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IZA DP No. 18108

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Sarah Xue Dong

Australian National University

Agung Satyadini

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IZA – Institute of Labor Economics

Schaumburg-Lippe-Straße 5–9
53113 Bonn, Germany

Phone: +49-228-3894-0
Email: publications@iza.org

www.iza.org

ABSTRACT

Location Matters: Insights from a Natural Field Experiment to Enhance Small Business Tax Compliance in Indonesia*

Tax compliance among small businesses remains low in developing countries, yet little is known about how regional context shapes the effectiveness of enforcement strategies. Both theory and evidence suggest an ambiguous relationship between compliance and geographic proximity to tax offices. We study this issue using a large-scale natural field experiment with Indonesia's tax authority involving 12,000 micro, small, and medium enterprises (MSMEs). Businesses were randomly assigned to receive deterrence, information, or public goods letters, or no message. All letters improved compliance, with deterrence messages producing the largest gains – substantially increasing filing rates and raising monthly tax payments. Each dollar spent on deterrence letters generated about US\$30 in additional revenue over the course of a year. We observe high compliance among non-treated MSMEs near metropolitan tax offices and find that enforcement messages successfully raise compliance in non-metropolitan regions to comparable levels. However, targeting already compliant MSMEs near metropolitan tax offices backfires, underscoring the need for geographically tailored tax administration strategies. These results provide novel experimental evidence on the relation between geographic proximity and the effectiveness of tax enforcement, helping to reconcile mixed findings in the tax compliance literature.

JEL Classification: C93, D90, H25, H26

Keywords: tax compliance, natural field experiment, behavioral insights

Corresponding author:

Sarah Xue Dong
Crawford School of Public Policy
JG Crawford Building #132
Lennox Crossing
The Australian National University
Canberra ACT 2601
Australia
E-mail: sarah.dong@anu.edu.au

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1 Introduction

Micro, small, and medium enterprises (MSMEs) play a vital role in the economic landscape of developing countries, driving employment and growth. In Indonesia, MSMEs account for about 99% of businesses and generate around 62% of GDP ([Coordinating Ministry for Economic Affairs, 2022](#)). Yet, despite their economic significance, persistently low tax compliance leaves much of their fiscal potential untapped ([DGT, 2021](#)), a missed opportunity to finance Indonesia’s development agenda ([World Bank, 2022](#)). The challenge is compounded by structural constraints: the vast majority of small businesses remain unregistered, compliance among registered firms is low ([DGT, 2021](#)), and the absence of third-party income reporting hampers the government’s ability to verify income and assess liabilities accurately. Under such conditions, it is crucial for policymakers to identify the realistic levels of compliance that can be achieved and design targeted strategies to enhance MSME tax compliance.

This paper explores the effectiveness of behavioral interventions designed to improve MSME tax compliance, using data from a Natural Field Experiment conducted in collaboration with Indonesia’s Directorate General of Taxes (DGT). Our sample consists of 12,000 DGT-registered businesses randomly assigned to receive one of three hard-copy letters, each informed by insights from the behavioral literature: a deterrence letter, a tax education letter, and a letter emphasizing the use of tax revenue. A control group received no correspondence. The experiment was implemented across Jakarta (metropolitan capital), Palembang in South Sumatera (urban/semi-urban), and Mataram in West Nusa Tenggara (urban, semi-urban, and rural), covering 13 local tax office jurisdictions. We observe the filing and payment behavior of MSMEs over a 12-month period after the intervention.

Our sample includes only registered businesses, allowing us to study variation among those already at the higher end of the compliance spectrum. It further allows us to examine regional variation in baseline compliance and treatment effectiveness. A key

feature distinguishing the three study regions is the geographic proximity of businesses to their nearest tax office. For example, in Jakarta, half of the businesses in our sample are located within one kilometer of a tax office, with six such offices operating within a 147-square-kilometer area. In contrast, in West Nusa Tenggara, 90% of sampled businesses are more than 23 kilometers away from the nearest tax office. To assess how spatial variation shapes outcomes, we conduct a heterogeneity analysis stratifying businesses by distance to the nearest tax office. This allows us to assess whether proximity of small businesses to tax offices moderates or amplifies the impact of behavioral interventions on compliance behavior.

We provide the first experimental evidence on how geographic proximity of businesses to tax offices influences compliance. Proximity facilitates greater availability and efficient dissemination of information, which flows more readily near its source (Ivković et al., 2005). As a consequence, businesses located in close proximity to a tax office may be less compliant if they perceive their proximity as providing an informational advantage (Kubick et al., 2017). Conversely, it is also possible that tax offices collect more information about nearby businesses than those businesses obtain about tax offices (Chan and Wang, 2023). In particular, physical closeness may enable tax offices to exert greater enforcement pressure – such as through door-to-door visits – which could increase compliance. Our analysis explores how these competing mechanisms play out by testing whether the effectiveness of behavioral nudges varies with business proximity to tax offices and across regions.

The economic literature has traditionally modeled tax evasion as a decision balancing the costs of detection and penalties against the benefits of evasion (Allingham and Sandmo, 1972; Yitzhaki, 1974). More recently, attention has shifted to the moral and psychological dimensions of compliance, including social norms and moral costs (Luttmer and Singhal, 2014). Empirical evidence shows that deterrence interventions, such as audit notifications, tend to increase compliance (Slemrod et al., 2001b; Mendoza et al., 2017), while non-deterrence interventions – such as moral suasion or social norms messages –

produce more mixed results (Blumenthal et al., 2001; Torgler, 2006; Hallsworth et al., 2017). Compliance is also shaped by fairness perceptions (Tyler, 2006; Saunders et al., 2013; Besley et al., 2019), trust in authorities (Kirchler et al., 2008), and cognitive biases such as anchoring (Maciejovsky et al., 2007), framing (Ashby and Webley, 2008), inertia (Kerr, 2012; Jones, 2012), and imperfect memory (Ericson, 2017; Gillitzer and Sinning, 2020).

A growing body of work examines behavioral tax compliance in upper-middle-income countries, mainly in Latin America.¹ In Indonesia, Persian et al. (2023) show that email prompts modestly increase filing rates in a Randomized Controlled Trial (RCT) with more than 11 million taxpayers. The closest study to ours, a World Bank (2020) RCT with 24,000 MSMEs, finds that calendar and informational messages raised tax payments by 12%, but combining these with deterrence messages increased filing rates only slightly and had no effect on payment amounts.

We contribute to the behavioral tax compliance literature with a particular focus on developing country contexts. First, we test the effectiveness of three low-cost, behaviorally informed treatments – letters and flyers – to assess which most effectively improves compliance. Cost-effectiveness is central to scaling interventions, and our treatments are roughly two to three times cheaper than those studied in the World Bank (2020) report. Second, we examine how business location conditions responsiveness to behavioral interventions, an issue that has received limited attention. While earlier studies link proximity to local tax offices with compliance, ours is the first to investigate this relationship in an experimental setting. Third, we broaden the geographic scope by comparing metropolitan and non-metropolitan regions across Indonesia (Jakarta, South Sumatera, and West Nusa Tenggara), providing new evidence on how regional factors shape the effectiveness of behavioral nudges. Finally, we estimate heterogeneous treatment effects by penalty and filing history, showing how past behavior mediates responsiveness to nudges and informing

¹See, among others, Eguino et al. (2020), Schächtele et al. (2022), Schächtele et al. (2023), Ortega and Sanguinetti (2013b), Mogollon et al. (2021), Kettle et al. (2016), Kettle et al. (2017), Castro and Scartascini (2013), Brockmeyer et al. (2019), and Holz et al. (2023).

the design of more targeted interventions.

Our results show that, on average across regions, all three treatments significantly improve compliance, raising filing rates, non-zero returns, and year-on-year growth in both payment likelihood and amount. Among the interventions, the deterrence letter has the strongest effect – raising non-zero filing by nearly 40 percentage points and increasing monthly tax payments by around IDR40,000 (\$US2.75) per business. The information and tax revenue letters (including flyers) also yield positive, albeit more modest, impacts.

More nuanced patterns emerge when treatment effects are disaggregated by region. In South Sumatera and West Nusa Tenggara – areas with lower baseline compliance – all three letters significantly increase both filing and payment rates, with the deterrence letter again proving most effective. In South Sumatera, this intervention brings compliance levels close to those observed in Jakarta. By contrast, in Jakarta – where compliance is already high, particularly among businesses located close to tax offices – our interventions reduce compliance, especially within 500 metres of a tax office. These negative effects weaken with distance and eventually turn positive. These findings highlight the importance of tailoring tax interventions to local compliance conditions. While simple deterrence messages can be highly effective in lower-compliance areas, they may be counterproductive in already compliant urban environments.

The remainder of this paper is structured as follows. Section 2 provides an overview of the related literature and discusses potential mechanisms and expected behaviors. Section 3 presents the experimental design, provides a description of the data, and explains our estimation strategy. The results are presented in Section 4. Section 5 concludes.

2 Related literature, mechanisms and expected behaviors

2.1 Related literature

The tax compliance literature has expanded rapidly with the availability of administrative data and growing interest in testing cost-effective interventions to improve compliance ([Hallsworth et al., 2017](#)). Tax compliance decisions are shaped by both economic and non-economic considerations. The traditional framework models evasion as a choice comparing the expected benefits of under-reporting with the probability of detection and associated penalties ([Allingham and Sandmo, 1972](#); [Yitzhaki, 1974](#)). Consistent with this framework, deterrence interventions such as audit notifications are generally effective. For example, [Slemrod et al. \(2001a\)](#) show that informing low- and middle-income earners about audit selection increases reported income, while high-income earners with greater evasion opportunities reduce their reported income. [Mendoza et al. \(2017\)](#) document that compliance improves only up to a certain audit intensity, after which it declines.

A second key strand emphasizes the moral and social costs of non-compliance ([Erard and Feinstein, 1994](#); [Reckers et al., 1994](#); [Bobek and Hatfield, 2003](#); [Torgler, 2007](#); [Alm and Torgler, 2011](#)), which arise when individuals deviate from social norms ([Elster, 1989](#); [Myles and Naylor, 1996](#); [Wenzel, 2004](#); [Frey and Torgler, 2007](#); [Traxler, 2010](#); [Bobek et al., 2013](#)). However, evidence on non-deterrence interventions is mixed. Many studies find limited effects of moral suasion and social norm messages ([Blumenthal et al., 2001](#); [Torgler, 2004](#); [Wenzel, 2005](#); [Fellner et al., 2013](#)), and a meta-analysis concludes tax morale messages are generally ineffective compared to neutral messages [Antinyan and Asatryan \(2020\)](#). Some interventions can even backfire, such as rewards that reduce compliance [Dwenger et al. \(2016\)](#). Nonetheless, a few large-scale field experiments show positive effects of social norm messages on tax revenue ([Hallsworth et al., 2017](#); [Bott et al., 2020](#)).

The costs and benefits of tax compliance can be influenced by various other fac-

tors. Taxpayers derive utility from public goods, affecting compliance through reciprocity (Bazart and Bonein, 2014) and altruism (Andreoni, 1990; Feld and Frey, 2010). Compliance is further shaped by perceptions of fairness (Tyler, 2006; Saunders et al., 2013; Besley et al., 2019), trust in authorities (Kirchler et al., 2008), interactions with tax administrations (Braithwaite, 2009), and behavioral biases such as anchoring (Maciejovsky et al., 2007), framing (Ashby and Webley, 2008), inertia (Kerr, 2012; Jones, 2012), and imperfect memory (Ericson, 2017; Gillitzer and Sinning, 2020).²

Several studies have examined tax compliance in upper-middle-income countries such as Indonesia.³ The majority of these studies focus on Latin American countries. In Argentina, Eguino et al. (2020) show that redesigned tax bills appealing to reciprocity raise payment rates by about 20% – and nearly 40% when delivered in person – with effects attributed to improved design, reciprocity, and proximity to public services. Schächtele et al. (2023) find that reciprocity appeals have lasting impacts, with effects persisting two years later. Direct interactions with taxpayers also prove effective in Colombia: Ortega and Sanguinetti (2013a) show that visits outperform letters and emails, while Mogollon et al. (2021) document that phone calls increase tax collections by 25 percentage points.

RCTs in Guatemala further highlight the mixed effects of communication strategies. Kettle et al. (2016) find that deterrence and social norm letters triple tax receipts in an experiment with 40,000 taxpayers, whereas other messages only increase declaration rates. By contrast, an online experiment with 600,000 taxpayers found no effect of honesty declarations, public goods messages, or penalty reminders on reported amounts (Kettle et al., 2017). Evidence on property tax compliance also shows heterogeneity: deterrence messages raise compliance in Argentina (Castro and Scartascini, 2013), while fairness appeals are ineffective; registration nudges in Brazil yield positive effects but lottery

²Holzinger and Biddle (2016) provide a more detailed review of the determinants of tax compliance.

