Reimagining development: Experimental evidence of public reception to progressive development narratives in Indonesia*

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Abstract

We investigate what narratives can influence the Indonesian public to be more receptive to progressive policies and development ideas centered on social justice and the environment. We conduct an online experiment randomly exposing participants to a short narrative about the Indonesian economy. Each narrative appeals to different principles, from equal opportunity to environmental protection. We find that each narrative has its merits and flaws. The narrative that calls for preventing development from displacing people and damaging the environment, along with the narrative that emphasizes human development, shows the most promise in cultivating people's receptivity. Meanwhile, narratives that call for rebalancing economic distribution and promoting equal opportunity have a limited impact and even generate backlash against progressive ideas. We also find that simpler messages are more effective in shifting perceptions. Conjoint analysis affirms that environmental protection is not a paramount concern for the Indonesian public. Our insights will inform the policy advocacy work of many think tanks and may help civil society organizations wage more effective campaigns.

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1. Introduction

Narratives are powerful. They can influence discourses on issues, shape public opinion, and, in turn, affect policy formulation (Smyth, 2024). Yet, despite the potent force of narratives, economics still trails other disciplines in studying them (Shiller, 2017). While it is an emerging field in economics (Haaland et al., 2025), controlled experiments examining the impact of narratives are still rare (Haaland et al., 2023; Shiller, 2017).

In this regard, we highlight the work of Stantcheva (2020), who conducted randomized experiments to investigate how different narratives of a policy affect views on health insurance, taxation (Stantcheva, 2021), trade (Stantcheva, 2022), and climate (Dechezleprêtre et al., 2025) policies. The studies found that varying the narrative emphasis of key policy aspects can lead to different policy views. This exemplifies the importance of narratives in driving policy discourse.

While studies on the impact of specific policy narratives are on the rise (Stantcheva, 2020)[1], we still observe scarcity in the inquiry into the effects of broader economic development narratives (Roos and Reccius, 2024) –particularly, how the narratives around the principles and values that govern the economic development model influence one's conception of economic governance– i.e., how the economy should work.

In this study, we aim to identify the key principles and values citizens believe should serve as the cornerstone for a new economic development narrative. We run a randomized online experiment exposing participants to different narratives about the economy. Each narrative emphasizes different values or ideals that the new development orientation should embody, from social equality to environmental preservation. We expect that the narratives will make them more receptive towards alternative ways of making sense of the economy. We conduct the study in the context of Indonesia, one of the largest emerging economies and a middle-income nation that is fighting two battles simultaneously: raising the living standards of its 176 million inhabitants[2] and limiting its carbon footprint (World Bank, 2023a).

We find that each narrative has its strengths and drawbacks, as it might stimulate desired changes in beliefs and attitudes but also generate unintended backlash towards progressive ideas. We

[1] See the seminal work of Shiller (2017) for some reviews of narrative studies outside of economics.
[2] Considered as "poor" using the World Bank's upper middle income country's poverty: it might stimulate desired changes in beliefs and attitudes but also generate unintended backlash against line (World Bank, 2025)

highlight three key findings. First, the “No victimization” narrative (Narrative 2) elevates support for inclusive, rights-based development priorities and heightened sensitivity to the human costs of displacement, without eliciting any detectable backlash. Second, the “Balanced development” narrative (Narrative 3) increases the salience of education and basic services but inadvertently undermines support for infrastructure-related and some clean-energy policies. Third, narratives that call for reforming redistribution (“Fix the distribution” / Narrative 1) or accentuate stark privilege differences (“Equal opportunity” / Narrative 4) have limited positive effects and, in some cases, provoke counterproductive responses. We generally find that all narratives fall short of prompting personal and collective efficacy. We then trace the possible sources of the backlash to each paragraph in the narrative script and find that careful wording is necessary to minimize the risk of misinterpretation.

We also identify several broader lessons. Simpler, more focused messages (as in Narrative 2 and parts of Narrative 3) foster better comprehension, while longer, more complex narratives, such as Narrative 4, risk dilution and misunderstanding. Conjoint analysis confirms that the equal (rather than equitable) distribution of income gain remains the most important aspect of development. In contrast, the impact of development on the environment does not seem to be a major concern for the Indonesian public.

The conventional development path that many developing economies embark upon is inadequate to confront new challenges in a rapidly deteriorating world. Climate change and the advent of novel technologies that will reconfigure the landscape of work and income distribution (Acemoglu, 2021; World Bank, 2019) necessitate a new approach to economic development that places the people and the planet at the center. Many such models have emerged with their own set of policy prescriptions in the last decade (Gronchi et al., 2021), some with better empirical support than others.[3]

While these progressive ideas have begun to move from the periphery of development thinking and are gaining some traction, they still lack widespread adoption (Lahti, 2024). Like any other episode of creative destruction, history has taught us that new economic models that disrupt the established ones will attract opposition (Acemoglu and Robinson, 2012). Economic

[3] Savin and van den Bergh (2024), for example, did not find empirical support for the claims espoused by the "degrowth model” – see also Ritchie (2024As with any episode of creative destruction, history has taught us that new economic models that disrupt)

transformations often involve inconvenient but necessary changes to how people live their lives (UNDP, 2017). In today's context, for example, a successful phase-out of fossil fuels and non-renewables will eventually lead to workers in these industries being laid off or moving to new jobs (Parks and Baran, 2023). While we must find ways to compensate the losers from the reform (UNDP, 2021), this change can nonetheless be uncomfortable, and people might perceive this as an invasion of their way of life (Anderson, 2024; Tasch, 2024). Present bias can further complicate this transition, as people tend to overvalue the immediate costs of change while undervaluing the long-term benefits (Laibson, 1994). This can make people reluctant, and even resistant, to reform agendas (Harring, 2021). Policymakers, in turn, might hesitate to introduce reforms when they do not see electoral incentives.

