

# Reducing Social Security Contribution Arrears in Indonesia

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## Project report

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## Executive Summary

The Behavioural Insights Team (BIT) and the Indonesian social security agency for the labour force, BPJS Ketenagakerjaan (BPJSTK), formed a partnership in May 2017 to apply behavioural insights and rigorous evaluation to improving social security coverage in Indonesia. This report summarises the findings of our first project together.

### Policy objective

A large proportion of companies registered with BPJSTK – 313,000 out of 570,000 – were in arrears at least once between July 2017 and June 2018. This puts employees at risk because they would not be covered by

BPJSTK insurance in the event of an accident and lowers the contributions made towards their pensions. Our objective was therefore to increase on-time payments of social security contributions and reduce contribution arrears.

### Intervention

BIT and BPJSTK tested the effectiveness of different email interventions to increase payments before the monthly deadline. We randomly allocated 95,156 companies that had arrears in the past year and for which BPJSTK held an email address to one of five trial arms listed below:

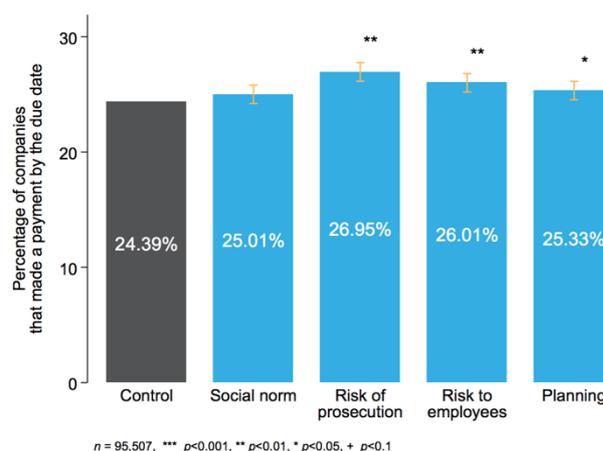
**Table:** *Email versions*

Trial arm	Email content
Control	No email
Social norms	Informed companies that the majority of companies pay their social security contributions on time
Risk of prosecution	Highlighted that companies with arrears could be prosecuted by the government
Risk to employees	Highlighted that employees were not insured through BPJSTK if companies were in arrears and appealing for them to take care of employees' well-being
Planning	Asked companies to mark a date and time in their calendar for when they would pay the contributions

## Results

The ‘Risk of prosecution’, ‘Risk to employees’, and ‘Planning’ emails significantly improved payment rates, while the ‘Social norm’ email was not significantly more effective than sending no email at all (see figure to the right). The ‘Risk of prosecution’ email was the most effective and led to a 2.6 percentage point increase in the likelihood that a company made a social security contribution payment by the deadline. This increased the number of companies making a payment by 500 and repayments of earlier arrears by IDR 10.2 billion (~ USD 715,000) compared to the Control group.

**Figure:** Impact on payments made by the deadline



*n* = 95,507, \*\*\* *p*<0.001, \*\* *p*<0.01, \* *p*<0.05, + *p*<0.1

## Recommendations

- Scale the ‘Risk of prosecution’ email by sending it to companies that were not sent the email during the trial.
- Adapt the one-off ‘Risk of prosecution’ email and test its effects as: (i) a monthly reminder; (ii) a hardcopy reminder letter to companies that have a physical address but not an email registered with BPJSTK; and (iii) a text message for companies that have registered for BPJSTK’s text reminder service.
- Develop new behavioural insights projects to: (i) encourage newly registered companies to pay their social security contributions on time (rather than just targeting companies that have been in arrears before); and (ii) discourage underreporting of the amount of social security contributions that a company needs to pay.

We thank BPJSTK for partnering with us and look forward to developing and testing more innovative approaches to ensure every Indonesian can eventually benefit from effective social security.

### Impact of the ‘Risk of prosecution’ email if scaled

If the ‘Risk of prosecution’ email had been sent to the entire trial sample of 95,156 companies, we would expect the following effects compared to not sending any email at all:

- 2500 more companies making a payment before the deadline;
- 1,430 more companies without arrears by the end of the month;
- IDR 51 billion (USD 3.6 million) more in repayments of earlier arrears.

## 01 / Introduction

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The Behavioural Insights Team (BIT) and the Indonesian social security agency for the labour force, BPJS Ketenagakerjaan (BPJSTK), formed a partnership in May 2017 to apply behavioural insights and rigorous evaluation to increase social security coverage in Indonesia.

BPJSTK is in charge of implementing the four components of public social security in Indonesia: 1) a provident fund scheme for old-age savings, 2) a pension scheme, 3) work accident insurance and 4) life insurance. BIT is working with BPJSTK's research team, which sits within the Office of the Deputy Director for Strategic Planning.

The purpose of the partnership, which is supported by the Global Innovation Fund, is to: (i) increase social security compliance and contribution payment revenues; and (ii) train BPJSTK staff to independently apply behavioural approaches and rigorous impact evaluation to social security implementation through 'learning-by-doing'.

As our first project, we conducted a randomised controlled trial (RCT) to evaluate the impact of email interventions designed to encourage companies to pay their monthly social security contributions on time and repay potential contribution arrears. This report describes the project and its results.

## 02 / Background

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### **Most registered companies have arrears at some point**

Depending on size, Indonesian companies must enrol their employees in some or all of the components of BPJSTK's social security programme. While the pension and provident fund provide old-age security, the work accident and life insurance pay benefits such as salary replacements and a scholarship to one of the beneficiary's children in the case of

incapacity or death. Monthly contributions, which are paid by the companies, are due by the 15th of the following month, and arrears are calculated on the last day of the month that the payment is due.

Out of around 570,000 companies currently registered with BPJSTK, around 313,000 were in arrears at least once between July 2017 and June 2018.

### **Employees are at risk if companies are in arrears**

An employer's failure to pay social security contributions has potentially detrimental consequences for employees' welfare: in case of a work accident or death, they and their dependents would not be covered by BPJSTK's insurance policies. This means that millions of Indonesian workers were not covered at some point during the past year. Furthermore, no contributions towards their pension and provident fund will be made, increasing the risk of old-age poverty. Finally, if a large number of companies fail to pay their contributions, BPJSTK might find it difficult to pay social security benefits to their members in general. Reducing arrears in contribution payments is therefore a priority for BPJSTK.

### **Lack of information and awareness lead to non-compliance**

To understand the barriers companies face in making social security contributions, BPJSTK and BIT conducted field research with BPJSTK frontline staff and company staff in charge of human resource and finance. There were two behavioural reasons why social security contributions were not paid: (i) companies in arrears tended not to prioritise these contributions because the consequences of not paying were not salient; and (ii) some companies were not even aware of their payment obligations and/or how to pay.

### *Companies are not always aware of the consequences of non-payment and prioritise other payments*

We pay attention to things that are salient – things that are at the top of our minds because the consequences are clear or because they are directly related to us. If companies have financial difficulties, decision makers in these companies tend to prioritise the payments for which the consequences of non-payment are more salient.

One way this happens is by employees putting pressure on them to make a specific payment. Employees, in turn, are more likely to demand payments whose benefits are more salient to them, such as salaries or health insurance. The benefits of social security coverage, on the other hand, are less obvious to employees, making it less likely that they will ask their employer to pay social security contributions regularly.<sup>i</sup>

The other reason a decision maker within a company might prioritise a payment is if the consequences of not doing so are immediately obvious and perceived as significant. However, we learned during our fieldwork that companies often were not aware of the legal risk such as prosecution and fines until they started to receive official communication about this from BPJSTK.