³Only a few studies have explored the effectiveness of deterrence and non-deterrence nudges in lower-middle- and low-income countries. Among lower-middle-income countries, research has been conducted in Eswatini (Santoro et al., 2024), Jordan (Alasfour et al., 2016), Pakistan (Slemrod, 2019b), Papua New Guinea (Hoy et al., 2021), Tanzania (Collin et al., 2022), Vietnam (Nga and Tam, 2023) and Zimbabwe (Dlamini, 2017). Important examples of studies in low-income countries include those by Mascagni (2018) and Mascagni and Nell (2021) in Rwanda.

rewards backfire (Schächtele et al., 2022); social norm messages in Peru boost compliance by 20% (Del Carpio, 2022); and enforcement in Mexico raises revenue but reduces welfare (Brockmeyer et al., 2021).

Evidence on business tax compliance in upper-middle-income countries is more limited. In Costa Rica, Brockmeyer et al. (2019) find that enforcement emails raise tax payments by 3.4 percentage points among non-filing firms, with third-party reporting further improving compliance. In the Dominican Republic, deterrence messages stressing prison sentences and public disclosure, combined with enforcement reforms, raised tax revenues by US\$184 million, with especially strong effects among large firms (Holz et al., 2023).

We are aware of only two experimental studies examining behavioral aspects of tax compliance in Indonesia. Persian et al. (2023) evaluate email prompts in an RCT with more than 11 million taxpayers and show that all treatments raise early and overall filing, with planning prompts most effective. The closest study to ours is a World Bank (2020) RCT involving 24,000 MSMEs in Java (excluding Jakarta), which tested calendars paired with informational, public goods, or deterrence messages. Payment effects were modest: information and public goods treatments raised payments by about IDR13,000 (US\$0.89),⁴ while deterrence increased payment rates by one percentage point without affecting amounts.

A simple cost-benefit analysis reveals that our treatments are more cost-effective than those used by the World Bank. For every dollar spent, the World Bank’s most effective treatment generated about US\$3.41 in tax revenue over a 12-month period and about US\$4.22 over the 15-month period observed in the data.⁵ In contrast, our treat-

⁴Throughout the paper, we use an exchange rate of US\$1 = IDR14,528 as of 1 July 2021 (<https://www.xe.com/currencytables/?from=USD&date=2021-07-01#table-section>, accessed on 15 January 2025). This rate is comparable to the exchange rates during the study period of the World Bank (2020) report.

⁵The effects presented in Table 4.3, Column 4 of the World Bank (2020) report are: Information: IDR12,879 (US\$0.89), Public goods: IDR13,004 (US\$0.90), Deterrence: IDR−2,945 (US\$−0.20, not statistically significant). The cost of printing and shipping a calendar, as shown in Table 4.7 of the report, is IDR44,197 (US\$3.04). Using the discount rate of 6.66% per annum employed in the report, the present value of monthly tax payments of IDR13,004 (US\$0.90) over a 12-month period is IDR150,561 (US\$10.36). The resulting cost-benefit ratio is $44,197/150,561 = 3.04/10.36 = 0.294$. In other words, for

ments were considerably cheaper and, in the case of the deterrence letter, far more effective. For every dollar spent, our deterrence letter generated about US\$30 in tax revenue over a 12-month period. We present the results of our cost-benefit analysis in Section 4.3 below.

2.2 Mechanisms and expected behaviors

To better understand the mechanisms underlying business tax compliance, we compare the costs and benefits of tax evasion. Specifically, we consider the deterrence model of Allingham and Sandmo (1972), which extends Becker’s (1968) economic model of crime to the domain of tax evasion. Using the notation introduced by Slemrod (2019a), we may write

$$(1 - p(e, a))U(y(1 - t) + te) + p(e, a)U(y(1 - t) - fte), \quad (1)$$

where the probability of detection, $p(e, a)$, is a function of the understated tax liability (e) and the enforcement intensity (a). The function $U(\cdot)$ is a von Neumann-Morgenstern (VNM) utility function. The variable y denotes the taxpayer’s true income, t is a proportional income tax rate, and f is the penalty factor applied to detected evasion.

Applying the VNM theorem, equation (1) may be written as

$$\mathbb{E}[U((1 - p(e, a))(y(1 - t) + te) + p(e, a)(y(1 - t) - fte))]. \quad (2)$$

It is useful to consider the case of full compliance (no evasion). In this case, the expected utility reduces to

$$\mathbb{E}[U(y(1 - t))]. \quad (3)$$

every dollar spent, the amount of tax revenue collected is US\$3.41. The corresponding amount of tax collected over a 15-month period is IDR186,665 (US\$12.85), yielding a tax revenue of US\$4.22 for every dollar spent.

Comparing (2) and (3), taxpayers will be fully compliant if

$$\underbrace{(1 - p(e, a))te}_{\text{expected benefit of evasion}} < \underbrace{p(e, a)fte}_{\text{expected cost of evasion}}$$

Proximity to the local tax office affects our model through the probability of detection, $p(e, a)$. Several studies highlight that compliance is more likely influenced by the believed probability of detection, $p_b(e, a)$, rather than the actual probability, $p(e, a)$.⁶ This distinction underscores the importance of taxpayer perceptions, which may diverge from objective realities.

If businesses located near a tax office perceive their proximity as providing an informational advantage – as suggested by [Kubick et al. \(2017\)](#) – they may believe their probability of detection is lower than that of businesses located farther away: $p_b^{\text{close}}(e, a) < p_b^{\text{far}}(e, a)$. As a consequence, businesses closer to a local tax office would face a higher expected benefit from tax evasion and a lower expected cost of evasion compared to those located farther away. Conversely, if local tax offices are perceived as more effective at gathering information about nearby businesses than those businesses are at obtaining information about local tax offices – as suggested by ([Chan and Wang, 2023](#)) – then the believed probability of detection for nearby businesses would exceed that of businesses farther away: $p_b^{\text{close}}(e, a) > p_b^{\text{far}}(e, a)$. In this scenario, the outcomes are reversed: businesses closer to a local tax office would face a lower expected benefit from tax evasion and a higher expected cost compared to their more distant counterparts.

While the theoretical model suggests that enforcement messages may enhance compliance by raising the believed probability of detection, it remains unclear whether these messages will contribute to closing or widening the compliance gap between businesses located near local tax offices and those farther away. This insight underscores the importance of empirical analysis in determining the link between business proximity to local tax offices and their responsiveness to deterrence messaging.

⁶Examples include [Alm et al. \(1992\)](#), [Snow and Warren \(2007\)](#), [Dhami and al Nowaihi \(2007\)](#) and [Durlauf and Nagin \(2010\)](#).

In addition to using enforcement messages, we also examine the effectiveness of providing information aimed at facilitating business tax compliance. From a theoretical perspective, providing information to reduce compliance costs should affect all businesses, except those that do not comply at all. We extend equation (2) to account for compliance costs, δ , which are assumed to increase with reported income, $r = y - e$:

$$\mathbb{E}[U((1 - p(e, a))(y(1 - t) + te - \delta r) + p(e, a)(y(1 - t) - fte - \delta r))]. \quad (4)$$

By comparing equation (4) to the case of full compliance, we obtain

$$\underbrace{(1 - p(e, a))te + \delta e}_{\text{expected benefit of evasion}} < \underbrace{p(e, a)fte}_{\text{expected cost of evasion}}$$

This result suggests that when compliance costs rise with reported income, they increase the expected benefit of evasion. Our information treatment aims to enhance compliance by reducing compliance costs. However, the effectiveness of providing information may vary depending on its usefulness to businesses, a factor not addressed in the model. If businesses in metropolitan areas – typically located near local tax offices – are better informed than those in non-metropolitan areas, we would expect the provision of information to be particularly useful for businesses in non-metropolitan areas. At the same time, businesses in rural areas may benefit less from information about digital solutions that require internet access, such as guidance on using apps or accessing online resources, due to limited internet connectivity.

Finally, we assess the effectiveness of a treatment designed to increase awareness of how tax revenue is used. Providing information on the use of tax revenue has the potential to enhance tax compliance because taxpayers may benefit from the provision of public goods (Cowell and P.F. Gordon, 1988), with reciprocity (Bazart and Bonein, 2014) and altruism (Andreoni, 1990; Feld and Frey, 2010) serving as potential underlying mechanisms. For simplicity, we assume that the benefits derived from the provision of public goods, captured by the parameter θ , increase with reported income, which determines the

amount of tax paid. We incorporate the utility gain from public goods into our model by extending equation (4) as follows:

$$\mathbb{E}[U((1 - p(e, a))(y(1 - t) + te - \delta r + \theta r) + p(e, a)(y(1 - t) - fte - \delta r + \theta r))]. \quad (5)$$

Comparing equation (5) to the case of full compliance yields

$$\underbrace{(1 - p(e, a))te + \delta e}_{\text{expected benefit of evasion}} < \underbrace{p(e, a)fte + \theta e}_{\text{expected cost of evasion}}.$$

This result suggests that providing information about the use of tax revenue increases the expected cost of tax evasion because taxpayers may derive additional utility from compliance when they are aware of the benefits of public goods and their role in funding them. The extent to which the effects of providing information about the use of tax revenue vary across business locations remains an empirical question. Our trial was conducted during the Covid-19 pandemic in 2021 and highlighted the use of tax revenue to fund vaccinations – a public good with immediate and widespread relevance. It is plausible that this type of information is particularly effective in areas where public health measures have visible impacts or where trust in government initiatives is higher.

3 Trial design, data and empirical strategy

3.1 Trial design

Our trial examines MSME tax filing and payment behavior across three regions: Jakarta, South Sumatera, and West Nusa Tenggara.⁷ The trial was designed in collaboration with the DGT and implemented through 13 local tax offices. The sample was drawn directly from these offices, which determined the geographic scope of the study. The sampled

⁷We use the terms “trial” and “natural field experiment” interchangeably throughout this paper. Natural field experiments are typically defined as RCTs in which participants are unaware that they are part of the study (Czibor et al., 2019).

business locations are shown in Appendix A. In Jakarta, all participating businesses are located in North Jakarta, a densely populated metropolitan district. In South Sumatera, the sample covers both the city of Palembang and the regional town of Prabumulih, including a mix of urban, semi-urban, and rural areas. Similarly, in West Nusa Tenggara, the sample includes businesses in and around the city of Mataram and nearby regional towns, again capturing a diverse mix of settlement types.

MSMEs in Indonesia are required to file tax returns and make tax payments on a monthly basis.⁸ Failure to submit tax returns or make timely payments may result in an administrative penalty of IDR100,000 (US\$6.88), in addition to a 2 percent interest charge on the outstanding amount. The current tax rate for MSMEs is 0.5 percent, applicable to businesses with an annual turnover of up to IDR4.8 billion (US\$330,396), in line with the definition of MSMEs under Indonesian tax regulations.⁹

Our analysis uses administrative records from the DGT, compiled monthly from anonymized information submitted by local tax offices. All data were de-identified in accordance with Article 34 of Indonesia’s General Provision and Tax Procedure Law, which mandates strict confidentiality and anonymity. Ethics clearance was obtained from the Human Research Ethics Committee of the Australian National University.¹⁰ The target population comprised approximately 12,000 registered MSMEs – defined as businesses with an annual turnover of less than IDR4.8 billion (US\$330,396) – recorded by the tax office between 2017 to 2019.¹¹ Additionally, we focus on MSMEs classified by the DGT as “monitored” taxpayers – those who submitted zero tax returns or filed late on at least three occasions within the 12 months prior to the intervention. Registered MSMEs in Indonesia represent a highly selective subgroup of small businesses. As of 2022, there were

⁸Article 7(3) of the 2023 Ministry of Finance Regulation. Payment receipts may serve as tax returns for payments validated with a state revenue transaction number (Nomor Transaksi Penerimaan Negara, or NTPN).

⁹The 0.5 percent rate under GR-23/2018 replaced the previous 1.0 percent rate from GR-46/2013. The reduction was implemented to provide greater financial relief to MSMEs, enabling them to retain more income for business expansion. The new rate took effect on 1 July 2018.

¹⁰ANU Human Research Ethics protocol number 2021/508.

¹¹The time frame was chosen to capture the application of prior regulations, such as GR-46/2013, while avoiding selection bias related to special arrangements due to COVID-19 in 2020.

about 2.3 million registered small businesses (DGT, 2022), compared to an estimated 63 million MSMEs in total (Ministry of Cooperatives and SMEs, 2020), meaning that only about 3.7 percent of MSMEs are officially registered.