Consequently, we must persuade the public more effectively to improve buy-in to progressive development goals and ideas for reforms to succeed. This is where the urgency for a new economic narrative that aligns with sustainability and social justice agendas enters. Narratives can provide the right framing to make unpopular policy ideas or alternative models seem attractive (Marshall et al., 2023). Our insights will inform the policy advocacy work of many think tanks and may help civil society organizations (CSOs) wage more effective campaigns. It may also encourage citizens to participate in collective actions organized by CSOs.

Our study also contributes to the limited literature on narratives and, more specifically, to the evidence base for randomized assessments of narratives' impact in developing countries. To date, we are aware of only two other related studies in Indonesia: Sim et al. (2024) and Marshall et al. (2023). The former examined messaging to persuade the public to support efforts to prevent land subsidence. Yet the researchers did not investigate the impact of various messages, but rather the different effects of various messengers delivering the same message. The latter study evaluated the impact of various climate narratives. Our research improves upon this study by addressing the narrative at a more comprehensive level and expanding the message's focus to encompass the environment and social justice. This may have broader implications for people's fundamental understanding of how the economy and development should work (NEON et al., 2018).

Learnings from past studies and efforts to shift people's perceptions suggest that sharing information or raising awareness alone may not be sufficient. Hoy et al. (2024) found that informing Indonesians of the true level of inequality in the country raises concerns about

inequality but does not sufficiently rally public support for redistribution policies. The same study also found that informing Indonesians of their relative position in the national income distribution reduced support for redistribution.

Similar challenges arise in environmental policy. Even after learning the correct definition of climate change, 60 percent of Indonesians are still willing to permit deforestation for important economic needs (Leiserowitz et al., 2023). These insights underscore the significance of narrative, which provides a frame for the information and helps the public interpret it as reformers desire.

We organize the remainder of the paper as follows. Section 2 further elaborates on the study context. It delves into the literature on narratives and policy views and contextualizes the case of Indonesia in greater depth. Section 3 describes the survey design, while Section 4 complements it with our empirical strategy. We then present the results in Section 5. We discuss the implications of the findings in Section 6, and Section 7 concludes the paper.

2. Study context

2.1. Narratives: crucial, yet overlooked

A narrative contains a sequence of temporally ordered and causally linked events. At an individual level, human beings make sense of the world by imposing a narrative structure (Beach and Wise, 2022). For example, the widespread belief that wealthy people in the US are self-made may stem from the American Dream narrative, which emphasizes individual responsibility and perseverance in achieving life goals (Schudson, 2004). This narrative has led Americans to instinctively associate hard work with rewards and attribute success to personal effort (Szalavitz, 2018). Another example is the narrative surrounding "Asian culture and values" that emphasizes collectivism, harmony, and respect for authority. This narrative has been widely capitalized on by political leaders in Asia to disregard or forestall the promotion of human rights, individual freedoms, and liberal democracy (Hoon, 2004; Sim, 2021).

The sentiments or emotions we feel, which are shaped by narratives we have been exposed to, affect our policy judgments (Algan et al., 2025). Stantcheva (2024) employed a related concept called "mindset," which determines how people perceive a policy. She defined mindset as "*a cognitive lens through which individuals interpret information and form judgments*". This

mindset, in turn, influences how people assess a policy's perceived efficiency and effectiveness, its perceived distributional impacts, fairness concerns, and perceived government efficacy. Relatedly, Lahti (2024) notes that narratives can alter mindsets and make difficult topics more palatable.

As such, narratives influence how we perceive the world around us. It helps us make sense of events and mold our ideals (Roos and Reccius, 2024). For example, Alesina et al. (2018) found that people who perceive that intergenerational mobility in their society is high—or, in the US context, believe that the American Dream is alive and well—are more likely to find redistribution distasteful (Alesina et al., 2020).

As such, overlooking the narratives that shape the context in which a person receives or interprets information can dampen efforts to change beliefs and attitudes. We have seen assertions that information intervention that directly aims to correct people's misperceptions or misinformation tend to fail (Singal, 2014).[4] Although this claim is continuously debated (Evans, 2019), it is consistent with the exposition of Beach and Wise (2022). Because we rely on narratives to make sense of what is happening around us, we are motivated to maintain or increase their plausibility. We will resist experiences (information) that would reduce coherence and are also more likely to be open to or seek experiences that increase coherence. Because of this, fact-based arguments that challenge or oppose our understanding of the world are hard to reconcile. We can enhance the persuasive power of facts by presenting them in a narrative format, particularly one that resonates with the recipient's shared values.