### *Companies were not aware of their payment obligations and/or how to pay*

Companies are especially likely to be unaware of their payment obligations and/or how to pay if they are small or if they only registered with BPJSTK recently. The relationship officers (ROs) that liaise between BPJSTK and companies are supposed to explain how to make payments and remind companies of their obligations. However, each RO may have several hundred company relationships to manage, which makes it difficult for them to communicate directly with companies and react to payment arrears in a timely manner. Therefore, communication between BPJSTK and companies often only takes place through official letters, which may be sent weeks or months after companies enter arrears, and do not include guidance on how to make a

payment. Additionally, because these letters have to be sent out manually, ROs tend to prioritise larger companies.

Thus, even companies that intend to comply with their obligations do not do so because of the effort involved in finding out how.

## 03 / Intervention

BPJSTK currently uses two ways to remind companies of their obligation to pay:

- a payment reminder system that sends out SMS reminders before the monthly deadline. Companies have to actively sign up to the service and it only states the amount to be paid; and
- the formal letters to companies with arrears mentioned above.

Our intervention involved sending a reminder email, supplementing these two communication methods, to test whether applying behavioural insights through an early intervention could increase companies' likelihood of making social security contributions by the monthly payment deadline.

We developed four versions of the email, each containing a different message based on behavioural insights. To refine the content and format, we sought feedback from employed and self-employed individuals outside BPJSTK before sending the emails out (see the [Annex](#) for the full emails in Bahasa Indonesia and English).

### 1. Social norms

*"62% of companies pay BPJS Ketenagakerjaan contribution on time"*

This email emphasised that paying social security contributions on time is the norm and pointed out that companies with arrears are in the minority. BIT has previously successfully used social norms to improve tax compliance<sup>ii</sup> and studies show that it can also be applied to encourage sustainable behaviour.<sup>iii</sup> Social norms tend to be effective because we want to

follow the crowd, i.e. do what we see or assume the majority around us to be doing, and therefore adjust our behaviour in response to a social-norms message when we had previously underestimated the prevalence of positive behaviour around us. Examples in the UK often pointed out that more than 90 per cent of the relevant population engaged in the desired behaviour. However, in Guatemala, we have found social norms to be effective even when the norm was as low as 64.5 per cent.<sup>iv</sup>

With this email, we aimed to shift the recipient company's priorities towards social security payments by correcting the (potential) misperception that no one paid social security contributions (on time).

## 2. Risk of prosecution

*"In 2017, BPJSTK referred 5.756 cases for prosecution to the State Assets and Auction Services Office and the District Courts or High Courts in the relevant area."*

We highlighted that companies ran the risk of prosecution if they did not pay. Rather than describing the prosecution risk in an abstract way, we made it more tangible by including the specific number of cases that were successfully processed. We hypothesised that the number would appear high enough for companies to feel that there was a real risk of them being prosecuted as well. Furthermore, we included the names of relevant authorities that companies take seriously according to BPJSTK frontline staff. The email also highlighted that companies may receive a fine as a consequence of non-payment, which not all recipients might have known.

We decided to test this message as people are more likely to be non-compliant if the consequences of non-compliance are not clear. For example, in a trial run by BIT, car owners were more likely to pay their road taxes if the letter stated in the heading "Pay your tax or lose your [make of car]" and included a picture of their car than if the letter was titled "Untaxed Vehicle Warning".<sup>v</sup>

## 3. Risk to employees

*"Show that you care about your employees' welfare"*

This email highlighted the risk to employees and asked the recipient to show that they cared about their employees. It stated the consequences of arrears for employees and their families, such as being denied a salary replacement or scholarship for one of the employee's children. It also asked the recipient, "How would you explain this [the fact that the employee is not covered due to arrears] to their family?"

People wish to maintain a positive self-image and are more likely to comply if the consequences of their actions are clear. For example, in the UK, BIT successfully decreased re-offending rates among drivers who had previously been caught speeding by outlining the potentially negative consequences of driving too fast – killing other road users such as children.<sup>vi</sup>

Both this email and the 'Risk of prosecution' version made the consequences of non-compliance more salient, but this version appealed to recipients' emotions rather than emphasising the risk of being caught.

## 4. Planning

*"Please take five minutes to mark a date and time in your calendar."*

This email encouraged recipients to plan the payment by asking them to "take five minutes to choose a date and time in your calendar when you will pay the August contributions". Encouraging recipients to plan has been shown to be effective in Indonesia before: in a RCT run by BIT and the Indonesian Directorate General of Taxes, the email asking taxpayers to choose a date when they would file a tax return and for which they received a reminder was the most effective at increasing the number of taxpayers that filed on time.<sup>vii</sup> The idea is that asking people to write down when they will take a planned action increases the likelihood that they will actually follow through on this intention.

### All emails

All emails were also (i) personalised; (ii) used simple language that clearly outlined the steps for payment; and (iii) signed off by the Membership Director to capitalise on the ‘messenger effect’.<sup>viii</sup>

## 04 / Trial design and implementation

We conducted an RCT to evaluate the impact of the four behaviourally-informed emails compared to sending no email.

### Sample

The sample consisted of all company divisions that: (i) had contribution arrears at least once during the period spanning July 2017 - June 2018, excluding companies with arrears only during February - April 2018; (ii) were currently registered with BPJSTK;<sup>ix</sup> and, (iii) had at least one valid email address registered with BPJSTK.

These criteria allowed us to focus our intervention on companies that are most likely to be non-compliant – i.e., that currently have or have previously had BPJSTK contribution arrears. In total, our trial sample consisted of 95,507 company divisions from 95,156 companies.

### Randomisation

We randomised by company but collected outcome data at the company division level. The reason for this was that spillovers within a company would be likely given that different divisions are often centrally managed and that, with randomisation at the division level, the same finance department might have received different versions of the email. At the same time, some companies only paid contributions for selected divisions; for example, if employees in one division demanded the payment of these contributions, while the employees in another division did not.

We stratified randomisation by three characteristics we expected to be associated with paying social security contributions on time: (i) arrears status with BPJSTK in June 2018 (as past behaviour is often predictive of future behaviour<sup>x</sup>); (ii) whether at least one division of the company held an account with BPJSTK’s electronic payment system (meaning that they were more likely to have a valid email address registered with BPJSTK); and, (iii) whether at least one division of the company had registered only one employee with BPJSTK (because we expect very small companies to be less likely to pay on time).

### Implementation

BPJSTK sent the emails on 7 September 2018, as a reminder for the payment due on 15 September 2018. These were sent to all email addresses that BPJSTK held on selected companies.

## 05 / Main findings

### Result 1: ‘Risk of prosecution’ was the most effective message

The ‘Risk of prosecution’, ‘Risk to employees’, and ‘Planning’ emails significantly improved the likelihood of a company making social security contributions by the 15 September 2018 deadline, compared to sending no email (see Figure 1).<sup>xi</sup> The ‘Social norms’ email did not improve outcomes when compared to sending no email at all.

The ‘Risk of prosecution’ email was the most effective: among companies in the Control group, 24.4 per cent made a payment before the deadline. This increased by 2.6 percentage points (10.23 per cent relative increase) to 26.9 per cent among companies that received the ‘Risk of prosecution’ email. This translates into 500 more payments before the deadline compared to the no email group or 2,500 additional payments if the email had been sent to the entire sample. Its subject line – ‘Avoid legal problems – pay your BPJS Ketenagakerjaan contributions now’ – was

also the most successful at inducing recipients to open the email.