Our trial compares members of three treatment groups to members of a control group who did not receive a letter. The treatment letters (presented in Appendix B) were designed to target three distinct behavioral aspects of tax compliance. The first letter, the “Deterrence Letter”, sought to reinforce compliance through clear reminders of submission deadlines, the administrative penalty of IDR100,000 (US\$6.88) for late filing, and the increasing use of computerized audits. It also emphasized the potential for further enforcement actions against non-compliance. The second, the “Literacy Letter”, adopted a simplified and approachable tone, providing step-by-step instructions to help recipients fulfill their tax obligations. It included a QR code that directed recipients to the official mobile application *m-pajak* (see Appendix B for details) and the DGT website, offering easy access to additional resources. The third, the “Public Goods Letter”, aimed to inspire compliance by emphasizing the positive societal impacts of tax payments, such as funding COVID-19 relief efforts and supporting education for future generations. To enhance the effectiveness of the Literacy and Public Goods letters, we included informative flyers designed with color and graphic elements grounded in psychological research on visual perception and engagement.¹²

Before the trial, the DGT provided pre-treatment characteristics for 11,996 taxpayers. To ensure stratified randomization, we grouped taxpayers with similar pre-treatment characteristics into strata. Within each stratum, cases were randomly assigned to one of the treatment groups or the control group. This approach ensured an even distribution of taxpayers across groups while maintaining balance in pre-treatment characteristics. The randomization process was carried out using a random number generator in STATA[®], with

¹²The use of color psychology in treatment design was informed by Elliot (2015). Previous studies have shown that red stimuli attract attention and convey caution (Lindsay et al., 2010; Tchernikov and Fallah, 2010; Buechner et al., 2014; Jetté Pomerleau et al., 2013; Sokolik et al., 2014), while blue and yellow light have been linked to increased alertness and improved performance on attention-based tasks (Lockley et al., 2006; Viola et al., 2008; Cajochen et al., 2011; Taillard et al., 2012).

a randomly selected seed to ensure replicability. Specifically, we employed the user-written command `randtreat` (version 1.4) for stratified randomization, which is designed to facilitate random assignment within predefined strata. The random assignment resulted in the following allocation of taxpayers: Treatment Group 1 (Deterrence) with 2,991 taxpayers; Treatment Group 2 (Information) with 2,989 taxpayers; Treatment Group 3 (Public Goods) with 3,040 taxpayers; and the Control Group with 2,976 taxpayers.

Our trial was implemented in November 2021, with letters sent out throughout the month. Outcomes were measured monthly from January 2022 to February 2023 (a total of 14 months), with data collection concluding in February 2023.¹³ The trial was registered with the Social Science Registry of the American Economic Association on 18 May 2022 (RCT ID AEARCTR-0009460). The pre-analysis plan was submitted on 17 February 2023, and we received access to the post-trial data in March 2023. While our pre-analysis plan focused on tracking the evolution of outcomes over time, we decided to exclude dynamic aspects from our analysis due to limited variation in outcomes over time. Instead, we pooled outcomes across the period and clustered standard errors to account for repeated observations over time. We also streamlined the definitions of outcome variables and considered only two of the five dimensions covered in the pre-analysis plan: filing and payment. Specifically, we focus on four primary outcomes: whether a business submitted a tax return, whether the return was non-zero, whether there was an increase in payment compared to the previous year, and the amount by which payments increased year-on-year. Other outcomes listed in the pre-analysis plan – such as timely submission, use of electronic payments, and inbound calls to the tax office – were not included in our analysis, as they were of secondary importance.

A common concern in the design of field experiments is the potential for spillover effects arising from interactions between members of the treatment and control groups. Specifically, contamination of the control group could bias the estimated treatment effects,

¹³We restrict our analysis sample to the first 12 months after the intervention because we only received information about changes in tax payments relative to the period 12 months earlier. We discuss this issue in greater detail in Section 3.2 below.

which are based on comparisons between treatment and control groups. While we cannot entirely rule out the possibility of spillovers, it appears unlikely that they represent a significant issue in our study. Our analysis sample consists of MSMEs spread across three distinct islands, with a wide geographic spread and a combined population of over 200 million.

3.2 Data

The data provided by the DGT prior to the trial implementation were used for stratified randomization. Following the interventions, external data sources were incorporated to add two baseline variables to the DGT’s administrative records: one measuring the distance to the nearest tax office¹⁴ and another capturing the base transceiver station (BTS) density.¹⁵ The set of pre-treatment characteristics used for stratified randomization includes three regions (Jakarta, South Sumatera, and West Nusa Tenggara), two sectors (service, trade/industry), two business types (business-only taxpayers, business taxpayers with additional income), two tax return groups (individuals, firms), and sextiles of business turnover, business age, distance to the nearest tax office, and base transceiver station (BTS) density.

The DGT provided access to further pre-treatment characteristics at the end of the data collection period after the trial. Specifically, we obtained information on whether businesses had received penalties and the number of months they had failed to file in the 12 months prior to the treatment. We used the latter to create a variable indicating whether businesses had failed to file for more than six months, which may be viewed as a risk indicator from the tax authority’s perspective. These additional variables allow us

¹⁴Calculated as the Euclidean distance between the taxpayer’s registered location and the nearest tax office, based on their longitude and latitude coordinates, the measure represents the straight-line distance (as the crow flies) between two points on a Cartesian plane.

¹⁵BTS density refers to the number of mobile network towers in a given area (regency or city), which can influence internet accessibility and connectivity for businesses. Unfortunately, the 2007 measure from the Ministry of Communications and Information, which was available at the time of our trial implementation, omits data from more recent cellular operators. Validation with an updated BTS density measure from Geospatial Information Indonesia Statistics (2020) confirmed that the 2007 measure is outdated and unreliable. Therefore, we do not consider this variable in our analysis of heterogeneous treatment effects.

to study heterogeneous treatment effects based on penalty and filing history.

Summary statistics of the pre-treatment variables are presented in Table 1. The p -values in Table 1 correspond to comparisons of sample means between each treatment group and the control group. Most of these comparisons show no significant differences, confirming that the randomization process effectively balanced the covariates across groups. However, we observe a significant difference (p -value = 0.024) between Treatment Group 3 and the Control Group with respect to penalty history, which was not used for stratified randomization. To account for imbalances, we will include the pre-treatment variables presented in Table 1 as control variables in our regression analysis.

[Table 1 about here.]

We use the administrative records provided by the DGT at the end of the data collection period to construct four outcome measures: (1) a binary variable indicating whether a tax return was filed, (2) a binary variable indicating whether a non-zero tax return was filed, (3) a binary variable indicating a higher amount of tax paid relative to the previous year, and (4) the additional amount of tax paid (in IDR) relative to the previous year.

The DGT’s compliance risk management system focuses on tracking increases in tax payments compared to the same period 12 months earlier, as most registered MSMEs either increase their tax payments or keep them stable. As a result, we do not observe tax payments in absolute terms, either before or after the intervention. This limitation has two implications. First, due to the comparison of tax payments relative to tax payments made 12 months earlier, analyzing the entire 14-month period following the intervention may create inconsistencies. We address this problem by restricting our analysis to the first 12 months after the intervention. Second, while we received data indicating whether MSME tax payments declined compared to the previous year, we have no information on the extent of that decline. However, only 56 of the 11,996 MSMEs in our dataset (0.047 percent) reduced their tax payments. Of those, 16 MSMEs belong to Treatment Group 1, 15 to Treatment Group 2, 9 to Treatment Group 3, and 16 to the Control Group. We exclude these 56 MSMEs from our analysis sample. Given the small number of cases and

their fairly even distribution across groups, it appears plausible that their exclusion has a negligible impact on our results.

3.3 Empirical strategy

Our analysis assesses the impact of the three treatments on the four outcome measures introduced in the previous section. We pool monthly observations over the 12 months following the intervention and compute clustered standard errors to account for repeated observations over time. Our primary estimation strategy relies on linear regression with covariate adjustment. Specifically, we estimate the equation

$$Y_{it} = \alpha_0 + \beta_1 T_i^1 + \beta_2 T_i^2 + \beta_3 T_i^3 + X_i \Gamma + \delta_t + \varepsilon_{it}, \quad (6)$$

where Y_{it} denotes the outcome for MSME i ($i = 1, \dots, N$) in month t ($t = 1, \dots, 12$) post-intervention. T_i^1 , T_i^2 , and T_i^3 are binary indicators for assignment to the respective treatment groups, while X_i is a vector of baseline covariates. δ_t captures month fixed effects, and ε_{it} is the error term. Our parameters of interest are β_1 , β_2 , and β_3 , which represent the average treatment effects on the treated.¹⁶ We use our regression results to conduct pairwise tests to compare treatment effects across groups.

To explore heterogeneous treatment effects, we estimate interacted models that allow treatment effects to vary across predefined subgroups (e.g., by region). The model specification is as follows:

$$Y_{it} = \alpha_0 + \sum_{j \in \mathcal{J}} \beta_1^j T_i^1 G_i^j + \sum_{j \in \mathcal{J}} \beta_2^j T_i^2 G_i^j + \sum_{j \in \mathcal{J}} \beta_3^j T_i^3 G_i^j + X_i \Gamma + \theta_j + \delta_t + \varepsilon_{it}, \quad (7)$$

where G_i^j is a binary indicator equal to 1 if individual i belongs to group j , and 0 otherwise.

¹⁶These parameters can also be interpreted as average intent-to-treat (ITT) effects, as we cannot verify whether business owners received or read the letters. Although the possibility of returned mail cannot be entirely ruled out, delivery was made to the taxpayer's registered address as listed in the DGT database. According to the DGT, this database is updated quarterly, resulting in a low rate of undeliverable mail – fewer than 10% of letters are returned to sender.

The θ_j are group fixed effects. Our key parameters of interest in this specification are the β_1^j s, β_2^j s, and β_3^j s, which capture treatment effects within each subgroup.¹⁷

4 Results

4.1 Treatment effects

Table 2 presents the treatment effects across three groups – T1 (Enforcement), T2 (Information), and T3 (Use of tax revenue) – compared to the control group, with results for both filing and payment outcomes. For filing behavior, all treatment groups show significant positive effects on tax filing compared to the control group. Specifically, T1 and T2 have the largest effects, increasing tax filing rates by 23 to 24 percentage points relative to the control group. T3 also shows a positive effect, though smaller in magnitude, with an increase of about 9 percentage points. Regarding non-zero filing, T1 has the largest effect, boosting non-zero filing by about 40 percentage points. In contrast, T2 and T3 show much smaller effects, ranging from about 8 to 12 percentage points. The effect of T1 on non-zero filing is significantly larger than those of T2 and T3, highlighting that T1 is particularly effective in improving MSME tax compliance.

[Table 2 about here.]

Turning to payment outcomes, all treatment groups show significant positive effects on the likelihood of increasing tax payments compared to the previous year. T1 again shows the largest effect, increasing the likelihood of higher payments by nearly 43 percentage points, followed by T3 at about 13 percentage points, and T2 at 9 percentage points. Similar to the non-zero filing results, the effect of T1 on year-on-year payment increases is significantly larger than those of T2 and T3, confirming that enforcement is the most effective tool for collecting tax revenue. Regarding increases in tax payments, T1 again

¹⁷When analyzing heterogeneity by baseline characteristics within regions, we estimate equation (7) separately for each region.

shows the largest effect, causing an increase of IDR39,379 (US\$2.71) per month, followed by T2 at IDR5,565 (US\$0.38) and T3 at IDR3,812 (US\$0.26). Taken together, these findings reveal that T1 has a substantial and consistent positive impact on both filing and payment, making it the most effective intervention among the three.

4.2 Effects heterogeneity

Our analysis of heterogeneous treatment effects examines how business location influences tax compliance, with a particular focus on the geographic proximity of businesses to local tax offices. We begin by exploring heterogeneous treatment effects by region in Section 4.2.1 before turning to the effects of distance to the local tax office within each region in Section 4.2.2. In Section 4.2.3, we summarize the main findings from our analysis of heterogeneous treatment effects across several other subgroups.

4.2.1 Effects by region

Table 3 presents the treatment effects by region. In Jakarta, all treatments have significant negative effects on the likelihood of tax filing, with T1 (Enforcement) showing the largest negative effect of about 10 percentage points compared to the control group. On the other hand, in South Sumatra and West Nusa Tenggara, all treatments show significant positive effects, with T1 having the largest effect in South Sumatra, increasing tax filing by about 77 percentage points, and in West Nusa Tenggara, increasing tax filing by about 48 percentage points. Regarding non-zero filing, in Jakarta, T1 shows the largest positive effect (about 31 percentage points), followed by T3 (Use of tax revenue) at about 12 percentage points, while the effect of T2 (Information) is statistically insignificant. In South Sumatera, T1 again shows a substantial positive effect (about 62 percentage point), while T2 and T3 yield more moderate positive effects (16-22 percentage points). In West Nusa Tenggara, T1 shows a positive effect of about 27 percentage points, while T2 and T3 show smaller effects (4-8 percentage points).

[Table 3 about here.]

For the outcome measuring whether businesses increased their tax payments compared to the previous year, T1 consistently shows significantly positive effects across all regions. The largest effect is observed in South Sumatera (approximately 64 percentage points), followed by Jakarta (around 34 percentage points) and West Nusa Tenggara (about 32 percentage points). T2 and T3 also produce positive and statistically significant effects in South Sumatera – ranging from 17 to 23 percentage points – and in West Nusa Tenggara, where effects range from 5 to 9 percentage points. In Jakarta, T3 shows a moderate effect of approximately 12 percentage points, while the effect of T2 is not significant.

Turning to the actual increase in tax payments, T1 again generates the largest gains, particularly in South Sumatera, where the monthly increase in payments amounts to IDR55,421 (US\$3.82). Smaller but still meaningful increases are observed in Jakarta (IDR33,874, or US\$2.33) and West Nusa Tenggara (IDR25,090, or US\$1.73). While T2 and T3 also lead to increased payments in South Sumatera, the magnitudes are considerably smaller than those of T1. In Jakarta and West Nusa Tenggara, the effects of T2 and T3 on payment amounts are positive but more modest and not always significant.