The widespread use of the internet and social media makes studying narratives even more important. It enables narratives to spread virally and influence people and policymaking with greater expediency (Shiller, 2017). Stories shared via social media, even if less reliable than scientific reports, can mobilize interest and emotional responses, causing policymakers to take greater interest in those issues (Webb, 2025). As such, it has transformed the policy agenda-setting landscape, shifting it from a top-down process to one where individual citizens are more empowered to influence the agenda (Tran, 2013). For example, in Indonesia, the government has repeatedly reversed controversial policy decisions following public outcry and feedback, particularly on X/Twitter (The Jakarta Post, 2024). This case illustrates how, in the

[4] This assertion in itself is a policy narrative. Media coverage has played a significant role in the formation of this narrative. See Ogden (2019)

Indonesian context, ideal, proactive, and evidence-based policy processes are often not fully functional or sufficient. This leads policymakers to rely on heuristics or public sentiment as shortcuts for identifying and addressing problems, rather than drawing on scientific research or robust evidence (Tan, 2024).

The emergence of narrative economics represents yet another significant advancement in understanding human behavior and a substantial theoretical update in the field of economics. The classic consumption optimization model assumes that individuals have perfect information, are rational optimizers, and are context-neutral (Lahti, 2024). The 1996 Nobel Prize-winning works of Mirrlees and Vickrey posed an early challenge to the first assumption (Sandmo, 1999). Subsequently, the 2001 Nobel Prize for Akerlof, Spence, and Stiglitz mainstreamed the issue of information asymmetry in economics (Rosser Jr., 2003). The Nobel-winning work of Herbert Simon in 1978 laid the foundation (Leahey, 2003) upon which Kahneman and Tversky (Geiger, 2017), and later Thaler (Earl, 2018), scrutinized the second assumption. The field of behavioral economics suggests that humans are not always rational decision-makers. Finally, the seminal work of Shiller (2019, 2017) corrected the third assumption. The work revealed how prevailing narratives at a given time influence how individuals interpret information and situations, thereby potentially shaping their preferences.

2.2. Economic narratives in Indonesia

We recognize the continued imperative of economic development in Indonesia. The country has made considerable strides in economic growth over the past two decades, transitioning from a low-income to an upper-middle-income country (World Bank, 2023b). Yet, despite these advances, Indonesia still faces persistent challenges in inequality, poverty, and underemployment. Around 43 million Indonesians remain in poverty (Pape and Rabia, 2023)[5], and many more have precarious livelihoods (Kalleberg et al., 2021). Some regions also suffer from a wide economic disparity (Akita and Kataoka, 2022; Suparman and Muzakir, 2023). These issues continue to drive the need for accelerated development.

However, this conventional development model, which relies heavily on the exploitation of natural resources, fossil fuels, and large-scale infrastructure projects, has come at significant environmental and social costs. The country ranks among the top 10 global emitters of

[5] Substantially more if we use the World Bank's upper middle income country poverty threshold (World Bank, 2025)

greenhouse gases, primarily due to energy production, land-use change, and deforestation (Climate Watch, 2024). While economic growth in Indonesia has contributed to reducing poverty levels, it has often been associated with increased income inequality (Hill, 2021; Yumna et al., 2015). Additionally, local communities often face displacement or loss of livelihood as a result of development projects (WALHI, 2025). Even the development of renewable energy projects faces local opposition because the government has not sufficiently involved local communities in decision-making (Indonesia Business Post, 2024). These trade-offs underscore the urgency of rethinking how development should be pursued.

The prevailing narrative surrounding development in Indonesia helps explain why these trade-offs between growth and environmental sustainability continue to be accepted, and in many cases, justified. The government has often portrayed economic advancement as an inevitable process requiring sacrifices. This mindset has deep historical roots. Soeharto, who ruled Indonesia for 32 years and spearheaded the country's massive development, famously asserted that development cannot succeed without sacrifice, disappointment, mistakes, and dissatisfaction (ANRI, 2018). The New Order government exploited this narrative, for example, to justify mass evictions for massive development projects, such as Kedung Ombo (Crouch and Hill, 1992).

This narrative remains influential today. Former president Joko Widodo and various regional leaders have similarly reinforced this viewpoint, suggesting that sacrifice in the present time, which often manifests in the form of environmental damage or displacement due to grand infrastructure projects (WALHI, 2025), is a justifiable cost for achieving long-term economic prosperity (Kementerian Sekretariat Negara, 2015; Suryaman, 2022). If development can be used to justify eviction, then it is not a giant leap to use it to justify deforestation or coal burning. Former Minister of Environment and Forestry Siti Nurbaya Bakar echoed this sentiment through her social media (Siti Nurbaya Bakar [@SitiNurbayaLHK], 2021), stating that President Jokowi's massive development efforts must not be halted in the name of carbon emissions or deforestation (Tempo, 2021).