The ‘Risk to employees’ and the ‘Planning’ emails led to a 1.6 and 0.9 percentage point increase, respectively (both statistically significant at the 5 per cent level<sup>xii</sup>), in the likelihood of a company making any payment before the deadline, compared to sending no email.

The difference between the ‘Social norm’ email and no email at all was not statistically significant. There are two potential explanations: (i) 62 per cent is too low to signal a compelling social norm; or (ii) companies expected the number to be at this level or above, and hence did not adjust their behaviour. We can also not preclude the possibility that the social norms content of the message actually ‘backfired’, i.e. put some companies off from paying, if they had thought that the percentage of companies complying was higher than the actual number. If this was the case, this might have been counteracted

by a positive reminder effect brought about by all emails, leading to an overall non-significant impact of the ‘Social norms’ message. However, our intervention and trial design did not allow us to disentangle these effects.

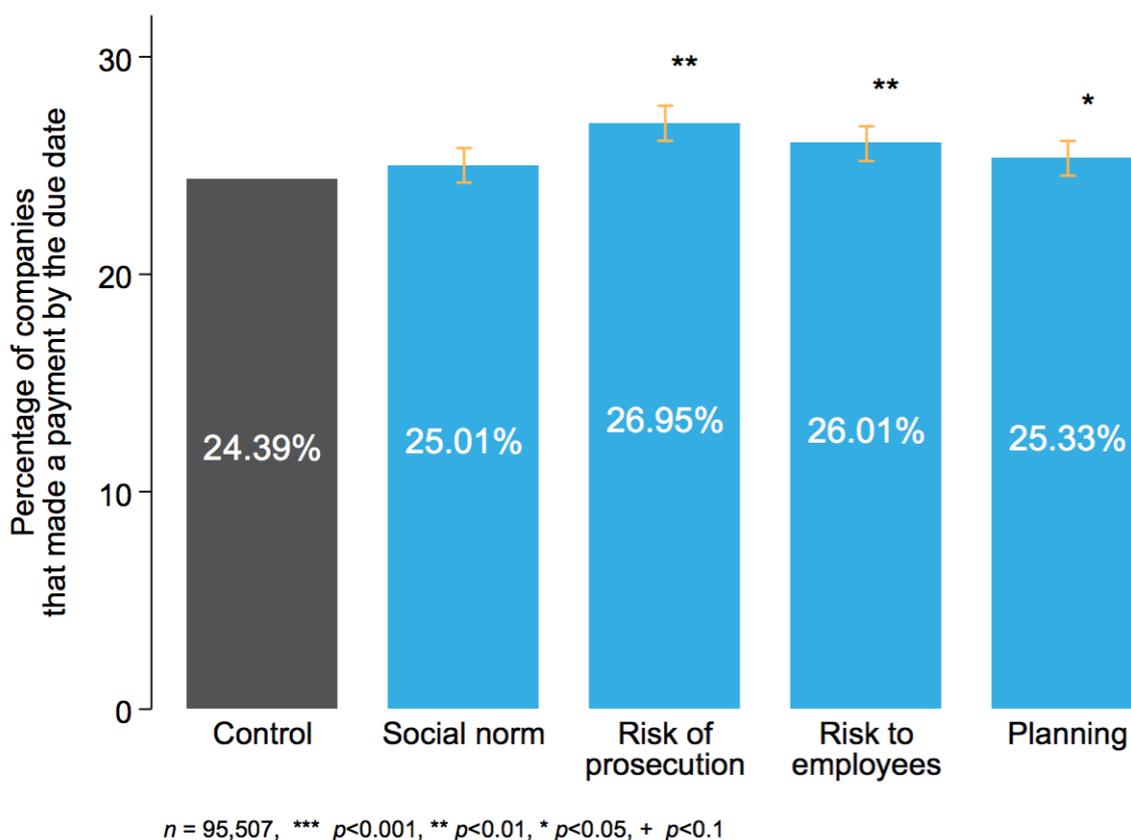
## 06 / Additional findings

We conducted additional analyses looking at other aspects of companies’ payment behaviour as well as the medium-term effect of the emails.

### **Result 2: Companies were more likely to make a late payment before arrears were calculated.**

If companies pay before the end of the month, they do not enter into arrears, even if they paid after the deadline. We found statistically

**Figure 1: Impact on payment by the due date**



significant effects for the ‘Risk of prosecution’ (1.9 percentage points) and ‘Risk to employees’ (0.9 percentage points) emails on the likelihood that a company made a payment before 30 September.

**Results 3: Companies in the ‘Risk of prosecution’ group were more likely to repay arrears and to pay their current contribution on time and less likely to have any arrears at the end of the month.**

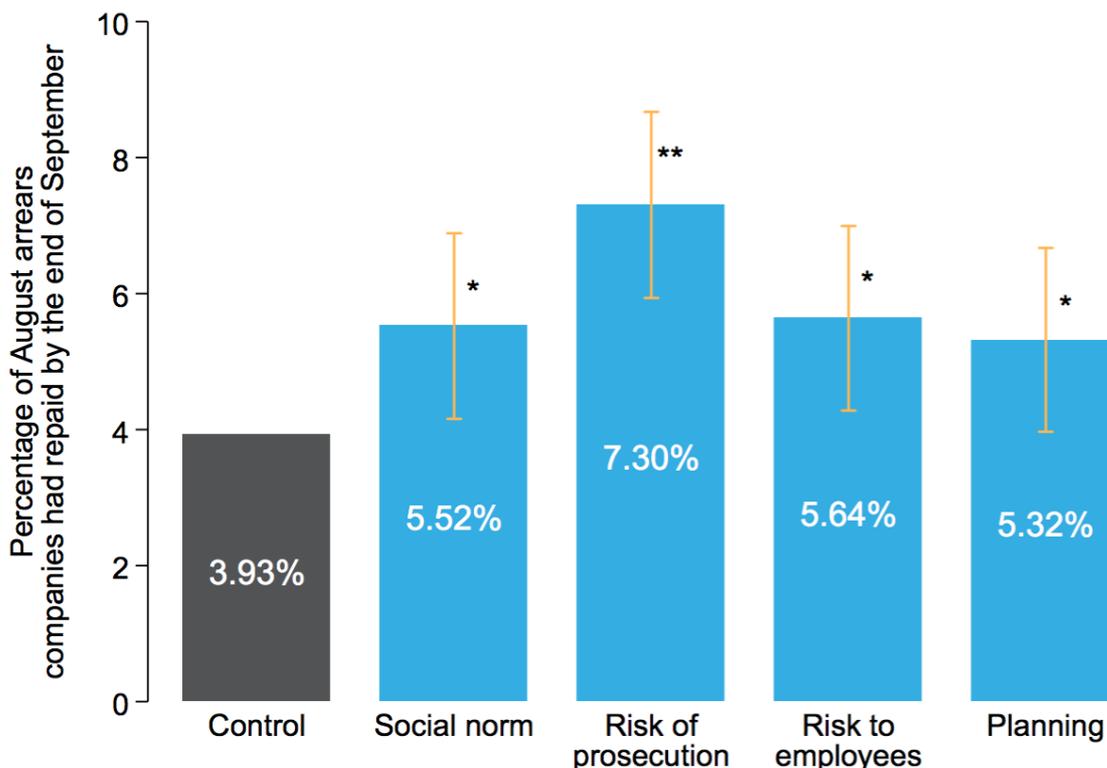
Among those companies that received the ‘Risk of prosecution’ email, the increase in payments by 15 September was driven both by companies paying their current contribution (i.e. for August) on time (1.2 percentage points increase relative to the Control group), as well as companies that repaid arrears (1.4 percentage points). Companies in this group were also 1.5 percentage points less likely to have any arrears at the end of the month relative to the Control group. When splitting payments in general into these components,

we did not find significant effects for the remaining versions of the email.