The underlying drivers of these regional differences in treatment effects remain uncertain. The three regions vary in terms of economic development, population density, and a range of geographic, cultural, and administrative characteristics, all of which could plausibly influence compliance behavior and responsiveness to interventions. While we do not aim to provide a comprehensive explanation of the regional variation, our heterogeneity analysis highlights one key factor: distance to the local tax office. This variable not only differs substantially across regions but is also strongly correlated with both baseline compliance and treatment effects.

4.2.2 Effects by distance to the local tax office

We find substantial variation in the distance to local tax offices across the three study regions. As shown in Table 4, in Jakarta (specifically North Jakarta district), 50% of businesses in our sample are located within one kilometer of the nearest local tax office.

In contrast, in South Sumatera, 90% of businesses are more than six kilometers away, and in West Nusa Tenggara, 90% are located more than 23 kilometers from the nearest tax office. These differences reflect both disparities in population density and the limited presence of tax offices in more remote areas.

[Table 4 about here.]

When we examine compliance behavior in the control group by distance to the local tax office, disaggregated by region, distinct patterns emerge. In areas extremely close to a tax office – such as the first decile of the distance measure in Jakarta, where businesses are located within 500 meters – compliance is nearly perfect. Filing rates in this group reach 100%, and average monthly tax payments increased by IDR64,000 (US\$4.41) compared to the previous year. This increase exceeds inflation and is substantial given the average annual turnover and tax liability of MSMEs in our Jakarta sample. These businesses are not only consistently filing and reporting non-zero returns but are also showing a marked increase in their payments over time.¹⁸

While we cannot conclusively determine the mechanisms behind this high level of compliance, administrative records from the DGT and prior research suggest that proximity to tax offices may facilitate more frequent site visits by tax officials – an enforcement and outreach strategy commonly used in Indonesia ([Antonacci and Chattha, 2024](#); [Basri et al., 2021](#); [DGT, 2015](#)). These visits may improve taxpayers’ understanding of filing obligations or increase their perceived risk of detection and penalties for noncompliance. Interestingly, tax compliance in Jakarta declines as the distance from the nearest local tax office increases – particularly in terms of non-zero filing and increased payments. Among businesses located more than one kilometer away from the tax office, fewer than 10% file non-zero returns, representing a nearly 90 percentage point drop compared to those

¹⁸It is important to keep in mind that registered MSMEs represent a highly selected subset of MSMEs in Indonesia. As such, compliance behavior among this group is not representative of MSMEs more broadly. In a context like Indonesia, where verifying MSME turnover poses administrative challenges, the compliance behavior observed among registered MSMEs located within 500 meters of a tax office in Jakarta can be considered an upper bound of what is achievable in terms of MSME compliance.

within 500 meters. Similar patterns are observed in South Sumatera and West Nusa Tenggara. However, because the baseline compliance is lower in these regions, the decline with distance is less pronounced than in Jakarta.

Figures 1 and 2 present treatment effects by deciles of distance to the nearest tax office for each region. The first notable finding is that, in Jakarta, treatments backfire among businesses located very close to a tax office – reducing both filing rates and tax payments. This negative effect dissipates after the second or third decile, depending on the outcome. Beyond that point, treatment effects generally improve with distance, and in higher deciles, compliance levels among treated businesses approximate those of firms located near tax offices. T1 consistently produces the strongest effects, especially for increased payments. Figure 3 presents a map of treatment effects in North Jakarta, illustrating the presence of six local tax offices situated in close proximity within a relatively compact area. This dense clustering increases the likelihood of interactions between taxpayers and tax officials.

[Figure 1 about here.]

The second key result is that, in South Sumatera, all treatments – particularly T1 – are noticeably more effective. The large magnitude of the effect of T1 observed in South Sumatera suggests that T1 raises overall compliance to a level comparable to that of businesses within 500 meters of a tax office in Jakarta – our high-compliance benchmark. This is a striking result, especially given that the intervention consisted of a simple deterrence letter. In other words, in a setting with lower baseline compliance with fewer enforcement resources, a low-cost behavioral intervention is able to raise tax compliance to levels typically observed in a highly monitored, metropolitan area. This finding highlights the considerable potential of such interventions in improving compliance in under-resourced regions.

[Figure 2 about here.]

The third insight relates to the interaction between distance and treatment heterogeneity across regions. While greater distance is associated with stronger treatment effects in Jakarta, no consistent pattern is observed in South Sumatera and West Nusa Tenggara. This suggests a non-linear relationship between distance and responsiveness to compliance interventions. Within a certain proximity – approximately 1.5 kilometers in our case – treatments may be more effective among businesses further away from the tax office, perhaps due to their initially lower compliance levels. However, at much greater distances (over 6 kilometers in South Sumatera and 22 kilometers in West Nusa Tenggara), the relationship appears to weaken. In these more remote areas, the limiting effect of remoteness itself – potentially due to infrastructure, access to information, or administrative capacity – may constrain the effectiveness of interventions.

[Figure 3 about here.]

4.2.3 Additional sources of heterogeneity

We also estimate heterogeneous treatment effects across subgroups based on the remaining pre-treatment characteristics presented in Table 1, separately for each region. We find no evidence of heterogeneity by turnover in Jakarta or West Nusa Tenggara. However, in South Sumatera, the deterrence treatment has a significantly stronger effect on filing among businesses with higher turnover. Similarly, we observe no heterogeneity by business age in Jakarta and West Nusa Tenggara, but in South Sumatera, the deterrence letter leads to larger increases in filing, non-zero filing, and increased payments for businesses that have been operating for a longer period.

When examining heterogeneity by past penalties and filing history, notable patterns emerge only in Jakarta. There, the deterrence letter has significantly stronger effects on filing, non-zero filing, and increased payments among businesses that had more than six months of non-filing in the previous year. The treatment effect of the deterrence letter is also larger for businesses with a history of penalties. These results suggest that in Jakarta, where baseline compliance is relatively high, the treatments are particularly

effective among businesses that were previously less compliant.

Our analysis of treatment effects across tax return groups, taxpayer types, and sectors reveals further heterogeneity, with patterns that are often mixed and challenging to interpret consistently across regions. In Jakarta, business-only taxpayers exhibit lower responsiveness to T1 (Enforcement) in both filing and payment behavior compared to business taxpayers with additional income sources. Moreover, businesses in the service sector are more responsive than those in the trade/industry sector. These patterns generally hold for T2 (Information) and T3 (Use of tax revenue), although the differences are smaller in magnitude and not always statistically significant.

In South Sumatera, we find that the effect of T1 on filing is slightly weaker in the service sector compared to the trade/industry sector. Furthermore, individual taxpayers are more likely than firms to increase their payments in response to T1. Other subgroup differences in this region are not statistically significant.

In West Nusa Tenggara, we observe more pronounced heterogeneity. Individual taxpayers are consistently more responsive than firms, business-only taxpayers respond more strongly than those with additional income, and the trade/industry sector is more responsive than the service sector. These differences are most evident for T1, less so for T2, and weakest – and not always statistically significant – for T3. One potential explanation for these findings is the relatively small sample size in West Nusa Tenggara compared to Jakarta and South Sumatera, which may contribute to greater variability and in the estimates and reduced statistical power.

4.3 Cost-benefit analysis

Table 5 presents the results of our cost-benefit analysis for the three treatments. Regarding the amount of tax paid, T1 (Enforcement) generates the highest monthly tax payment at IDR39,379 (US\$2.64), followed by T2 (Information) at IDR5,565 (US\$0.38) and T3 (Use of tax revenue) at IDR3,812 (US\$0.26). The present value of the annual amount of tax paid is IDR455,933 (US\$30.61) for T1, compared to IDR64,432 (US\$4.44) for T2 and

IDR44,136 (US\$3.04) for T3.

Regarding costs, the printing cost per letter is IDR800 (US\$0.06) for both T1 and T3, and IDR1,000 (US\$0.07) for T2.¹⁹ In addition, both T2 and T3 incur extra costs of IDR3,000 (US\$0.21) for printing flyers. The postage cost per letter is consistent across all approaches, at IDR14,402 (US\$0.99). Consequently, the total costs amount to IDR15,202 (US\$1.05) for T1, IDR18,402 (US\$1.27) for T2, and IDR18,202 (US\$1.25) for T3.

The benefit-cost ratio is considerably higher for T1, at 29.99, indicating that for every dollar spent on T1, the present value of the amount of tax collected over a 12-month period amounts to US\$29.99. In contrast, for T2, each dollar spent yields US\$3.50, while for T3, the return is US\$2.42.

5 Conclusions

This paper presents findings from a randomized field experiment conducted in collaboration with the Indonesian tax authority, using administrative data to assess the effectiveness of behavioral interventions – specifically, hard-copy letters and flyers from local tax offices – in improving tax compliance among micro, small, and medium enterprises. Our sample consists of businesses already registered with the tax authority, and thus likely to exhibit a relatively high baseline compliance. However, we find substantial regional variation in baseline compliance: in metropolitan Jakarta, where businesses are typically located near multiple local tax offices, baseline compliance was significantly higher than in South Sumatera and West Nusa Tenggara, where businesses tend to be farther from tax offices.

Treatment effects also vary substantially across regions. In Jakarta, where compliance is already high, especially among businesses located within close proximity to a local tax office, we find that the interventions backfired. In contrast, in South Sumatera, the

¹⁹The printing cost per letter for T2 is higher due to the use of a non-standard, informal format. Unlike the standardized letters in T1 and T3, which follow a uniform design, T2 features a more visually engaging layout with additional colors to enhance readability and appeal. This customization requires the use of higher-quality printing materials.

deterrence letter proved highly effective, raising compliance levels to match those observed in high-compliance areas of Jakarta. These findings highlight the importance of geographic context in tax collection, suggesting that location-sensitive strategies may be essential for improving compliance in diverse settings.

Our work contributes to a growing body of experimental research on tax compliance in low- and middle-income countries and represents one of the first field experiments targeting small businesses taxpayers in Indonesia. The results underscore the potential of simple, low-cost deterrence interventions in improving compliance, particularly in regions with lower baseline compliance and among businesses with moderate proximity to tax offices.

Tables and Figures

TABLE 1: PRE-TREATMENT CHARACTERISTICS

	Control		Treatment 1			Treatment 2			Treatment 3		
	Mean	SD	Mean	SD	<i>p</i> -value	Mean	SD	<i>p</i> -value	Mean	SD	<i>p</i> -value
Variables used for stratification											
Annual turnover (million IDR)	1,120	1,672	1,145	1,828	0.588	1,146	1,973	0.583	1,146	2,433	0.630
Age of business (years)	12.0	9.0	11.9	9.3	0.693	11.9	8.8	0.489	11.9	8.8	0.487
Distance to tax office (kms)	6.2	8.8	6.2	8.8	0.882	6.3	8.8	0.737	6.3	8.9	0.532
BTS density	1,746	1,599	1,730	1,606	0.690	1,772	1,640	0.540	1,760	1,638	0.741
Jakarta	0.566	0.496	0.563	0.496	0.804	0.555	0.497	0.420	0.559	0.497	0.604
South Sumatera	0.306	0.461	0.309	0.462	0.835	0.316	0.465	0.422	0.308	0.462	0.907
West Nusa Tenggara	0.128	0.334	0.128	0.335	0.936	0.128	0.335	0.932	0.133	0.340	0.546
Sector (1 Service; 0 Trade and industry)	0.506	0.500	0.512	0.500	0.652	0.511	0.500	0.699	0.518	0.500	0.357
Type (1 Business only; 0 Diverse income)	0.382	0.486	0.387	0.487	0.665	0.375	0.484	0.587	0.392	0.488	0.418
Tax return group (1 Individual; 0 Firm)	0.790	0.408	0.784	0.412	0.595	0.797	0.403	0.503	0.782	0.413	0.492
Additional variables											
Received penalty before	0.271	0.444	0.281	0.449	0.386	0.274	0.446	0.766	0.297	0.457	0.024
Did not file more than 6 months	0.543	0.498	0.547	0.498	0.738	0.543	0.498	0.992	0.565	0.496	0.088
<i>N</i>	2,960		2,975			2,974			3,031		

Note: Treatment 1: Enforcement; Treatment 2: Information; Treatment 3: Use of tax revenue. *p*-values (based on robust standard errors) refer to the comparison of means between treatment and control groups.

TABLE 2: TREATMENT EFFECTS

	Control Mean	T1 vs. Control	T2 vs. Control	T3 vs. Control	<i>p</i> -values		
					T1=T2	T1=T3	T2=T3
Filing							
Filed tax return	0.5706	0.2396*** (0.0099)	0.2325*** (0.0099)	0.0869*** (0.0102)	0.482	0.000	0.000
Filed non-zero return	0.1564	0.3979*** (0.0109)	0.0800*** (0.0100)	0.1214*** (0.0101)	0.000	0.000	0.000
Payment							
Increased payment	0.1599	0.4258*** (0.0105)	0.0917*** (0.0099)	0.1262*** (0.0100)	0.000	0.000	0.001
Additional amount paid (IDR)	10,342	39,379*** (931.26)	5,565*** (670.18)	3,812*** (591.30)	0.000	0.000	0.008

Note: T1: Enforcement; T2: Information; T3: Use of tax revenue. The pre-treatment characteristics presented in Table 1 are used as covariates. Standard errors (presented in parentheses) were clustered to account for repeated observations over time.