However, the narrative nowhere addresses how economic development would ultimately benefit those who had to make sacrifices. It implicitly assumed that economic benefit would somehow spill over to everyone.[6] Indonesia has attempted to assist those who have not yet profited from

[6] This line of thought is akin to the infamous yet historically mainstream trickle-down economics narrative among Indonesia's development planners (Hainsworth, 1980; McGill, 2018).

development through various social protection measures. Yet, a negative stigma is also attached to social assistance, portraying its recipients as unwilling to work hard (Bimardhika, 2024). This narrative has hindered Indonesia's progress towards a more effective and universal social protection regime, which is crucial for a just energy transition (UNDP, 2021).

In response to the government's narrative, academia's narrative appears to have shifted in favor of a new, more inclusive, equitable, and sustainable development approach. For example, recent studies have raised concerns that Indonesia's economic growth has become less effective in reducing poverty due to rising inequality (De Silva and Sumarto, 2014; Gibson, 2017), and has not made sufficient strides towards sustainability (Kurniawan and Managi, 2018).

Yet, despite academia's plea, the government's framing still appears to resonate strongly with large segments of the public. Leiserowitz et al. (2023) found that 60 percent of Indonesians agreed that forest protection should be deprioritized in favor of issues such as infrastructure development. This is despite 73% of people admitting they are worried about global warming and 80% expressing concern about deforestation in Indonesia. Ipsos (2025) found that a sizable portion of Indonesians believe that limiting fossil fuels could harm the economy more than climate change itself, and that rapid adoption of renewable energy might cause power outages. This suggests that the dominant development narrative, which prioritizes growth above all else, is not only perpetuated by state actors but also widely internalized by the public.

This is exacerbated by the lack of public understanding of energy sources. Many urban youth in Indonesia are unaware that fossil fuels are finite and are uninformed about renewable energy (Communication for Change, 2021). Together, these attitudes form a powerful social consensus that positions economic development as the unchallenged top priority, even in the face of ecological and social consequences.

As such, we must change the status quo if we want to move closer to a new development approach. One of the pathways that will gradually get us there is citizen action and demands. There have been several notable victories for citizen action against harmful development practices, but they are still rare or temporary.[7] Furthermore, while it is no substitute for grassroots participation (Salma, 2025), the advent of social media has also opened the door for more channels of citizen engagement (Tan, 2024).

[7] See Anugrahanto (2024); Jong (2025)

If we wish to see more victories for citizen action, we need a stronger civil society that is willing to stand up and hold the government accountable for harmful development practices. However, the majority of Indonesians are not yet engaged in tangible activism (Leiserowitz et al., 2023). This is the case again, despite their concerns about deforestation and climate change. Consequently, building a stronger civil society requires converting more uninformed or indifferent citizens into concerned citizens, concerned citizens into standby citizens, and standby citizens into active citizens (Amnå, 2010; Amnå & Ekman, 2014).

We posit that citizens are more likely to engage in collective action when they subscribe to a development narrative that differs from the dominant one. A major change, then, is possible when a critical mass of citizens subscribes to a new narrative (Centola et al., 2018). This implies that continuous efforts to build alternative narratives will only be successful if we have persuasive messages that can go beyond the echo chamber and reach uninformed, indifferent, or even skeptical citizens.

3. Study design

3.1. Sampling and recruitment

We recruited 3,638 research subjects through an online survey partner, Dynata, from late February 2025 to early March 2025. Dynata has a respondent panel database registered on its platform. They send online survey participation invitations to potential subjects' devices, and panelists can decide whether to participate. Panelists complete the survey on their devices in exchange for Dynata reward points.

We recognize that online surveys are subject to inherent selection bias due to technological limitations. As such, we implement a sampling quota based on sex, age, and province in recruitment to bring our sample closer to national representation. We present the key sample characteristics and compare them with the population in Appendix A. We use Indonesia's National Socioeconomic Survey (Susenas) from March 2023 to measure the population characteristics. Susenas is a biannual, nationally representative, in-person survey administered by Statistics Indonesia, and Indonesia's leading source for tracking socioeconomic indicators.

Figure A9 in Appendix A aptly demonstrates that our respondents can be summarized as urban, productive-age Indonesians with at least a high school degree. The figure indicates that the

sample closely aligns with population benchmarks for gender and regional demographics for which quotas are explicitly applied. Household size in our sample is also somewhat similar to the population. However, notable deviations emerge across other characteristics. Older individuals (aged 55 and above) are underrepresented, while middle-aged respondents (25–54) are overrepresented. Compared to their national shares, the sample also overrepresents higher education graduates by more than 40 percentage points and urban residents by almost 40 percentage points.

These biases, particularly in education and urban residency, are common in Indonesian online surveys and are likely driven by unequal internet access, which disproportionately excludes rural and lower-educated populations (Stantcheva, 2023; Wati et al., 2024; Yasmine et al., 2025). As such, we advise proper caution regarding the generalizability of results when applying the findings from this study to programs and interventions.