Even companies that did not repay the full amount of arrears still repaid more than in Control. Companies that received the ‘Risk of prosecution’ email reduced their overall arrears from August 2018 by 7.3 per cent, compared to 3.9 per cent in the Control group, equivalent to an almost 3.4 percentage point increase (see Figure 2). Companies that received one of the other emails increased their repayment by 1.4 - 1.7 percentage points compared to the control group.

We calculate that companies in the ‘Risk of prosecution’ group repaid an additional IDR 10.2 billion (USD 715,000) relative to the Control group, which would have translated into IDR 51 billion (USD 3.6 million), had the email been sent to all companies in the sample.

Figure 2: Impact on arrears repayment



n = 52,049, \*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.1

**Result 4: There was no medium-term effect on payment**

We were interested to see if sending the email once in September had effects on future social security contributions beyond the closest deadline, that is whether a one-off email could lead to improvements in contribution payments in the medium- or long-term. However, we found no statistically significant effect of any email version on payments made in October - December 2018.

## 07 / Recommendations

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The results of this trial show that companies respond to reminder emails that include information about the negative consequences of non-compliance. This response does not carry over into the medium- and long-term. Based on these results, we propose for BPJSTK to:

**Scale without further testing**

- Send the 'Risk of prosecution' email to companies that have had arrears but were not sent an email in this trial (e.g. because they entered arrears more recently).

**Adapt with further testing**

- Send simple reminders to companies every month after they have been sent the first 'Risk of prosecution' email, and test the long-term effects. This is in response to the result that the email was not effective beyond the first month. We hypothesise that, once companies are aware of the negative consequences of non-payment, a simple reminder message can be sufficient to induce a positive response, even without an explicit reference to the risks.
- Modify other types of communications, following the example of the emails tested here, to highlight the risk of prosecution to companies in simple language, such as: (i) text messages to companies that have registered for the text reminder service;

and (ii) existing letters that inform companies that they are in arrears. This would allow us to reach companies that do not have an email registered with BPJSTK.

**Develop potential new projects**

- Send companies that register with BPJSTK an email that informs them of their payment obligations and how to make payments. This is especially pertinent as we found that companies that had registered with BPJSTK more recently were less likely to comply with their payment obligations.
- Develop ways to reach employees directly and encourage them to hold their employers accountable. We have seen in our trial that companies do care about their employees' welfare as they respond to the 'Risk to employees' message, and we know that some employers prioritise their payments based on what employees are more likely to insist on. Hence, we hypothesise that companies' behaviour is likely to change if employees hold them accountable.
- Use deterrence messages similar to the 'Risk of prosecution' message to reduce underreporting of the amount of social security contributions that a company needs to pay, and enhance these further by: (i) personalising messages with third-party data from the Indonesian Directorate General of Taxes that show an employee was registered for tax but not for social security; or (ii) by adding honesty prompts when companies register or update their information in the electronic payment system.

## 08 / BPJSTK project team

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**Romie Erfianto, Deputy Director of Project Management, formerly: Deputy Director of Strategic Planning**

*“So far, BPJSTK has run programmes that rely on big efforts, but we don’t know whether they were actually impactful. Behavioural Insights is about running projects with less effort and a big impact”*

Romie had been introduced by Eldest, a member of his team (see below), to behavioural insights, but had never seen them applied at BPJSTK. He argues that behavioural insights can and should be applied to all three of BPJSTK’s strategic priorities for 2019: communication, excellent service delivery and law enforcement.

Romie thinks that the research team, which he oversaw for the duration of the project, should continue to push new social-security research and that the collaboration with BIT has given them the tools to do this. Each of the team’s projects will have to result in recommendations, written up in simple, non-technical language. After that, it is up to the relevant Directorates within BPJSTK to implement these recommendations and take the interventions to scale. The fact that our project delivered results within only a few months is important here – it will help the research team to convince BPJSTK’s Board of Directors and other Directorates of the value of using behavioural insights and rigorous

evaluation to improve the implementation of social security policies.

In fact, Romie has now moved to a central position, working directly with BPJSTK’s President Director. This puts him in an ideal place to spread the demand for and uptake of behavioural insights throughout the organisation, especially for the implementation of policies with a direct impact on the delivery of services to BPJSTK’s members.



**Sartika Kooshanafiah, Assistant Deputy Director of Social Security Research & Development**

*“Human behaviour has always interested me because if a person behaves in a certain way, there is always a reason behind that. And it’s interesting to know what these reasons are”*

While her background is in chemical engineering and human resource management, Sartika was probably the first BPJSTK employee to become interested in behavioural insights: in 2014, she came across Dan Ariely’s book, “Predictably Irrational”, was intrigued by the title and therefore started reading it.

She now leads the research team in the Office of the Deputy Director of Strategic Planning, which was established in early 2018. Her job is essentially to coordinate desk studies and research at BPJSTK – projects such as the one with BIT therefore naturally fall within her area of responsibility.

However, Sartika hadn’t heard about RCTs as an evaluation approach. What did she learn from the project with BIT? “RCTs are really difficult – you have to think about all the details, including controlling spillovers – which ultimately limits what you can do if you want to run an RCT.”

She also enjoyed that the project made her explore the reasons behind company arrears in the field, rather than by just looking at the literature. While teams from BPJSTK's headquarters had visited BPJSTK branch offices before, this was generally not to investigate a particular challenge in detail.

One big lesson learned for her was that, to ensure smooth implementation of research projects and uptake of the results, the relevant Directorates should be involved from the beginning – something she wants to make a priority for the next project.



**Eldest Augustin, Junior Manager of Social Security Research**

*“We are not so familiar with policy-making based on evidence. We didn't test, we just ran programmes - hopefully, that will change in the future.”*

Eldest was already familiar with behavioural economics and BIT's work when BIT first approached BPJSTK in 2017. She had completed a Master's degree in Behavioural Economics at City University, London, the year before. After her return to Jakarta, she gave presentations about behavioural economics to her colleagues, but was still looking for an opportunity to apply it to BPJSTK's work.

During the project with BIT, Eldest contributed significantly to the email drafts, not only checking that the content was factually correct but also that it was culturally appropriate. She managed internal stakeholder relationships and oversaw the launch of the emails.

For her, one of the central learnings from the project was something you don't necessarily learn at university – analysing the data, even if it is just for simple descriptive statistics, is

valuable as it can help detect anomalies and convince others of the importance of a research project. She feels that the use of data for policy making is now slowly spreading across the organisation and hopes that running experiments before the implementation of new policies will become the norm at BPJSTK.

While her Master's degree and the work with BIT have given her both a relevant theoretical and practical background, she feels that, to become a truly independent researcher, she needs to dig deeper: a PhD in Behavioural Economics is therefore definitely an option for the future – or, as she puts it, “I want to learn.”



**Nanda Anthony, Senior Officer of Social Security Research & Development**

*“The most exciting thing has been to see how such a small thing can have such a large impact.”*

Nanda joined the research team not long before the launch of our project, in July 2018, from BPJSTK's IT development team.

Having never heard about behavioural insights before, Nanda received some introductory readings from Sartika upon joining the project. He enjoyed learning about behavioural science and understanding people's behaviour in detail. For him, the most fascinating thing was to see how a light-touch intervention such as an email could have such a big impact on the outcome of interest.

With an IT degree from the University of Queensland, Nanda was the ideal person to prepare the logistics behind sending out more than 100,000 emails and thanks to his patience and diligence, the launch went smoothly.