** $p < 0.05$, *** $p < 0.01$.

TABLE 3: TREATMENT EFFECTS BY REGION

	Jakarta			South Sumatra			West Nusa Tenggara		
	T1 vs. Control	T2 vs. Control	T3 vs. Control	T1 vs. Control	T2 vs. Control	T3 vs. Control	T1 vs. Control	T2 vs. Control	T3 vs. Control
Filed tax return	-0.1005*** (0.0111)	-0.0585*** (0.0107)	-0.0695*** (0.0108)	0.7663*** (0.0147)	0.6721*** (0.0169)	0.3148*** (0.0197)	0.4760*** (0.0263)	0.4475*** (0.0266)	0.2338*** (0.0254)
Filed non-zero return	0.3080*** (0.0161)	0.0055 (0.0153)	0.1162*** (0.0159)	0.6174*** (0.0164)	0.2158*** (0.0143)	0.1648*** (0.0132)	0.2661*** (0.0227)	0.0779*** (0.0151)	0.0433*** (0.0121)
Increased payment	0.3347*** (0.0155)	0.0172 (0.0152)	0.1196*** (0.0158)	0.6383*** (0.0155)	0.2266*** (0.0142)	0.1722*** (0.0131)	0.3170*** (0.0217)	0.0925*** (0.0151)	0.0480*** (0.0123)
Additional amount paid (IDR)	33,874*** (1324.00)	783 (1027.05)	1,860 (947.46)	55,421*** (1518.12)	14,547*** (973.77)	8,179*** (719.50)	25,090*** (2090.41)	4,882*** (981.20)	1,935*** (683.36)

Note: T1: Enforcement; T2: Information; T3: Use of tax revenue. The pre-treatment characteristics presented in Table 1 are used as covariates. Standard errors (presented in parentheses) were clustered to account for repeated observations over time.

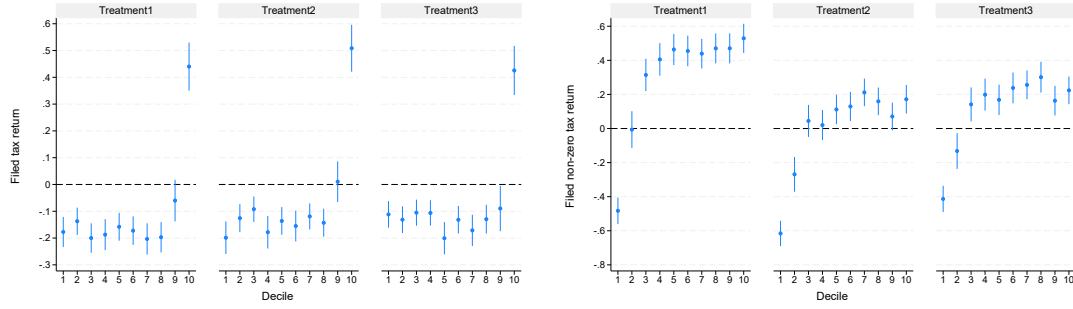
** $p < 0.05$, *** $p < 0.01$.

TABLE 4: CONTROL GROUP MEANS BY REGION AND DISTANCE TO LOCAL TAX OFFICE

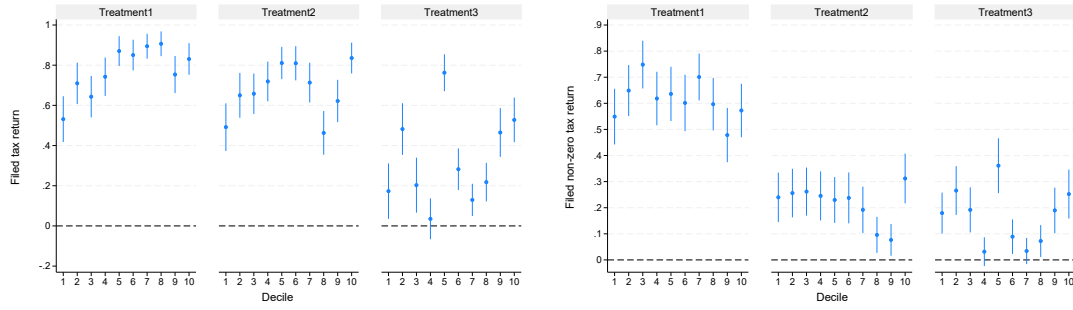
		DISTANCE TO LOCAL TAX OFFICE (DECILES)									
All		1	2	3	4	5	6	7	8	9	10
Jakarta											
Median distance (kms)		0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4
Filed tax return	0.923	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.856	0.403
Filed non-zero return	0.267	0.988	0.561	0.240	0.202	0.151	0.137	0.086	0.107	0.138	0.097
Increased payment	0.271	0.987	0.564	0.243	0.209	0.153	0.140	0.090	0.111	0.139	0.102
Additional amount paid (IDR)	17,588	64,310	36,491	15,914	13,451	10,168	8,850	5,676	7,409	8,936	6,759
N	20,100	1,980	1,860	2,196	2,136	1,824	2,016	1,944	2,028	2,004	2,112
South Sumatra											
Median distance (kms)		6.0	6.3	6.4	6.5	6.7	6.8	6.9	7.0	7.1	7.5
Filed tax return	0.137	0.392	0.232	0.277	0.128	0.040	0.055	0.026	0.034	0.093	0.045
Filed non-zero return	0.014	0.010	0.012	0.010	0.021	0.027	0.018	0.013	0.011	0.010	0.011
Increased payment	0.018	0.014	0.015	0.017	0.021	0.029	0.021	0.019	0.014	0.015	0.017
Additional amount paid (IDR)	1,065	832	763	803	1,402	1,823	1,359	981	893	1,024	826
N	10,884	1,164	984	1,212	1,128	900	1,308	912	1,056	1,164	1,056
West Nusa Tenggara											
Median distance (kms)		22.8	27.5	27.6	27.8	27.9	28.1	28.2	28.4	30.4	31.0
Filed tax return	0.050	0.098	0.059	0.025	0.032	0.026	0.050	0.049	0.083	0.073	0.000
Filed non-zero return	0.005	0.024	0.000	0.000	0.000	0.000	0.000	0.000	0.028	0.000	0.000
Increased payment	0.010	0.033	0.005	0.000	0.005	0.000	0.002	0.000	0.037	0.008	0.007
Additional amount paid (IDR)	494	1,791	25	0	24	0	15	0	2,424	284	340
N	4,536	492	408	480	372	456	480	492	432	492	432

FIGURE 1: TREATMENT EFFECTS ON FILING BEHAVIOR BY DISTANCE TO LOCAL TAX OFFICE (DECILES)

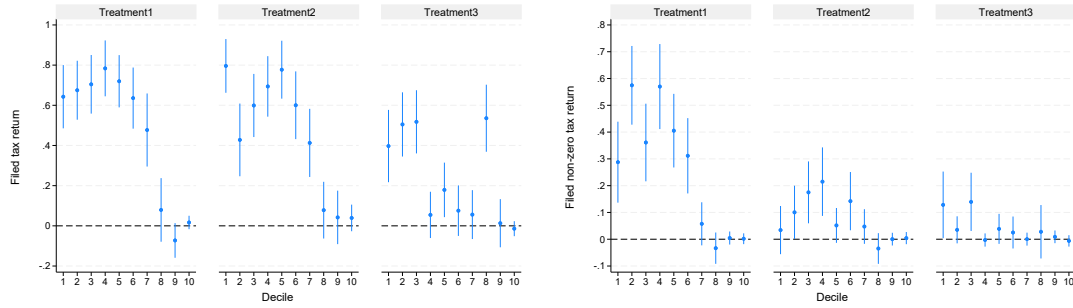
Jakarta



South Sumatra



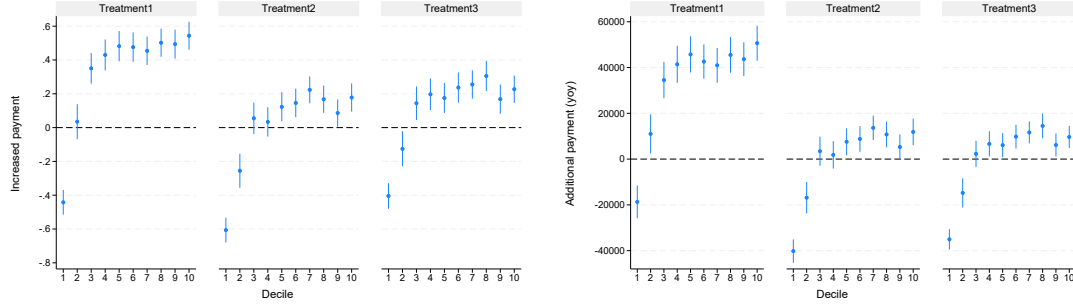
West Nusa Tenggara



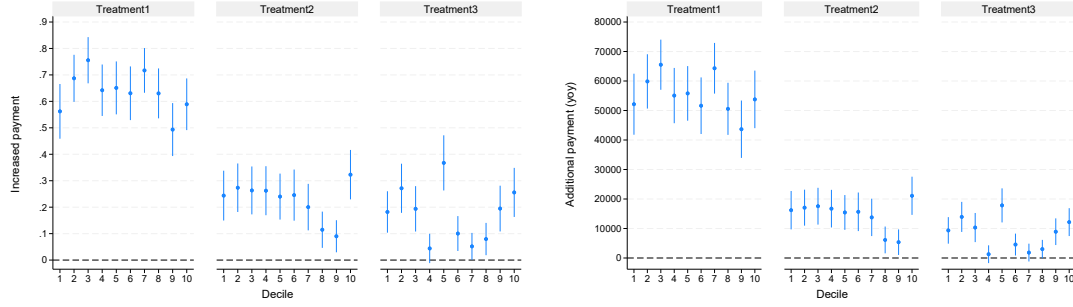
Note: The pre-treatment characteristics presented in Table 1 are used as covariates. Standard errors were clustered to account for repeated observations over time.

FIGURE 2: TREATMENT EFFECTS ON PAYMENT BEHAVIOR BY DISTANCE TO LOCAL TAX OFFICE (DECILES)

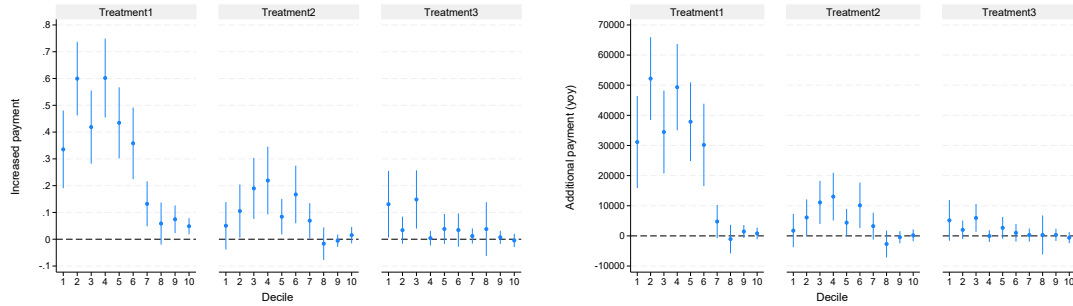
Jakarta



South Sumatra

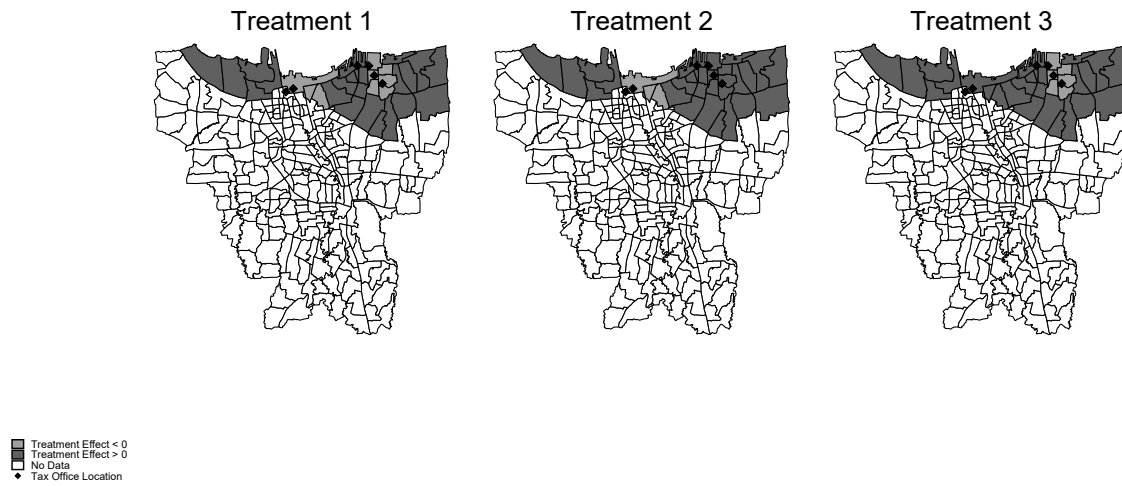


West Nusa Tenggara



Note: The pre-treatment characteristics presented in Table 1 are used as covariates. Standard errors were clustered to account for repeated observations over time.