Nevertheless, we believe that this sample remains relevant for program applications. The middle class is often considered a politically influential group. They tend to have higher political interest and engagement than other income groups, frequently discussing politics and being more proactive in expressing aspirations (Wihardja and Wibisana, 2024). In addition, the middle class, particularly in urban areas, tends to have greater access to resources and information, positioning them as a low-hanging fruit and critical actor in the dissemination and uptake of development initiatives (Chun et al., 2017). Their relatively higher digital literacy and internet connectivity make them more likely to engage with online content, participate in discussions, and amplify campaign messages (Wihardja and Wibisana, 2024). As such, their significant presence in public discourses enables them to leverage their political influence despite their relatively smaller numbers.

3.2. Experiment design

3.2.1. Main experiment

We ask Dynata to randomly assign participants to a control group and four treatment groups.[8] Table 1 presents the group size of each experimental arm.[9] Each treatment group receives a different stimulus in the form of a short Indonesian text narrative. Participants can read the stimulus as long as needed, and they can return to the stimulus page at any point during the survey if they wish.

We develop four narratives based on the dominant narratives identified in an earlier study (Bahana and Communication for Change, 2025). In this earlier study, we mapped the dominant development narratives in Indonesia through a quantitative content analysis of government officials' speeches from the New Order until the Jokowi era. We also conducted FGDs with laypeople in several locations with diverse development experiences to understand how they conceptualize "development". We then used the results of the FGDs and the quantitative content analysis to facilitate a Delphi discussion with academics and practitioners from diverse backgrounds to formulate the building blocks of the alternative narrative.

Our earlier study identified four dominant narratives that we must counter, leading to four alternative narratives that emphasize different values in the economy. Table 1 summarizes the mapping of the dominant and counter-narrative, as well as the full text of the English translation of stimulus materials. The "Dominant narrative" column identifies the existing narrative that the new narrative intends to challenge.

The first alternative narrative addresses the government's blatant omission in development discourse regarding how those who make sacrifices for development can eventually enjoy the economic benefits. The second alternative narrative directly questions the underlying assumption behind the dominant narrative that sacrifice is necessary for growth and development.

[8] As committed in our AEA Trial Registry (number AEARCTR-0015433), we have another narrative group in the survey. The additional narrative is not about development but about the role of the state and the relationship between citizen and the state. With this narrative, we are primarily interested in investigating whether it can alter people's perception about the role of the government. Given the quite sharp differences between the topics of narratives 1 - 4 and narrative 5 and considering that narrative 5 focuses on an entirely different set of outcomes than narrative 1 - 4, we separate the analysis of narrative 5 to a separate paper about democracy and civic space in Indonesia. Nonetheless, we attach the stimulus script and the results of narrative 5 regressions using the same analytical framework as the other narratives in this paper in Appendix L for interested readers.

[9] We calculate power prior to data collection to determine the appropriate sample size. Please refer to our pre-analysis plan at AEA Trial Registry number AEARCTR-0015433 for the detailed discussions.

Table 1: Treatment assignment and sample size

Treatment	Dominant narrative	New narrative	Complete text of the stimulus (translated)	Sample size
1	Economic benefits of development will eventually spill over to everyone	**Fix the distribution**: Fix the distribution of development benefits	What is the point of Indonesia developing if only a few people benefit from it? For too long, the benefits of development haven't reached everyone. The rich and powerful continue to enjoy the benefits, while the less fortunate remain impoverished. The government needs to do a better job of sharing the benefits of development. They must ensure that all Indonesians can benefit from these advantages. If the government can share development benefits more equitably, then everyone in society, regardless of their location, can achieve a better life.	681
2	Development requires sacrifice	**No victimization**: Development should not victimize the people and the environment	What's the real point of Indonesia's development when so many people become victims because of it? For the sake of new projects, forests are cut down. For the sake of new projects, many people lose their homes or their livelihoods. This isn't actually progress; it's going backwards. We might get good jobs in factories and mines built on cleared land. But what's the use if we get sick from pollution? How will our children live in the future if there are constant floods or landslides? And if someone else is forced out of their home today, what makes us think it won't happen to us, too? The government needs to make sure that no one's life or the environment is harmed for the sake of development.	702

Treatment	Dominant narrative	New narrative	Complete text of the stimulus (translated)	Sample size
3	Development means building large infrastructure	**Balanced development**: Development should be balanced in its focus on infrastructure and human development	What's the use of having grand bridges and massive buildings like those in rich countries if our people aren't as smart or skilled? People become smarter and more skilled when their education improves. School graduates will be able to solve problems, generate new ideas, be disciplined, and work effectively with others. When people are well-educated, they have more job options and can even create jobs for others. On the other hand, the benefits of fancy bridges and buildings are mostly enjoyed by people in big cities. The government should cut waste in the construction of physical infrastructure and invest more in education, research, and culture instead.	677
4	Efforts determine success	**Equal opportunity**: Differences in privilege lead to unequal opportunity	Indonesia claims to support all its citizens, but why are the lives of the rich and the poor so vastly different? From birth, children from poor families face disadvantages. Their mothers often don't get enough healthcare and good food during pregnancy. As they grow up, their families can't afford to send them to good schools, and they often drop out. When they become adults, they struggle to find good jobs, keeping them and their families in poverty. On the other hand, children from wealthy families have a good start from the very beginning. Their mothers are healthy, they live in clean and safe areas, and they can go to school all the way through graduation. As adults, they can get good jobs, which helps them continue to improve their financial situation. The government needs to improve health, education, and social services for everyone. This way, children from both affluent and disadvantaged families will have an equal chance to lead successful lives.	680