Going forward, he wants to learn more about behavioural science, RCTs and other evaluation methods and apply them to other policy challenges.

## 09 / Conclusion

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Employees are put at significant financial risk if their employer does not pay social security contributions to BPJSTK on time, as they will not be covered by social security insurance. Given the number of companies that enter into arrears over the course of the year, this affects a significant number of Indonesians, who are often also a more vulnerable segment of the population.<sup>xiii</sup>

Decisions within companies are made by people who are prone to behavioural biases that result in suboptimal behaviour. For example, we are more likely to act if the consequences of our behaviour are salient. Our most successful email confirmed this: it stressed the risk of prosecution to companies that had arrears and thereby increased the likelihood of a company making a payment before the deadline by 2.6 percentage points relative to no reminder.

Our project also showed that the impact of the emails was not only down to a reminder effect and that content matters: the 'Social norms' email was not significantly more effective than not sending an email at all.

We found that the positive effects did not extend beyond the immediate payment cycle, suggesting that well-designed reminder emails need to be sent out regularly in order to be effective in the long run.

Nevertheless, sending preventive emails is a highly cost-effective measure in encouraging companies to pay their social security contributions: The emails were sent at close to zero cost, yet the 'Risk of prosecution' email led to a relative increase in arrears repaid by IDR 10.1 billion (USD 715,000), with the potential to reach IDR 51 billion (USD 3.6 million) if scaled. Additionally, BPJSTK frontline staff save time because there are

fewer late payers that they have to follow up with.

From the results of this trial, we can draw three conclusions that can be applied to other communications with companies about social security: (i) use preventive messages to encourage companies to comply with regulations; (ii) highlight the consequences of an action; and (iii) send reminders out regularly and test whether this leads to a long-term effect.

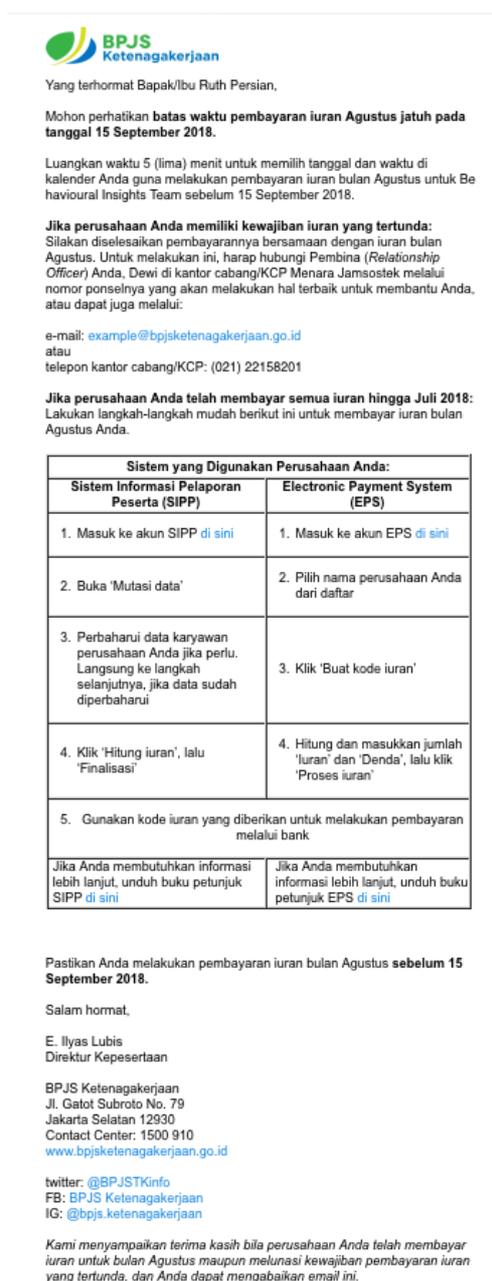
We thank BPJSTK for partnering with us and look forward to developing and testing more innovative approaches to ensure every Indonesian can eventually benefit from effective social security.

## Annex - Emails

Note: we highlight in orange the text that changes across treatments only in this document.

### Treatment 1: Social Norm

Figure A1: Screenshot of email as sent



**BPJS Ketenagakerjaan**

Yang terhormat Bapak/Ibu Ruth Persian,

Mohon perhatikan **batas waktu pembayaran iuran Agustus jatuh pada tanggal 15 September 2018.**

Luangkan waktu 5 (lima) menit untuk memilih tanggal dan waktu di kalender Anda guna melakukan pembayaran iuran bulan Agustus untuk Be  
havioural Insights Team sebelum 15 September 2018.

**Jika perusahaan Anda memiliki kewajiban iuran yang tertunda:**  
Silakan diselesaikan pembayarannya bersamaan dengan iuran bulan Agustus. Untuk melakukan ini, harap hubungi Pembina (*Relationship Officer*) Anda, Dewi di kantor cabang/KCP Menara Jamsostek melalui nomor ponselnya yang akan melakukan hal terbaik untuk membantu Anda, atau dapat juga melalui:

e-mail: [example@bpjsketenagakerjaan.go.id](mailto:example@bpjsketenagakerjaan.go.id)  
atau  
telepon kantor cabang/KCP: (021) 22158201

**Jika perusahaan Anda telah membayar semua iuran hingga Juli 2018:**  
Lakukan langkah-langkah mudah berikut ini untuk membayar iuran bulan Agustus Anda.

Sistem yang Digunakan Perusahaan Anda:	
Sistem Informasi Pelaporan Peserta (SIPP)	Electronic Payment System (EPS)
1. Masuk ke akun SIPP <a href="#">di sini</a>	1. Masuk ke akun EPS <a href="#">di sini</a>
2. Buka 'Mutasi data'	2. Pilih nama perusahaan Anda dari daftar
3. Perbarui data karyawan perusahaan Anda jika perlu. Langsung ke langkah selanjutnya, jika data sudah diperbarui	3. Klik 'Buat kode iuran'
4. Klik 'Hitung iuran', lalu 'Finalisasi'	4. Hitung dan masukkan jumlah 'iuran' dan 'Denda', lalu klik 'Proses iuran'
5. Gunakan kode iuran yang diberikan untuk melakukan pembayaran melalui bank	
Jika Anda membutuhkan informasi lebih lanjut, unduh buku petunjuk SIPP <a href="#">di sini</a>	Jika Anda membutuhkan informasi lebih lanjut, unduh buku petunjuk EPS <a href="#">di sini</a>

Pastikan Anda melakukan pembayaran iuran bulan Agustus **sebelum 15 September 2018.**

Salam hormat,

E. Ilyas Lubis  
Direktur Kepesertaan

BPJS Ketenagakerjaan  
Jl. Gatot Subroto No. 79  
Jakarta Selatan 12930  
Contact Center: 1500 910  
[www.bpjsketenagakerjaan.go.id](http://www.bpjsketenagakerjaan.go.id)

twitter: [@BPJSTKinfo](https://twitter.com/BPJSTKinfo)  
FB: [BPJS Ketenagakerjaan](https://www.facebook.com/BPJSKetenagakerjaan)  
IG: [@bpjsketenagakerjaan](https://www.instagram.com/bpjsketenagakerjaan)

*Kami menyampaikan terima kasih bila perusahaan Anda telah membayar iuran untuk bulan Agustus maupun melunasi kewajiban pembayaran iuran yang tertunda, dan Anda dapat mengabaikan email ini.*

*Perihal: 62% perusahaan membayar iuran program BPJS Ketenagakerjaan tepat waktu*

Yang terhormat Bapak/Ibu [Nama PIC],

**Tahukah Anda, 62% perusahaan membayar iuran program BPJS Ketenagakerjaan tepat waktu.**

Jadilah bagian dari mayoritas perusahaan yang membayar iuran tepat waktu. Lakukan pembayaran iuran bulan Agustus untuk [company\_name] sebelum 15 September 2018.