FIGURE 3: TREATMENT EFFECTS ON PAYMENT BEHAVIOR BY SUB-DISTRICT IN NORTH JAKARTA



Note: The maps are constructed using geospatial data provided by Indonesia's Statistics Bureau, merged with subdistrict-level data from the experimental design. The outcome variable represents the additional amount of tax paid. Tax office locations are accurately mapped using precise longitude and latitude coordinates.

TABLE 5: COST-BENEFIT ANALYSIS

	T1 (Enforcement)	T2 (Information)	T3 (Use of tax revenue)
Amount of tax paid (IDR)			
Monthly tax paid	39,379	5,565	3,812
Annual tax paid (present value)	455,933	64,432	44,136
Costs (IDR)			
Printing: cost per letter	800	1,000	800
Printing: cost per flyer	0	3,000	3,000
Postage: cost per letter	14,402	14,402	14,402
Total costs	15,202	18,402	18,202
Benefit-cost ratio	29.99	3.50	2.42

Note: The present value calculations are based on a 6.66 percent real rate of interest, in line with [World Bank \(2020\)](#). Postage costs per letter are based on the price of sending a standard letter using Indonesia Post. For more information, visit the official Indonesia Post website.

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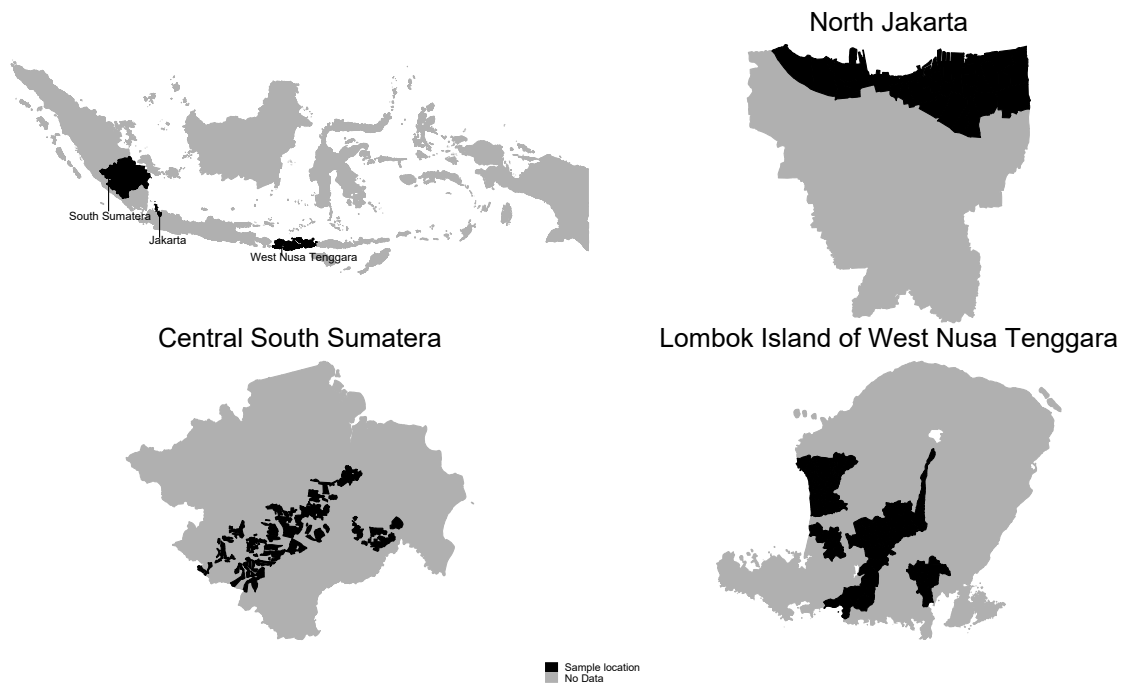
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Appendix A: Location of trial sample



Note: The maps are based on geospatial data from Indonesia's Statistics Bureau that have been merged with subdistrict-level data from the experimental design.

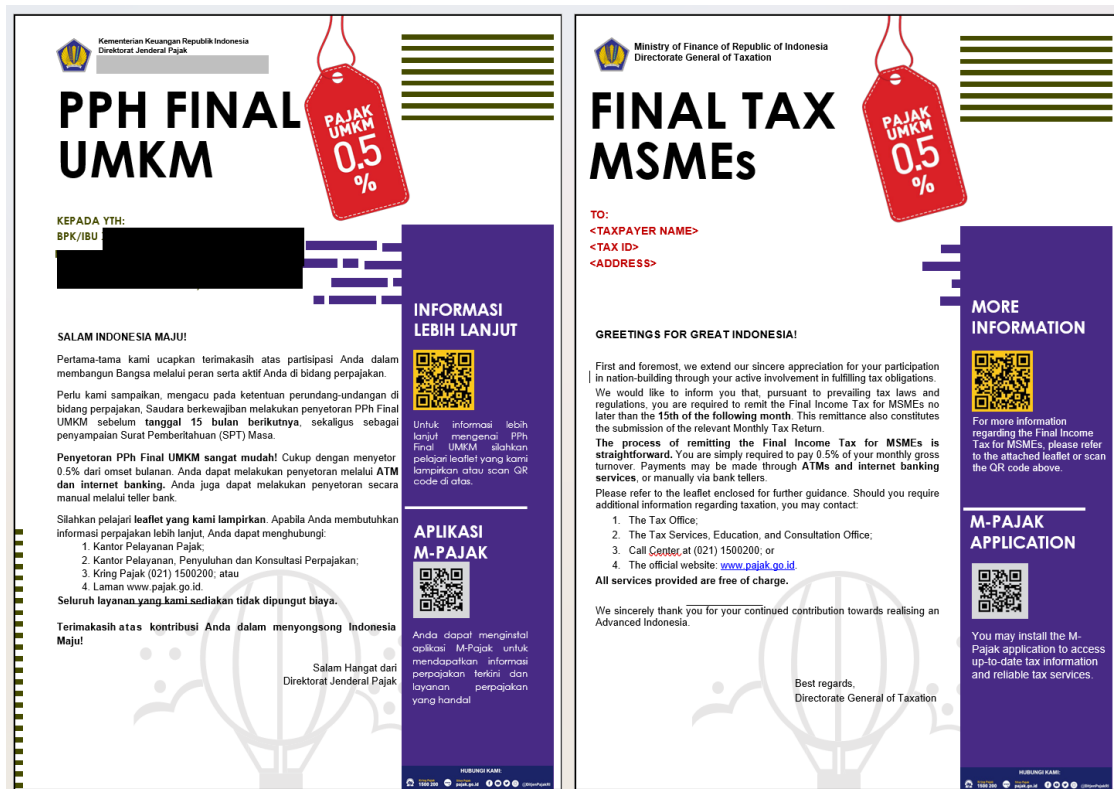
Appendix B: Treatment letters

TREATMENT 1: ENFORCEMENT

KEMENTERIAN KEUANGAN REPUBLIK INDONESIA DIREKTORAT JENDERAL PAJAK KANTOR WILAYAH DIREKTORAT JENDERAL PAJAK KANTOR PELAYANAN PAJAK PRAT	MINISTRY OF FINANCE OF THE REPUBLIC OF INDONESIA DGT REGIONAL TAX OFF JAKART
Nomor : 021 Sifat : Segera Lampiran : - Hal : Pembayaran dan Pelaporan Pajak untuk Wajib Pajak UMKM Berdasarkan ketentuan Pasal 2 Peraturan Menteri Keuangan Nomor PMK-242/PMK.03/2014 tanggal 24 Desember 2014 tentang Tata Cara Pembayaran dan Penyetoran Pajak, PPh UMKM Pasal 4 ayat (2) yang harus dibayar sendiri oleh Wajib Pajak harus disetor paling lama tanggal 15 (lima belas) bulan berikutnya setelah Masa Pajak berakhir. Sehubungan dengan hal tersebut, kami sampaikan bahwa Saudara diwajibkan melakukan penyetoran PPh UMKM sebelum tanggal 15 bulan berikutnya, yang sekaligus dapat dianggap sebagai penyampaian Surat Pemberitahuan (SPT) Masa. Peringatan : Apabila Saudara belum dapat SPT tidak disampaikan dalam jangka waktu yang telah ditetapkan, dapat dikenakan sanksi administratif berupa denda sebesar Rp100.000,00 (seratus ribu rupiah). Lebih lanjut, dapat pula diundatifikasi dengan tindakan penegakan aktif lainnya meliputi surat teguran, surat paksa, penyitaan, lelang, dan penyitaan. Sebagai komitmen kami untuk menciptakan iklim pajak yang lebih adil, kami akan mengadopsi sistem pemeriksaan pajak terkomputerisasi berbasis risiko. Kami saat ini juga sedang melaksanakan kolaborasi dengan pihak ke-tiga dalam pertukaran data perpajakan. Apabila Saudara membutuhkan informasi perpajakan lebih lanjut, Saudara dapat menghubungi: 1. Kantor Pelayanan Pajak; 2. Kantor Pelayanan, Penyuluhan dan Konsultasi Perpajakan; 3. Kring Pajak (021) 1500200; atau 4. Laman www.pajak.go.id. Seluruh layanan yang kami sediakan tidak dipungut biaya. Atas peran serta Saudara dalam pembayaran dan pelaporan pajak, kami sampaikan terima kasih. Demikian disampaikan Kepala Kantor Pelayanan Pajak  Ditandatangani secara elektronik   	Number : Priority : Urgent Subject : Tax Payment and Reporting for MSME Taxpayers To: <Taxpayer Name> Tax ID Number: <Tax ID Number> <Address> Pursuant to the provisions of Article 2 of the Minister of Finance Regulation Number PMK-242/PMK.03/2014 dated 24 December 2014 concerning the Procedures for Tax Payment and Remittance, the Income Tax (PPh) for MSMEs as referred to in Article 4 paragraph (2), which is self-assessed by the taxpayer, must be remitted no later than the 15th day of the month following the end of the relevant tax period. In this regard, we hereby inform you that you are required to remit the MSME Income Tax (PPh) before the 15th of the following month. Such remittance shall also be deemed as the submission of the corresponding Monthly Tax Return. Peringatan : Please be advised that failure to submit the Tax Return (SPT) within the prescribed time frame may result in an administrative sanction in the form of a fine amounting to IDR 100,000 (one hundred thousand rupiah). Furthermore, it may also be followed by other active collection measures, including a warning letter, distress warrant, seizure, auction, and travel restriction. As part of our commitment to fostering a fairer tax environment, we will adopt a computerised system for tax audits and the determination of business turnover. We are also currently engaged in collaboration with third parties for the purpose of tax data exchange. Should you require further information regarding taxation, you may contact: 1. Your local Tax Office; 2. The Tax Services, Counselling, and Consultation Office; 3. Call Center at (021) 1500200; or 4. Visit the official website at www.pajak.go.id. All services we provide are free of charge. We sincerely thank you for your continued participation in fulfilling your tax payment and reporting obligations. Digitally signed, Head of tax office   

Note: This treatment letter highlights the consequences of failing to submit the tax return (SPT) on time. It outlines potential penalties, including monetary fines and enforcement actions such as warning letters, forced collection orders, prevention measures, and auctions. The letter follows official correspondence procedures of the DGT and is delivered to the taxpayer's registered address as listed in the DGT database. To verify the letter's authenticity, recipients can scan the QR code linked to the electronic signature. This redirects to a digital copy of the letter stored in the Ministry of Finance's official correspondence system.

TREATMENT 2: INFORMATION



Note: This treatment letter serves as a cover letter accompanying instructions on how to calculate, pay, and file the tax return (SPT) for MSMEs. It emphasizes the submission deadline and underscores that fulfilling MSME tax obligations is a simple and straightforward process. The letter follows official correspondence procedures of the DGT and is delivered to the taxpayer's registered address as listed in the DGT database. To verify the letter's authenticity, recipients can scan the QR code linked to the electronic signature. This redirects to a digital copy of the letter stored in the Ministry of Finance's official correspondence system.

TREATMENT 2: FLYER (PAGE 1)

Original

Pengin Lebih Mudah? Pakai gadget kuy!

Hitung pajakmu!

Cara yang gampang! Cukup hitung omset bulan lalu untuk semua gerai, counter, outlet. Termasuk omset pusat & cabang, juga penjualan online & offline, pajak terutang kamu adalah 0.5% dikalikan omset.

Bayar pajakmu!

Kamu bisa pakai beberapa cara: 1) tanpa kode billing via ATM; 2) pakai kode billing dengan kode jenis pajak. (Lihat petunjuk di halaman berikutnya untuk Pajak UMKM 0.5% lewat ATM).

Cara buat kode billing juga mudah: Kalau kamu sudah punya akun DJP online, cukup login dan tambah hak akses e-Billing. Caranya:

- Pilih menu "Profil Lengkap" di bagian kiri laman
- Centang pilihan e-Billing pada bagian "Tambah/Kurangi Hak Akses"
- Klik "Ubah Akses"

Kalau kamu belum punya akun DJP online, silahkan daftar dengan aktivasi EFIN terlebih dahulu.

Kamu juga bisa membuat kode billing dengan **Internet Banking**. Saat ini tersedia untuk 10 Bank (Citibank, Bank Bukopin, CIMB Niaga, BRI, Bank Permata, BCA, Bank UOB, Maybank, Bank Danamon dan Bank OCBC-NISP).