Treatment	Dominant narrative	New narrative	Complete text of the stimulus (translated)	Sample size
Control	Placebo stimulus		Indonesia, a country comprising approximately 17,000 islands, is the world's largest archipelago. These islands stretch about 5,000 kilometers across the equator. Indonesia is renowned for its diverse array of cultures, languages, and religions. There are over 300 different ethnic groups and 700 regional languages spoken throughout the country. Some popular tourist destinations include Yogyakarta, which boasts ancient temples like Borobudur and Prambanan, and Bali, an island renowned for its stunning scenery that attracts artists and writers alike. Indonesia's natural landscape features beaches with white, gold, silver, pink, and black sand. It also has many volcanoes, including the famous Mount Tambora. In fact, Indonesia has more volcanoes than any other country in the world. One of the most well-known is Krakatau, located between Sumatra and Java. When it erupted in 1883, its ash traveled around the world three times, and it was one of the deadliest eruptions ever, killing over 36,000 people. In the 7th century AD, the Sriwijaya kingdom in Sumatra was a powerful trading center and a center of Buddhist spread. Later, in the 13th century, the Majapahit kingdom in East Java became extremely powerful, controlling most of the islands and leaving behind a rich cultural legacy. Indonesia is also renowned for its traditional handicrafts, performing arts, and diverse cuisine, all of which showcase its rich and varied cultural heritage.	898
Total				3,638

The third alternative narrative seeks to counter the prevailing notion that development is synonymous with infrastructure construction. This common conceptualization among the public has been exploited by Indonesia's past administration as a justification for promoting numerous grand development projects (Warburton, 2016), despite many questioning their impact on welfare (Basri, 2017; Tasyarani, 2025). The consequence of this conceptualization is that less physically tangible projects, such as educational or institutional reforms, or even projects that prohibit physical development, like environmental preservation to ensure certain areas can maintain their ecological services, are less likely to be viewed as development, despite their undeniably important contributions to human welfare.

The final alternative narrative aims to mitigate public stigma and enhance public perception of social assistance programs. Social assistance programs are crucial for a just energy transition. While disruptive economic transformations are indeed necessary, they will undoubtedly create losers from the reform. A successful phase-out of fossil fuels and non-renewables will inevitably involve workers in these industries being laid off or reassigned to new jobs (Parks and Baran, 2023). One of the most effective tools to help those who lose out in an economic transition to stay afloat is social assistance.

However, this will be difficult to achieve unless the dominant narrative around social assistance changes. In our earlier study (Bahana and Communication for Change, 2025), we found that there is a firm belief among the public that people should receive government assistance only if the cause of hardship is external factors and only for a short period. Once the hardship is over, the assistance must stop. This opinion aligns with the prevailing narrative on social assistance in Indonesia (Bimardhika, 2024). Despite robust empirical evidence demonstrating its humongous benefits and its lack of distortionary effects, social assistance continues to carry a persistent negative stigma (Bimardhika, 2022).

Finally, to ensure the control group has a somewhat equivalent cognitive load to the treatment group when completing the survey, we assign them to read a placebo stimulus containing general information about Indonesia. We make the placebo stimulus slightly longer than the treatment stimulus because the control group has fewer survey questions. For example, we do not ask the control group which paragraph from the stimulus resonates most with them, or whether they agree with the stimulus.

3.2.2. Conjoint experiment

In the survey, we also conduct a conjoint experiment that is independent of the main experiment. We are interested in what aspects of development the public values the most. As such, we adapt the conjoint design run by Marshall et al. (2023). We require participants to choose their preferred development profile from a randomized pair ten times. Each profile has four attributes that characterize the development. The first is about the distribution of income increase. The second concerns the rights of people displaced by development. The third concerns striking a balance between environmental preservation and development. The final one is about the degree of public participation in development. We present the complete list of attributes and levels in Table 2.

Table 2: Conjoint experiment attributes and levels

Attributes	**Level**
Improvement of economic conditions (ECON)	1. The incomes of the rich rose the most, while the incomes of others rose only modestly. 2. The incomes of the poor or near-poor rose the most, while the incomes of the middle and upper classes rose only modestly. 3. All levels of society experienced modest increases in income, but no one became poorer
The rights of others (RIGHTS)	1. To build something that will benefit many people in the future, no group should be displaced or lose their livelihood, even if they receive commensurate compensation. 2. To build something that will benefit many people in the future, residents should not only be compensated appropriately but also financially benefit from the project. 3. To build something that will benefit many people in the future, it is natural that some residents will be forced to be evicted or lose their livelihoods, provided they receive compensation that is commensurate with their circumstances.
Environmental preservation (ENV)	1. There should be no environmental destruction, even if it is to build something that will benefit many people in the future. 2. It is acceptable to destroy the environment to some extent, as long as it is to build something that will benefit many people in the future.