**Jika perusahaan Anda memiliki kewajiban iuran yang tertunda:**

Silakan diselesaikan pembayarannya bersamaan dengan iuran bulan Agustus. Untuk melakukan ini, harap hubungi Pembina (Relationship Officer) Anda, [Nama Relationship Officer (RO)/Pembina] di kantor cabang/KCP [nama kantor cabang] melalui nomor ponselnya yang akan melakukan hal terbaik untuk membantu Anda, atau dapat juga melalui:

e-mail: [email]

atau

telepon kantor cabang Anda: [nomor telepon]

**Jika perusahaan Anda telah membayar semua iuran hingga Juli 2018:**

Lakukan langkah-langkah mudah berikut untuk membayar iuran bulan Agustus Anda.

<b>Sistem yang Digunakan Perusahaan Anda:</b>	
<b>Sistem Informasi Pelaporan Peserta (SIPP)</b>	<b>Electronic Payment System (EPS)</b>
Masuk ke akun SIPP <a href="#">di sini</a>	Masuk ke akun EPS <a href="#">di sini</a>
Buka 'Mutasi data'	Pilih nama perusahaan Anda dari daftar
Perbaharui data karyawan perusahaan Anda jika perlu. Langsung ke langkah selanjutnya, jika data sudah diperbaharui	Klik 'Buat kode iuran'
Klik 'Hitung iuran', lalu 'Finalisasi'	Hitung dan masukkan jumlah 'iuran' dan 'Denda', lalu klik 'Proses iuran'
Gunakan kode iuran yang diberikan untuk melakukan pembayaran melalui bank	
Jika Anda membutuhkan informasi lebih lanjut, unduh buku petunjuk SIPP <a href="#">di sini</a>	Jika Anda membutuhkan informasi lebih lanjut, unduh buku petunjuk EPS <a href="#">di sini</a>

Pastikan Anda melakukan pembayaran iuran bulan Agustus **sebelum 15 September 2018**.

Salam hormat,

E. Ilyas Lubis  
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twitter: [@BPJSTKinfo](#)

FB: [BPJS Ketenagakerjaan](#)

IG: [@bpjs.ketenagakerjaan](#)

Kami menyampaikan terima kasih bila perusahaan Anda telah membayar iuran untuk bulan Agustus maupun melunasi kewajiban pembayaran iuran yang tertunda, dan Anda dapat mengabaikan email ini.

*Translation*

**Subject: 62% of companies pay BPJS Ketenagakerjaan contributions on time.**

Dear Sir/Madam [name of person in charge],

**Did you know that 62% of companies pay BPJS Ketenagakerjaan contributions on time?**

**Be part of the majority of companies that pay contributions on time.** Pay the August contribution for [company\_name] before 15 September 2018.

**If your company has contribution arrears:**

Please complete this payment together with the August contribution. To do this, please contact your contact person (Relationship Officer), [Name of Relationship Officer (RO) / Trustee] at the branch office / KCP [name of branch office], who will do the best to help you, on their cell phone or through:

email: [RO's email]

Or

Call your branch office: [branch office's number]

**If your company has paid all contributions up to July 2018:**

Take these simple steps to pay your contribution for the month of August.

<b>The System that Your Company Uses:</b>	
<b>Member Reporting Information System (SIPP)</b>	<b>Electronic Payment System (EPS)</b>
1) Log into SIPP <a href="#">here</a>	1) Log into EPS <a href="#">here</a>
2) Go to 'Mutasi data'	2) Choose your company's name from the drop-down menu
3) Update your employee data if necessary. Continue with the next step, if data is already up-to-date	3) Click 'Create a payment code'
4) Click 'Calculate contribution', then 'Finalization'	4) Calculate and enter the amount of 'contribution' and 'fine', then click 'proceed contribution'
5) Use the payment code given to pay the contribution at the bank	
If you need further information, download the SIPP manual <a href="#">here</a>	If you need further information, download the EPS manual <a href="#">here</a>

Make sure you make the contribution payment for the month of August before 15 September 2018.

Best regards,

E. Ilyas Lubis

Membership director.

We thank you if your company has already paid the contribution for the month of August and paid off any arrears, and you can ignore this email.

## Treatment 2 - Risk of prosecution

Perihal: **Hindari masalah hukum - Lakukan pembayaran iuran BPJS Ketenagakerjaan Anda sekarang**

Yang terhormat Bapak/Ibu [Nama PIC],

Pada tahun 2017, BPJS Ketenagakerjaan telah memproses **5.756 kasus** perusahaan yang menunggak untuk ditindaklanjuti ke:

- **Kantor Pelayanan Kekayaan Negara dan Lelang (KPKNL)** Kementerian Keuangan yang dapat mengenakan biaya administrasi tambahan bagi perusahaan Anda.
- Kejaksaan Negeri atau Kejaksaan Tinggi di wilayah terkait.

**Hindari masalah hukum.** Lakukan pembayaran iuran bulan Agustus untuk [company\_name] sebelum 15 September 2018.

### Jika perusahaan Anda memiliki kewajiban iuran yang tertunda:

Silakan diselesaikan pembayarannya bersamaan dengan iuran bulan Agustus. Untuk melakukan ini, harap hubungi Pembina (Relationship Officer) Anda, [Nama Relationship Officer (RO)/Pembina] di kantor cabang/KCP [nama kantor cabang] melalui nomor ponselnya yang akan melakukan hal terbaik untuk membantu Anda, atau dapat juga melalui:

e-mail: [email]

atau

telepon kantor cabang Anda: [nomor telepon]

### Jika perusahaan Anda telah membayar semua iuran hingga Juli 2018:

Lakukan langkah-langkah mudah berikut untuk membayar iuran bulan Agustus Anda.

Sistem yang Digunakan Perusahaan Anda:	
Sistem Informasi Pelaporan Peserta (SIPP)	Electronic Payment System (EPS)
Masuk ke akun SIPP <a href="#">di sini</a>	Masuk ke akun EPS <a href="#">di sini</a>
Buka 'Mutasi data'	Pilih nama perusahaan Anda dari daftar
Perbaharui data karyawan perusahaan Anda jika perlu. Langsung ke langkah selanjutnya, jika data sudah diperbaharui	Klik 'Buat kode iuran'
Klik 'Hitung iuran', lalu 'Finalisasi'	Hitung dan masukkan jumlah 'iuran' dan 'Denda', lalu klik 'Proses iuran'
Gunakan kode iuran yang diberikan untuk melakukan pembayaran melalui bank	
Jika Anda membutuhkan informasi lebih lanjut, unduh buku petunjuk SIPP <a href="#">di sini</a>	Jika Anda membutuhkan informasi lebih lanjut, unduh buku petunjuk EPS <a href="#">di sini</a>

Pastikan Anda melakukan pembayaran iuran bulan Agustus **sebelum 15 September 2018**.

Salam hormat,

E. Ilyas Lubis

Direktur Kepesertaan

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IG: [@bpjs.ketenagakerjaan](https://www.instagram.com/bpjs.ketenagakerjaan)

Kami menyampaikan terima kasih bila perusahaan Anda telah membayar iuran untuk bulan Agustus maupun melunasi kewajiban pembayaran iuran yang tertunda, dan Anda dapat mengabaikan email ini.