Lapor pajakmu!

Lapor SPT Tahunan wajib dilakukan. Agar lebih mudah, kamu bisa mengakses www.djponline.pajak.go.id

PELAYANAN TIDAK DIPUNGUT BIAYA APAPUN

Informasi lebih lanjut tentang Pajak UMKM, pindai QR Code ini

PAJAK UMKM 0.5%

Setengah persen, sepenuh hati ..

0.5% pajak terutang: 0.5% x omset bulanan

15 Setor sebelum tanggal 15 bulan berikutnya

Lebih Mudah! Gunakan Aplikasi M-Pajak

Scan to install

HUBUNGI KAMI:

1500 200 www.djponline.pajak.go.id @DjponPajakRI

Translation

Want something easier? Just use your gadget!

Calculate your tax:

It's simple! Just calculate last month's total turnover from all your locations—branches, counters, and outlets—including both online and offline sales. Your tax payable is 0.5% of that total turnover.

Pay your tax:

You can use several methods: 1) without a billing code via ATM; or 2) with the billing code and tax type code. (See the instructions on the next page for the 0.5% MSME Tax via ATM).

Creating a billing code is easy as well if you already have an online DJP account, simply log in and add e-billing access. Follow these steps:

- Select the "Full Profile" menu on the left side of the page.
- Check the e-billing option in the "Add/Remove Access Right" section.
- Click "Change Access."

If you don't have an online DJP account, please register by activating your EFIN first.

You can also create a billing code using Internet Banking. This option is currently available for 10 banks: Citibank, Bank Bukopin, CIMB Niaga, BRI, Bank Permata, BCA, Bank UOB, Maybank, Bank Danamon, and Bank OCBC-NISP.

Submit your returns:

The annual tax return is mandatory. To make it easier, you can access it at www.djponline.pajak.go.id.

OUR SERVICES ARE FREE OF CHARGE

Thank you for not offering anything in return to our officers. The services we provide are completely free of charge.

More information about MSMEs Taxation, please scan this

MSMEs TAX 0.5%

Half a percent, with a whole heart.

0.5% Your tax = 0.5% x monthly turnover

15 Pay before the 15th of the following month

Now Easier! Use M-PAJAK Application

Scan to install

CONTACT US:

1500 200 www.djponline.pajak.go.id @DjponPajakRI

Note: This guide provides a clear overview of MSME tax compliance, organized into three main sections: **Left Panel:** Tax compliance for MSMEs is made easy through the use of digital tools. To calculate your monthly tax obligation, add up revenue from all sources – including stores, counters, outlets, headquarters, branches, and online or offline sales – from the previous month. The applicable tax rate is 0.5% of this total. Payments can be made via ATM without a billing code or through DJP Online with a billing code. To generate a billing code, log in to DJP Online, activate e-Billing through the “Full Profile” menu, and update your access rights. If you don’t yet have an account, registration requires activation of your EFIN. Billing codes can also be created through internet banking, supported by 10 banks including Citibank, BRI, and BCA. Filing your annual tax return is mandatory and can be completed online at: www.djponline.pajak.go.id. **Center Panel:** All tax-related services are completely free of charge. For more information, scan the QR code on the guide. **Right Panel:** MSME tax is straightforward and affordable – just 0.5% of your total monthly revenue. Payments are due by the 15th of the following month. To streamline the process, download and use the M-Pajak mobile app.

TREATMENT 2: FLYER (PAGE 2)

Original

Objek Pajak UMKM

Penghasilan dari usaha meliputi:

- usaha dagang, industri, dan/atau jasa, seperti misalnya jasa pelayanan penginapan (rumah kos/asrama untuk mahasiswa/pelajar, asrama atau pondok pekerja), toko/kios/teleng, pakaian, elektronik, bengkel, penjahit, warung/rumah makan/restoran, salon, dan usaha lainnya, baik dilakukan secara langsung atau melalui media online.

yang diterima atau diperoleh Wajib Pajak (WP) dengan peredaran bruto (omzet) yang tidak melebihi Rp4,8 Miliar (UMKM) dalam 1 (satu) Tahun Pajak.

BAYAR PAJAK UMKM 0.5% LEWAT ATM GAMPANG BINGITS!

1. Masukkan PIN, pilih Transaksi Lain, pilih Pembayaran
2. Pilih Lainnya, pilih Lainnya
3. Pilih Pajak, pilih PPh Final
4. Masukkan 15 digit NPWP, pilih Benar
5. Masukkan Masa Pajak (MMYYYY), pilih Benar
6. Masukkan Nominal pajak, Pilih Benar
7. Pastikan benar, jika telah yakin pilih Ya.

BELUM PUNYA NPWP? DAFTAR SEKARANG GAMPANG KOKI!

MULAI 17 AGUSTUS 2020,

UMKM dapat melakukan pendaftaran dan validasi NPWP di:

Melalui Aplikasi Layanan Pajak e-Registrasi dan Validasi NPWP antara DJP dan Himbara.

Omzet & Penentuan Pengenaan

Peredaran bruto (omzet) merupakan imbalan atau nilai pengganti berupa uang atau nilai uang yang diterima atau diperoleh dari usaha, **sebelum dikurangi** potongan penjualan, potongan tunai, dan/atau potongan sejenis.

Penentuan pengenaan didasarkan pada omzet dalam 1 (satu) Tahun Pajak terakhir sebelum Tahun Pajak yang bersangkutan. Bila omzet suatu usaha Tahun Pajak lalu tidak lebih dari Rp4,8Miliar, maka usaha tersebut termasuk UMKM yang dapat dikenakan Peraturan Pemerintah Nomor 23 Tahun 2018.

- Bila memiliki lebih dari satu tempat usaha, omzet yang dimaksud adalah jumlah omzet seluruh gerai atau counter atau outlet atau sejenisnya baik pusat maupun cabang.
- Bagi WP Orang Pribadi Kawin status Pisah Harta atau Memiliki Terpisah (MTI), yakni suami-istri yang masing-masing memiliki usaha dan NPWP yang berbeda, omzet yang dimaksud adalah dari penggabungan usaha keduanya.

Tahukah Kamu?

Tahun Pajak adalah jangka waktu 1 (satu) tahun kalender kecuali bila Wajib Pajak menggunakan tahun buku yang tidak sama dengan tahun kalender.

BANK BRI

1. Masukkan PIN, pilih Transaksi Lain, pilih Pembayaran
2. Pilih Lainnya, pilih Lainnya
3. Pilih Pajak, pilih PPh Final
4. Masukkan 15 digit NPWP, pilih Benar
5. Masukkan Masa Pajak (MMYYYY), pilih Benar
6. Masukkan Nominal pajak, Pilih Benar
7. Pastikan benar, jika telah yakin pilih Ya.

BCA

1. Masukkan PIN, pilih Menu Lainnya, pilih Pembayaran
2. Pilih Pajak/Penerimaan Negara, pilih Pajak Masa Tertentu
3. Masukkan 15 digit NPWP, lalu pilih Benar
4. Pilih PPh Final Bruto Tertentu, pilih Ya
5. Masukkan Masa Pajak (MMYYYY), pilih Benar
6. Masukkan Nominal pajak, pilih Ya
7. Pastikan benar, jika telah yakin pilih Benar

BNI

1. Masukkan PIN, pilih Lainnya, pilih Penerimaan Negara
2. Pilih Bayar/Beli, pilih Lainnya, pilih Penerimaan Negara
3. Pilih Buat ID Billing Pajak, pilih Benar
4. Masukkan 15 digit NPWP, pilih Benar
5. Pilih Jenis Pajak → PPh Final Bruto Tertentu
6. Masukkan Jumlah Pajak yang mau dibayar
7. Masukkan Masa dan Tahun Pajak (MMYYYY)
8. Konfirmasi pembayaran, pilih Ya

Terdapat pilihan Jenis Pajak lain

PPN Dalam Negeri 1% (1111111100) PPh 22 1% (1111221100) PPh 22 DP 0% (1111221100)
 PPh 21 1% (1111211100) PPh 22 1% (1111221100) PPh 22 0% (1111221100)

mandiri

1. Masukkan PIN, pilih Lainnya, pilih Penerimaan Negara
2. Pilih Bayar/Beli, pilih Lainnya, pilih Penerimaan Negara
3. Pilih Buat ID Billing Pajak, pilih Benar
4. Masukkan 15 digit NPWP, pilih Benar
5. Pilih Jenis Pajak → PPh Final Bruto Tertentu
6. Masukkan Jumlah Pajak yang mau dibayar
7. Masukkan Masa dan Tahun Pajak (MMYYYY)
8. Konfirmasi pembayaran, pilih Ya

Translation

MSME's Income Tax:

Income tax applies to income from businesses received or earned by taxpayers with a gross turnover not exceeding IDR 4.8 billion in a single tax year.

This includes individuals who carry out trade or service activities using movable facilities and who use part or all of the space for public purposes. Examples include street vendors, hawkers, and tent stalls in sidewalk areas.

Entities that have not yet operated commercially or those that, within one year of starting commercial operations, exceed a gross turnover of IDR 4.8 billion are also subject to this tax.

PAYING THE 0.5% MSME TAX THROUGH ATM IS VERY EASY!

1. Enter PIN, select Other Transaction, select Payment
2. Select OTHERS, select OTHERS
3. Select TAX, select FINAL TAX
4. Enter 15 digits of Tax ID, select CORRECT
5. Enter tax period (MMYYYY), select CORRECT
6. Enter amount, select CORRECT
7. Confirm to correct, select YES

DON'T HAVE A TAX ID? REGISTER NOW! IT'S VERY EASY!

STARTED FROM AUGUST 17, 2020

MSMEs are eligible to register for Tax ID validation at:

Through e-registration services and ID validation between DJP and Himbara Bank, taxpayers can easily complete their registration and ensure their identity is verified.

Gross turnover and levies:

Gross turnover refers to the compensation or replacement value in the form of money, or its equivalent, received or collected by a business, before sales discounts, cash discounts, or other deductions are applied.

The levy is determined based on the previous fiscal year's gross revenue. If a business's revenue for the preceding tax year was less than IDR 4.8 billion, it is classified as a micro, small, or medium-sized enterprise (MSME) and may be subject to Government Regulation Number 23 of 2018.

For businesses with multiple locations, the turnover refers to the combined revenue from all outlets, counters, branches, and similar locations, including those at the main office and any branches.

For individual taxpayers with a Married Status of Separation of Assets or Separate Choices (MT), where the husband and wife have separate businesses and NPWPs, the turnover is the total from both businesses combined.

Unless a taxpayer chooses an accounting year that differs from the calendar year, the tax year is considered to be one calendar year.

BANK BRI

1. Enter PIN, select Other Transaction, select Payment
2. Select OTHERS, select MPN
3. Select TAX, select FINAL TAX
4. Enter 15 digits of Tax ID, select CORRECT
5. Enter tax period (MMYYYY), select CORRECT
6. Confirm to correct, select YES

BCA

1. Enter PIN, select Other Transaction, select Payment
2. Select OTHERS, select MPN
3. Select TAX, select FINAL TAX
4. Enter 15 digits of Tax ID, select CORRECT
5. Enter tax period (MMYYYY), select CORRECT
6. Confirm to correct, select YES

BNI

1. Enter PIN, select Other Transaction, select Payment
2. Select OTHERS, select MPN
3. Select TAX, select FINAL TAX
4. Enter 15 digits of Tax ID, select CORRECT
5. Enter tax period (MMYYYY), select CORRECT
6. Confirm to correct, select YES

mandiri

1. Enter PIN, select Other Transaction, select Payment
2. Select create ID Billing Tax
3. Select TAX, select FINAL TAX
4. Enter 15 digits of Tax ID, select CORRECT
5. Enter tax period (MMYYYY), select CORRECT
6. Confirm to correct, select YES

BANK BRI

1. Enter PIN, select Other Transaction, select Payment
2. Select OTHERS, select OTHERS
3. Select TAX, select FINAL TAX
4. Enter 15 digits of Tax ID, select CORRECT
5. Enter tax period (MMYYYY), select CORRECT
6. Enter amount, select CORRECT
7. Confirm to correct, select YES

BCA

1. Enter PIN, select Other Transaction, select Payment
2. Select OTHERS, select MPN
3. Select TAX, select FINAL TAX
4. Enter 15 digits of Tax ID, select CORRECT
5. Enter tax period (MMYYYY), select CORRECT
6. Confirm to correct, select YES

BNI

1. Enter PIN, select Other Transaction, select Payment
2. Select OTHERS, select MPN
3. Select TAX, select FINAL TAX
4. Enter 15 digits of Tax ID, select CORRECT
5. Enter tax period (MMYYYY), select CORRECT
6. Confirm to correct, select YES

mandiri

1. Enter PIN, select Other Transaction, select Payment
2. Select OTHERS, select MPN
3. Select TAX, select FINAL TAX
4. Enter 15 digits of Tax ID, select CORRECT
5. Enter tax period (MMYYYY), select CORRECT
6. Confirm to correct, select YES

Note: This guide outlines the essentials of MSME tax compliance, presented in three clear sections: **Left Panel:** MSME tax applies to income earned from a wide range of business activities, including trade, manufacturing, and services. This covers operations such as accommodation services (e.g., student housing, dormitories, and worker lodgings), retail shops and kiosks, clothing and electronics stores, repair workshops, tailoring services, food stalls and restaurants, salons, and both online and offline businesses. The tax applies to businesses with gross annual revenue not exceeding IDR 4.8 billion. **Center Panel:** Paying MSME tax – just 0.5% of gross monthly revenue – is simple, especially via ATM. Step-by-step payment instructions are available for each participating bank. These include how to navigate the ATM menu, select the tax type, enter your Taxpayer Identification Number (NPWP), and input the payment amount. A helpful list of tax type codes and deposit codes is also provided to make the process even smoother. **Right Panel:** Don't Have an NPWP yet? Register now – it's easy! Getting your NPWP is quick and easy. As of 17 August 2020, MSMEs can register for and validate their NPWP directly through partner bank applications or by using the M-Pajak app.