Citizen participation (PARTICIPATION)	1. Citizens are comfortable and free to actively provide input, ask questions, or submit complaints to the government, allowing development programs to proceed more carefully. 2. After voting in the election, citizens entrust the government with their trust and discretion, allowing development programs to proceed more smoothly and efficiently.

With four attributes, where the first two have three levels and the other two have two levels, a full factorial design would have 36 profiles. We implement a fractional factorial design using only 15 carefully selected profiles, chosen to maximize profile diversity and balance between attribute levels. We then show each respondent 10 randomly selected profile pairs from a universe of 105 unique possible pairings based on 15 selected profiles.

3.3. Theory of change

We summarize the theory of change (TOC) of our intervention in Figure 1. The input in our intervention is the provision of a stimulus that contains an alternative narrative about the economy. We expect participants to follow through with their assigned task and correctly understand the message of the stimulus. Participants who do not read the stimulus (they directly skip the page) or do not accurately interpret the meaning of the stimulus can be considered "noncompliers" in this case, since they do not follow through with their assigned treatment. We discuss the compliance check more thoroughly in Section 4.2.

Figure 1: Theory of change

By accurately interpreting the meaning of the stimulus, our intervention shifts participants' perceptions of the relevant issues. This is the part of the TOC that we investigate in this study.

Ultimately, the goal of the intervention is for participants to internalize more nuanced trade-offs that foreground sustainability and social justice in their understanding of how growth and development should be pursued. We do not test this part of the TOC, as it can only be achieved in the long term through constant exposure to the stimulus. It requires the accumulation of stimuli that consistently narrate the same story and trigger new ways of thinking. Nonetheless, our study can help identify which narrative is most promising for taking us there. This study represents the first step towards a significant undertaking to reshape people's understanding of how the economy and development process should function.

3.4. Outcomes

We collect outcome variables based on our TOC and experimental design. In total, we have seven families of outcomes. While our narratives convey varying messages, several common threads bind them. Our narratives invite readers to rethink how the economy and development should function. As such, we ask our sample what they think should be the nation's development priority and their opinions on a battery of items about the economy. Since our first (Fix the distribution) and fourth (Equal opportunity) narratives directly address redistribution and economic privilege, we also inquire about whom the government should prioritize in the economy and what determines economic success. The final paragraph of each narrative calls for government action. We investigate whether this impacts policy support across a range of items related to social equality and environmental policy ideas. While our narratives do not directly call for citizen action, they might ignite a sense of self-relevance regarding these issues (Sinclair et al., 2025); hence, we investigate the impact on personal efficacy, adapting from the module used by NEON et al. (2018). Finally, we are interested in how narratives can alter the relative importance of various development aspects in conjoint analysis. We present the complete variable construction in Appendix D. Our questionnaire is also available in our AEA Trial Registry.

4. Empirical strategy

4.1. Balance test

We find that our treatment and control groups are similar in terms of their characteristics. Following our pre-analysis plan, we use the method proposed by Kerwin et al. (2024) as our primary test for treatment-control balance. The procedure is essentially an omnibus F-test of joint

orthogonality, using randomization inference p-values to determine the overall balance between treatment and control.

We use MANOVA instead of OLS to account for the multiple-treatment-arm design, as Kerwin et al. (2024) also suggested. The F-statistic in MANOVA indicates whether participant characteristics are jointly different across treatment arms and the control. The randomization inference procedure then performs repeated simulations of reassigning treatment status while holding participant characteristics fixed, while performing the same estimation in each simulation.[10] We obtain the p-value of the test by dividing the number of simulations in which the test statistic is larger in absolute value than the observed test statistic by the total number of successful simulations. Appendix D provides the complete list of participant characteristics that we use for balance testing, which is also based on our pre-analysis plan.

MANOVA yields an F-statistic of 1.39, which is the same estimate across four common measures (Wilks' Lambda, Pillai's trace, Lawley-Hotelling trace, and Roy's largest root). All 9,979 successful simulations out of 10,000 randomized treatment reassignment simulations yield a simulated F-statistic that is larger than 1.39, which indicates a very high p-value. As such, we cannot reject the null hypothesis that there are no overall statistical differences in participant characteristics between treatment and control groups.

As a robustness check, we also provide the conventional balance testing results in Appendix E. In this procedure, we regress each respondent's characteristics on the treatment status using simple linear regression (OLS) and adjust the results for multiple hypothesis testing using Holm's (1979) correction. Only two characteristics (sex and age) out of 13 show imbalances, and these imbalances are present only in some treatment arms. As Kerwin et al. (2024) suggested, conventional balance tests tend to over-reject the null, even after multiple hypothesis testing adjustments. Nonetheless, the overall characteristics are still balanced.

4.2. Treatment compliance

As we described in our TOC in Figure 1, we consider participants reading and accurately interpreting the stimulus as a successful output of the intervention. When this output is not reached, we consider that participants do not comply with the treatment. To minimize noncompliance stemming from survey speeders, our survey partner automatically excluded

[10] This is similar to a Fisher exact test procedure (Imbens and Rubin, 2015).

survey completions under 12 minutes. Our final sample consists of individuals who passed this screening.