*Translation*

**Subject: Avoid legal problems - pay your BPJS Ketenagakerjaan contributions now**

Dear Sir/Madam [name of person in charge],

In 2017, BPJS Ketenagakerjaan's investigation officers referred **5.756 cases** of companies with arrears to be followed up by:

- **The State Assets and Auction Services Office (KPKNL)** at the Ministry of Finance, which can impose fines
- District Courts or High Courts in the relevant area.

**Avoid legal problems.** Pay the August contribution for [company\_name] before 15 September 2018.

**If your company has contribution arrears:**

Please complete this payment together with the August contribution. To do this, please contact your contact person (Relationship Officer), [Name of Relationship Officer (RO) / Trustee] at the branch office / KCP [name of branch office], who will do the best to help you, on their cell phone or through:

email: [RO's email]

Or

Call your branch office: [branch office's number]

**If your company has paid all contributions up to July 2018:**

Take these simple steps to pay your contribution for the month of August.

The System that Your Company Uses:	
Member Reporting Information System (SIPP)	Electronic Payment System (EPS)
1) Log into SIPP <a href="#">here</a>	1) Log into EPS <a href="#">here</a>
2) Go to 'Mutasi data'	2) Choose your company's name from the drop-down menu
3) Update your employee data if necessary. Continue with the next step, if data is already up-to-date	3) Click 'Create a payment code'
4) Click 'Calculate contribution', then 'Finalization'	4) Calculate and enter the amount of 'contribution' and 'fine', then click 'proceed contribution'
5) Use the payment code given to pay the contribution at the bank	
If you need further information, download the SIPP manual <a href="#">here</a>	If you need further information, download the EPS manual <a href="#">here</a>

Make sure you make the contribution payment for the month of August before 15 September 2018.

Best regards,

E. Ilyas Lubis

Membership director.

We thank you if your company has already paid the contribution for the month of August and paid off any arrears, and you can ignore this email.

### Treatment 3 – Risk to employees

Perihal: Tunjukkan bahwa Anda peduli atas kesejahteraan karyawan Anda – Lakukan pembayaran iuran BPJS Ketenagakerjaan Anda sekarang

Yang terhormat Bapak/Ibu [Nama PIC],

**Jika perusahaan Anda memiliki pembayaran iuran yang tertunda, BPJS Ketenagakerjaan tidak akan dapat memberikan jaminan kecelakaan kerja dan kematian kepada karyawan Anda.** Bila salah seorang karyawan Anda meninggal dunia karena kecelakaan kerja, keluarganya tidak akan memperoleh santunan 48 bulan gaji serta beasiswa 23 pendidikan untuk salah satu anak mereka. Bagaimana Anda akan menjelaskan ini pada keluarga mereka?

Tunjukkanlah bahwa Anda peduli dengan karyawan Anda dan keluarga mereka. Lakukan pembayaran iuran bulan Agustus untuk [company\_name] sebelum 15 September 2018

#### Jika perusahaan Anda memiliki kewajiban iuran yang tertunda:

Silakan diselesaikan pembayarannya bersamaan dengan iuran bulan Agustus. Untuk melakukan ini, harap hubungi Pembina (Relationship Officer) Anda, [Nama Relationship Officer (RO)/Pembina] di kantor cabang/KCP [nama kantor cabang] melalui nomor ponselnya yang akan melakukan hal terbaik untuk membantu Anda, atau dapat juga melalui:

e-mail: [email]

atau

telepon kantor cabang Anda: [nomor telepon]

#### Jika perusahaan Anda telah membayar semua iuran hingga Juli 2018:

Lakukan langkah-langkah mudah berikut untuk membayar iuran bulan Agustus Anda.

Sistem yang Digunakan Perusahaan Anda:	
Sistem Informasi Pelaporan Peserta (SIPP)	Electronic Payment System (EPS)
Masuk ke akun SIPP <a href="#">di sini</a>	Masuk ke akun EPS <a href="#">di sini</a>
Buka 'Mutasi data'	Pilih nama perusahaan Anda dari daftar
Perbaharui data karyawan perusahaan Anda jika perlu. Langsung ke langkah selanjutnya, jika data sudah diperbaharui	Klik 'Buat kode iuran'
Klik 'Hitung iuran', lalu 'Finalisasi'	Hitung dan masukkan jumlah 'iuran' dan 'Denda', lalu klik 'Proses iuran'
Gunakan kode iuran yang diberikan untuk melakukan pembayaran melalui bank	
Jika Anda membutuhkan informasi lebih lanjut, unduh buku petunjuk SIPP <a href="#">di sini</a>	Jika Anda membutuhkan informasi lebih lanjut, unduh buku petunjuk EPS <a href="#">di sini</a>

Pastikan Anda melakukan pembayaran iuran bulan Agustus **sebelum 15 September 2018.**

Salam hormat,

E. Ilyas Lubis

Direktur Kepesertaan

BPJS Ketenagakerjaan

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IG: [@bpjs.ketenagakerjaan](https://www.instagram.com/bpjs.ketenagakerjaan)

Kami menyampaikan terima kasih bila perusahaan Anda telah membayar iuran untuk bulan Agustus maupun melunasi kewajiban pembayaran iuran yang tertunda, dan Anda dapat mengabaikan email ini.

*Translation*

**Subject: Show that you care about your employees' welfare – pay your BPJS Ketenagakerjaan contributions now**

Dear Sir/Madam [name of person in charge],

If your company has arrears, BPJS Ketenagakerjaan will not be able to provide work accident insurance and life insurance to your employees. If one of your employees dies due to a work accident, **their family will not be receive a 48-month salary benefits and educational scholarship for one of their children How would you explain this to their families?**

Show that you care about your employees and their families. Pay the August contribution for [company\_name] before 15 September 2018.

**If your company has contribution arrears:**

Please complete this payment together with the August contribution. To do this, please contact your contact person (Relationship Officer), [Name of Relationship Officer (RO) / Trustee] at the branch office / KCP [name of branch office], who will do the best to help you, on their cell phone or through: email: [RO's email]

Or

Call your branch office: [branch office's number]

**If your company has paid all contributions up to July 2018:**

Take these simple steps to pay your contribution for the month of August.

The System that Your Company Uses:	
Member Reporting Information System (SIPP)	Electronic Payment System (EPS)
1) Log into SIPP <a href="#">here</a>	1) Log into EPS <a href="#">here</a>
2) Go to 'Mutasi data'	2) Choose your company's name from the drop-down menu
3) Update your employee data if necessary. Continue with the next step, if data is already up-to-date	3) Click 'Create a payment code'
4) Click 'Calculate contribution', then 'Finalization'	4) Calculate and enter the amount of 'contribution' and 'fine', then click 'proceed contribution'
5) Use the payment code given to pay the contribution at the bank	
If you need further information, download the SIPP manual <a href="#">here</a>	If you need further information, download the EPS manual <a href="#">here</a>

Make sure you make the contribution payment for the month of August before 15 September 2018.

Best regards,

E. Ilyas Lubis

Membership director.

We thank you if your company has already paid the contribution for the month of August and paid off any arrears, and you can ignore this email.

**Treatment 4 - Planning prompt**

Perihal: Pembayaran iuran BPJS Ketenagakerjaan jatuh tempo pada 15 September 2018.

Yang terhormat Bapak/Ibu [Nama PIC],

Mohon perhatikan **batas waktu pembayaran iuran Agustus jatuh pada tanggal 15 September 2018**.