TREATMENT 3: USE OF TAXPAYER MONEY

 KEMENTERIAN KEUANGAN REPUBLIK INDONESIA DIREKTORAT JENDERAL PAJAK KANTOR WILAYAH DIREKTORAT JENDERAL PAJAK LAYANAN INFORMASI DAN PENGADUAN KRING PAJAK (021) 1500200 SURTEL: pengaduan@pajak.go.id, informasi@pajak.go.id Nomor : [REDACTED] Sifat : Segera [REDACTED] Lampiran : - [REDACTED] Hal : Pembayaran dan Pelaporan Pajak untuk Wajib Pajak UMKM [REDACTED] Yth NPWP: [REDACTED] Berdasarkan ketentuan Pasal 2 Peraturan Menteri Keuangan Nomor PMK-242/PMK.03/2014 tanggal 24 Desember 2014 tentang Tata Cara Pembayaran dan Penyetoran Pajak, PPh UMKM Pasal 4 ayat (2) yang harus dibayar sendiri oleh Wajib Pajak harus disetor paling lama tanggal 15 (lima belas) bulan berikutnya setelah Masa Pajak berakhir. Sehubungan dengan hal tersebut, kami sampaikan bahwa Saudara diwajibkan melakukan penyetoran PPh UMKM sebelum tanggal 15 bulan berikutnya, yang sekaligus dapat dianggap sebagai penyampaian Surat Pemberitahuan (SPT) Masa.  Perlu kami sampaikan bahwa peran serta dan kontribusi Saudara sangat diperlukan untuk mendukung program pemerintah dalam penanganan pandemi COVID-19. Kontribusi Saudara akan dialokasikan dalam Program Pemulihan Ekonomi Nasional pada periode untuk menciptakan INDONESIA YANG KUAT. Apabila Saudara membutuhkan informasi perpajakan lebih lanjut, Saudara dapat menghubungi: 1. Kantor Pelayanan Pajak; 2. Kantor Pelayanan, Penulisan dan Konsultasi Perpajakan; 3. Kring Pajak (021) 1500200; atau 4. Laman www.pajak.go.id. Seluruh layanan yang kami sediakan tidak dipungut biaya. Atas peran serta Saudara dalam pembayaran dan pelaporan pajak, kami sampaikan terima kasih. Demikian disampaikan. Kepala Kantor Pelayanan Pajak  Verifikasi secara elektronik   	 MINISTRY OF FINANCE OF THE REPUBLIC OF INDONESIA DIRECTORATE GENERAL OF TAXATION DGT REGIONAL TAX OFFICE LOCAL TAX OFFICE PENCHE (021) 1500200, 1500100 EXT 2007, FAX (021) 2904300 Number : [REDACTED] 2021 Priority : Urgent Subject : Tax Payment and Reporting for MSMEs Taxpayers To: <Taxpayer Name> Tax ID Number: <Tax ID Number> <Address> Pursuant to the provision of Article 2 of the Minister of Finance Regulation No. PMK-242/PMK.03/2014 dated 24 December 2014 on the Procedures for Tax Payment and Remittance, MSME Income Tax under Article 4 paragraph (2), which must be paid directly by the taxpayer, is due no later than the 15th of the month following the end of the relevant tax period. Accordingly, please be informed that you are required to remit the MSME Income Tax before the 15th of the following month. This payment will also be considered as fulfilling your obligation to submit the relevant Monthly Tax Return.  We would like to convey that your participation and contribution are essential in supporting the government's efforts to address the COVID-19 pandemic. Your contribution will be allocated to the National Economic Recovery Program in the post-pandemic period, with the aim of building a STRONGER INDONESIA. Should you require further information regarding taxation, you may contact: 1. Your local Tax Office. 2. The Tax Services, Counselling, and Consultation Office. 3. Call Center at (021) 1500200; or 4. Visit the official website at www.pajak.go.id. All services we provide are free of charge. We sincerely thank you for your continued participation in fulfilling your tax payment and reporting obligations. Digitally signed, Head of tax office   
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Note: This treatment letter highlights the deadline for MSME taxpayers to submit their tax return (SPT) and emphasizes the importance of taxpayer contributions in supporting government programs, particularly those addressing the impact of the Covid-19 pandemic. The letter is issued in accordance with the official correspondence procedures of the tax office and is delivered to the taxpayer's registered address listed in the DGT database. To verify the letter's authenticity, taxpayers can scan the QR code linked to the electronic signature. This will display a digital copy of the letter within the Ministry of Finance's official correspondence system.

TREATMENT 3: FLYER

Original

Ministerium Keuangan Republik Indonesia
Direktorat Jenderal Pajak

Informasi tentang Pajak UMKM, yitidai skan Now:

Taukah Anda?

PAJAK UMKM 0.5 %

Pajak Anda, berperan besar untuk Menciptakan **INDONESIA** yang kuat

Pajak yang anda bayar, menghadirkan **VAKSIN COVID-19** & membuat kita bangkit kembali

PAJAK ANDA VAKSIN UNTUK SEMUA

COVID-19 Vaccine COVID-19 Vaccine COVID-19 Vaccine COVID-19 Vaccine COVID-19 Vaccine

Pajak yang Anda bayar, dialokasikan ke berbagai sektor dalam **penanganan COVID-19**:

1. UMKM insentif, kredit usaha, relaksasi pajak, pendanaan **Rp48.8T**
2. Kelompok Rentan: bantuan sosial, sembako, dana desa, kartu prakerja **Rp110.2T**
3. Tenaga dan Sarana Kesehatan: obat, vaksin, APD, insentif tenaga kesehatan **Rp25.4T**
4. Insentif bisnis, relaksasi pajak & insentif, restitusi PPN, fasilitas pajak **Rp20.4T**

PAJAK ANDA untuk GENERASI EMAS
20% APBN dialokasikan untuk **PENDIDIKAN** anak-anak kita, Sang Generasi EMAS.

Lebih Mudah! Gunakan Aplikasi **M-Pajak** untuk instal

JADILAH PAHLAWAN SIAPKAN MASA DEPAN MEREKA... BAYAR PAJAK ANDA SEKARANG

1500 200 pajak.go.id @GajepPajak

Translation

Ministry of Finance of the Republic of Indonesia
Directorate General of Taxation

Information about Tax for MSMEs Scan Now:

Did you Know?

MSMEs TAX 0.5 %

Your TAX is crucial for building a **STRONGER INDONESIA**

Your tax will help provide the **COVID 19 Vaccine** to Support Indonesia's recovery

YOUR TAX IS CURE FOR EVERYONE

COVID-19 Vaccine COVID-19 Vaccine COVID-19 Vaccine COVID-19 Vaccine COVID-19 Vaccine

Your **TAX** will be allocated to essential sectors to help address **the COVID-19 pandemic** :

1. MSMEs **Rp48.8T**
2. Vulnerable Groups **Rp110.2T**
3. Health Facilities **Rp25.4T**
4. Business and workers Incentives **Rp20.4T**

YOUR TAX also benefits the GOLDEN GENERATION
20% of National Budget
For the education of our children – the **GOLDEN GENERATION**.

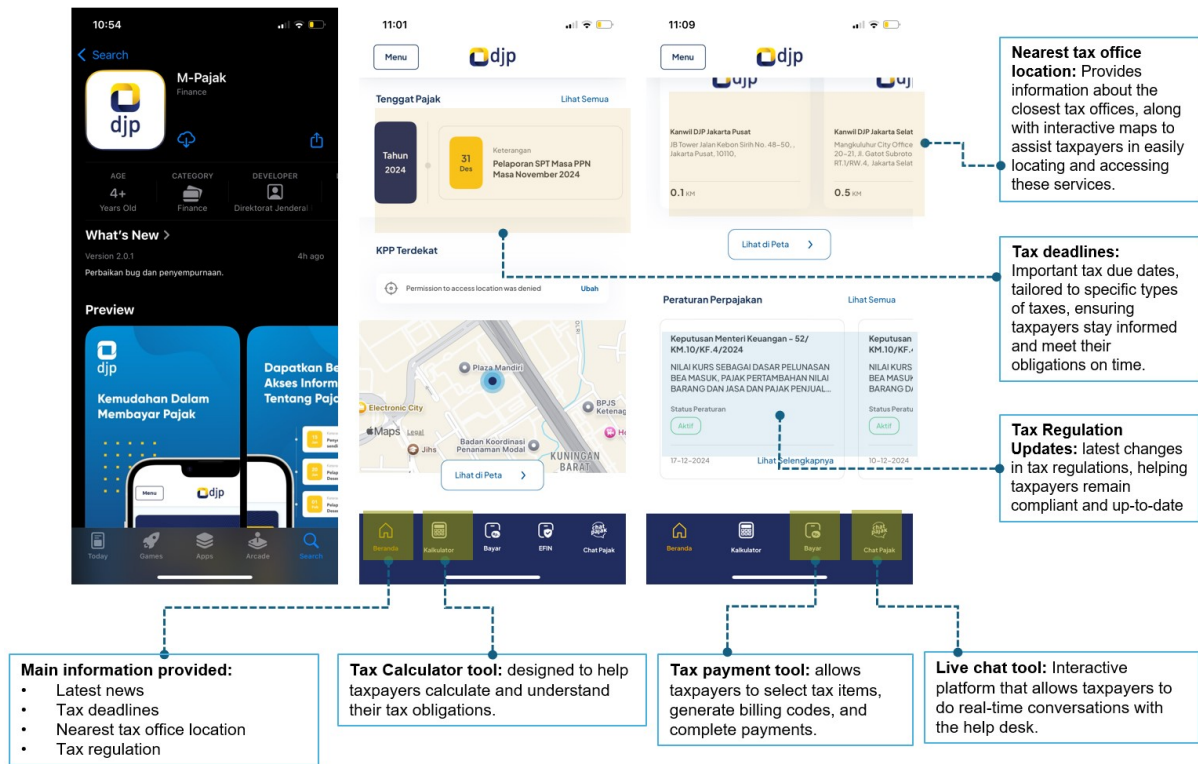
It's Easier now **USE M-Pajak Application** Scan this:

BE A HERO SUPPORT THEIR FUTURE AND PAY YOUR TAXES NOW!

1500 200 pajak.go.id @GajepPajak

Note: This guide highlights the importance and impact of paying taxes, particularly for MSMEs: **Left Panel:** Did you know? Your taxes play a crucial role in building a strong Indonesia. The taxes you pay have funded Covid-19 vaccines and helped us rise again. With an MSME tax rate of 0.5%, your contribution acts as a “vaccine” for all. **Right Panel:** The taxes you pay are allocated across various sectors to address the challenges of Covid-19. This includes IDR 4.8 trillion for MSME incentives, business loans, and tax relaxations; IDR 110.2 trillion for vulnerable groups, social assistance, food supplies, village funds, and pre-employment cards; IDR 25.4 trillion for health workers and infrastructure, medicines, vaccines, personal protective equipment, and health worker incentives; and IDR 20.4 trillion for business incentives, tax relaxations, VAT refunds, and tax facilities. Taxes also secure the future for the “golden generation”, with 20% of the state budget (APBN) allocated for children’s education. Be a hero and prepare their future – pay your taxes now. For convenience, use the M-Pajak application. Scan the QR code to download it from the App Store or Google Play.

M-PAJAK MOBILE APPS



Note: M-Pajak is an official IOS/Android-based application developed by the DGT, aims to enhance the efficiency of managing taxpayers' rights and obligations by offering a comprehensive suite of tax-related services. The platform facilitates easy access to tax regulations and updates while providing timely reminders for critical tax deadlines. One of the feature of M-Pajak is its document verification and validation system, which employs QR codes to ensure authenticity. Additionally, the app offers detailed taxpayer profiles, including personal, contact, and tax-specific information, as well as information on nearby tax office locations. For taxpayers requiring assistance with forgotten Electronic Filing Identification Numbers (EFIN), the application includes a recovery feature that eliminates the necessity of visiting a tax office. Users can also utilize the tax calculator to perform simulations of various tax computations with accuracy and speed. Furthermore, the app provides live chat support with help-desk agents and a tax office locator based on the user's geographic location. Another key feature of M-Pajak is the generation of billing codes for online tax payments through the "Pay" menu. Subsequently, payments can be conveniently made via banks, ATMs, or e-commerce platforms.