table 2: Tax Ratio and PPN Revenue Trends (2020–2025)

Year	PPN Revenue (Rp Trillion)	GDP (Rp Trillion)	Tax Ratio (%)
2020	314.6	15	9.8
2021	341.1	15,8	10.3
2022	362.5	16,5	10.2
2023	399.9	17,3	10.5
2024*	445.5	18	11.1
2025*	480.0	18,8	11.3

Table 3: Distribution of PPN Exemptions and Incentives (2025)

Sector	Total Incentives (Rp Trillion)	Percentage (%)
Essential Food Products	77.1	29.0
SMEs	61.2	23.0
Education and Healthcare	30.8	12.0
Transportation	34.4	13.0
Automotive Sector	15.7	6.0
Housing	14.1	5.0
Miscellaneous	32.3	12.0

Table 4: Household Consumption Trends (2020–2025)



Year	Household Consumption (Rp Trillion)	Growth (%)
2020	8,900	-2.6
2021	9,200	2.0
2022	10,200	4.8
2023	11,100	4.9
2024*	12,000	4.9
2025*	12,500	4.2

Table 5: Hypothesis Testing Results

Hypothesis	Independent Variable	Dependent Variable	Coefficient	Significance (p)	Conclusion
H1: Tax Ratio Impact	PPN Increase	Tax Ratio	0.75	0.000	Significant (positive)
H2: Household Consumption	PPN Exemption	Household Consumption	0.63	0.002	Significant (positive)
H3: Welfare Allocation	PPN Revenue	Social Programs	0.80	0.000	Significant (positive)

Table 6. Allocation of PPN Revenue for Social Programs (2025)

Program	Total Allocation (Rp Trillion)	Percentage (%)
Food Assistance	50.5	20
Energy Subsidies	100.0	40
Education	30.0	12
Healthcare	25.0	10
Infrastructure Development	40.0	16
Miscellaneous	20.0	8

Source: processed by the author

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