Luangkan waktu 5 (lima) menit untuk memilih tanggal dan waktu di kalender Anda guna melakukan pembayaran iuran bulan Agustus untuk [company\_name] sebelum 15 September 2018.

**Jika perusahaan Anda memiliki kewajiban iuran yang tertunda:**

Silakan diselesaikan pembayarannya bersamaan dengan iuran bulan Agustus. Untuk melakukan ini, harap hubungi Pembina (Relationship Officer) Anda, [Nama Relationship Officer (RO)/Pembina] di kantor cabang/KCP [nama kantor cabang] melalui nomor ponselnya yang akan melakukan hal terbaik untuk membantu Anda, atau dapat juga melalui:

e-mail: [email]

atau

telepon kantor cabang Anda: [nomor telepon]

**Jika perusahaan Anda telah membayar semua iuran hingga Juli 2018:**

Lakukan langkah-langkah mudah berikut untuk membayar iuran bulan Agustus Anda.

Sistem yang Digunakan Perusahaan Anda:	
Sistem Informasi Pelaporan Peserta (SIPP)	Electronic Payment System (EPS)
Masuk ke akun SIPP <a href="#">di sini</a>	Masuk ke akun EPS <a href="#">di sini</a>
Buka 'Mutasi data'	Pilih nama perusahaan Anda dari daftar
Perbaharui data karyawan perusahaan Anda jika perlu. Langsung ke langkah selanjutnya, jika data sudah diperbaharui	Klik 'Buat kode iuran'
Klik 'Hitung iuran', lalu 'Finalisasi'	Hitung dan masukkan jumlah 'iuran' dan 'Denda', lalu klik 'Proses iuran'
Gunakan kode iuran yang diberikan untuk melakukan pembayaran melalui bank	
Jika Anda membutuhkan informasi lebih lanjut, unduh buku petunjuk SIPP <a href="#">di sini</a>	Jika Anda membutuhkan informasi lebih lanjut, unduh buku petunjuk EPS <a href="#">di sini</a>

Pastikan Anda melakukan pembayaran iuran bulan Agustus **sebelum 15 September 2018**.

Salam hormat,

E. Ilyas Lubis

Direktur Kepesertaan

BPJS Ketenagakerjaan

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FB: [BPJS Ketenagakerjaan](#)

IG: [@bpjs.ketenagakerjaan](#)

Kami menyampaikan terima kasih bila perusahaan Anda telah membayar iuran untuk bulan Agustus maupun melunasi kewajiban pembayaran iuran yang tertunda, dan Anda dapat mengabaikan email ini.

*Translation*

**Subject: BPJS Ketenagakerjaan contributions are due on 15 September**

Dear Sir/Madam [name of person in charge],

**Please note the deadline for the August contribution is 15 September 2018.**

**Take 5 (five) minutes to choose the date and time in your calendar to make the August payment for [company\_name] before 15 September 2018.**

**If your company has contribution arrears:**

Please complete this payment together with the August contribution. To do this, please contact your contact person (Relationship Officer), [Name of Relationship Officer (RO) / Trustee] at the branch office / KCP [name of branch office], who will do the best to help you, on their cell phone or through:

email: [RO's email]

Or

Call your branch office: [branch office's number]

**If your company has paid all contributions up to July 2018:**

Take these simple steps to pay your contribution for the month of August.

<b>The System that Your Company Uses:</b>	
<b>Member Reporting Information System (SIPP)</b>	<b>Electronic Payment System (EPS)</b>
1) Log into SIPP <a href="#">here</a>	1) Log into EPS <a href="#">here</a>
2) Go to 'Mutasi data'	2) Choose your company's name from the drop-down menu
3) Update your employee data if necessary. Continue with the next step, if data is already up-to-date	3) Click 'Create a payment code'
4) Click 'Calculate contribution', then 'Finalization'	4) Calculate and enter the amount of 'contribution' and 'fine', then click 'proceed contribution'
5) Use the payment code given to pay the contribution at the bank	
If you need further information, download the SIPP manual <a href="#">here</a>	If you need further information, download the EPS manual <a href="#">here</a>

Make sure you make the contribution payment for the month of August before 15 September 2018.

Best regards,

E. Ilyas Lubis

Membership director.

We thank you if your company has already paid the contribution for the month of August and paid off any arrears, and you can ignore this email.

## Notes

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<sup>i</sup> When contributions to the government's health insurance scheme are not paid, beneficiaries and their families would have to pay out-of-pocket for any health services immediately.

<sup>ii</sup> Larkin, C., Sanders, M., Andresen, I., and Algate, F. (2018). *Testing Local Descriptive Norms and Salience of Enforcement Action: A Field Experiment to Increase Tax Collection*. Available at SSRN: <https://ssrn.com/abstract=3167575> or <http://dx.doi.org/10.2139/ssrn.3167575>

<sup>iii</sup> See, for example, Ayres, I., Raseman, S. and Shih, A. (2013). *Evidence from Two Large Field Experiments that Peer Comparison Feedback Can Reduce Residential Energy Usage*. *Journal of Law and Economic Organisation*, 29 (5), p. 992 – 1022.

<sup>iv</sup> Kettle, S., Hernandez, M., Ruda, S. & Sanders, M. (2016). *Behavioral Interventions in Tax Compliance Evidence from Guatemala*. Washington, DC: World Bank Group.

<sup>v</sup> The Behavioural Insights Team (2014). *EAST. Four simple ways to apply behavioural insights*. Available at: [https://www.behaviouralinsights.co.uk/wp-content/uploads/2015/07/BIT-Publication-EAST\\_FA\\_WEB.pdf](https://www.behaviouralinsights.co.uk/wp-content/uploads/2015/07/BIT-Publication-EAST_FA_WEB.pdf)

<sup>vi</sup> Ruda, S., Wills Silva, M., & Wieshmann, H. (2017, October 25). Improving road safety: New results [Web blog post]. Retrieved February 22, 2019, from <https://www.bi.team/blogs/improving-road-safety-new-results/>

<sup>vii</sup> Gandy, K., Persian, R., & Watson, J. (2018, October 19). Capacity building work in Indonesia, Bangladesh and Guatemala [Web blog post]. Retrieved February 22, 2019, from

<https://www.bi.team/blogs/capacity-building-work-in-indonesia-bangladesh-and-guatemala/>

<sup>viii</sup> Nickerson, D. W., & Rogers, T. (2010). Do you have a voting plan? Implementation intentions, voter turnout, and organic plan making. *Psychological Science*, 21(2), p.194 – 199.

<sup>ix</sup> The introduction of a new IT system meant that it was more difficult for some companies to pay their contributions on time during this period.

<sup>x</sup> BIT has found in data analysis of rental arrears that past arrears are the strongest predictor of future ones, see Fitzhugh, E., Park, T., Nolan, D., & Gibbons, D. (2018). *Reducing Rent Arrears at Metropolitan Housing*. London: The Behavioural Insights Team. Available at:

<https://www.bi.team/wp-content/uploads/2019/03/BIT-Applying-behavioural-insights-to-reduce-rent-arrears-final-report.pdf>

<sup>xi</sup> We focused on whether a company division made any payment towards their social security contributions before the deadline of 15 September 2018, rather than whether it had any arrears at the end of the month, to also capture companies that made a payment towards repaying their arrears, but for some reason did not pay off the full amount.

<sup>xii</sup> This means that there is less than a 5% probability that a difference at least as extreme as the one we observe between the treatment and control groups would have been seen just due to random chance, rather than our intervention.

<sup>xiii</sup> Data analysis conducted by BPJSTK shows that companies that pay lower average salaries are also more likely to be in arrears.