As is standard in randomized experiments with noncompliance, we primarily examine the treatment's intent-to-treat (ITT) effect (Angrist and Pischke, 2009). Nevertheless, we still estimate the treatment-on-treated (TOT) effect[11] as a comparison and consistency check to the ITT results. We present the analysis of treatment compliance in Section 5.1.

4.3. Estimation framework

4.3.1. Regression models

Following our pre-analysis plan, we estimate several regression models to obtain treatment effects for each outcome. Our first and most basic estimation model is Equation 1, which simply compares each treatment arm to the control group in a regression framework.

$$Y_i = \beta_i + \sum_{j=1}^{4} \tau_{ij} T_{ij} + \varepsilon_i \quad (1)$$

Y_i is the outcome variable of individual i. $\Sigma^4_{j=1} \boldsymbol{\tau}_{ij} T_{ij}$ is a vector of treatment dummies for individual i. We include four dummies corresponding to the four treatment arms to estimate the treatment effects for each arm. Each treatment dummy yields our coefficient of interest, $\boldsymbol{\tau}_{ij}$, which is essentially the mean difference of the outcome between treatment arm j and the control group. β_i and ε_i are the regression intercept and idiosyncratic errors, respectively.

In principle, since treatment assignment is random, regressing the outcome on the treatment indicator, as in Equation 1, should yield an unbiased estimate of the treatment effect. Nonetheless, we run two extensions of Model 1 as a sensitivity analysis to ensure the robustness of our results. We write the regression framework of our extensions in Equation 2.

[11] Since the control group was only administered a placebo stimulus containing general information about Indonesia and thus no comprehension of the stimulus was required, we only expect a one-sided noncompliance (only treatment units can be noncompliant). As such, TOT is the more appropriate interpretation rather than Local Average Treatment Effect (LATE), which requires two-sided noncompliance (both treatment and control units can be noncompliant). See Angrist and Pischke (2009).

$$Y_i = \beta_i + \sum_{j=1}^{4} \tau_{ij} T_{ij} + \sum_{k=1}^{k} \theta_{ik} X_{ik} + \varepsilon_i \quad (2)$$

In our first extension using Equation 2, we estimate the treatment effect while controlling for several covariates to improve precision. $\Sigma^{k}_{k=1} \Theta_{ik} X_{ik}$ is a vector of covariates of k number for individual i. Following Kerwin's (2025) suggestion, we plug the participant characteristics used for the balance test in Section 4.1 into the Post Double Selection Lasso (PDS Lasso) procedure developed by Chernozhukov et al. (2016) and let the procedure determine the appropriate control variables for each outcome. We call this extension Model 2 henceforth.

Our second extension still utilizes Equation 2. Yet, in addition to covariates selected by the PDS Lasso procedure, we also add what we call cognitive controls. In this Model 3, we control for the time participants spent reading the stimulus and the time they spent completing the survey section of the outcome in question. This allows us to control the length of exposure to the stimulus and absorb the distortions caused by survey speeders. We also control for whether the participants agree with the stimulus using their agreement rating towards the paragraph in the stimulus they think is the most resonating.[12] Following Moerbeek and Schie (2019), we also include an indicator variable for whether participants accurately interpret the stimulus, which we construct using a question that asks them to identify the key message of the stimulus.[13] Finally, we adapt the approach of Sim et al. (2024) by including each participant's social desirability score in Model 3 to address concerns about inconsistency between stated preferences and actual behavior. We use the shortened Marlowe-Crowne Social Desirability Scale, developed by Reynolds (1982). These cognitive controls are independent of the PDS Lasso covariate selection procedure and thus will always be included in any regressions using Model 3. As always, we make the complete variable descriptions available in Appendix D.

4.3.2. Hypothesis testing setup

We want our hypothesis testing to be grounded in some theory and intuition. As such, while we ask the same questions to all respondents to equalize cognitive burden across study arms, we

[12] We did not ask this question to the control group because the placebo stimulus only contain general information about Indonesia. As such, we set the value of this dummy variable to one for all control units.
[13] We also did not ask this question to the control group because the placebo stimulus requires no specific comprehension. As such, we also set the value of this dummy variable to one for all control units.

only estimate the treatment effect on the relevant outcome for each treatment arm. We determine the relevant outcome for each treatment based on the stimulus content. If we expect that some content of the stimulus might affect the outcome, either positively or negatively, we consider the outcome relevant for the treatment arm.[14]

We present our complete regression plan in Appendix F. In Table F1, we detail the mapping of each outcome from the main experiment onto its relevant treatment arms. The first column specifies the family of outcomes we use for multiple hypothesis testing. The final two columns provide information about the estimator we use to estimate the models (more on this in the succeeding section). We estimate the standard errors of all models with the robust sandwich heteroskedasticity-consistent estimator (White, 1980). Although we did not propose this in our pre-analysis plan, we report the unadjusted differences in outcomes (simple mean differences between each treatment arm and the control) from the main experiment in Appendix G, following the advice of Lin (2012) and Özler (2016). We find that the unadjusted differences in outcomes closely mirror the adjusted differences (as shown in the regression results).

In Table F2, we detail the relevant interaction effect (treatment-moderating or treatment-enhancing) we want to examine in the conjoint experiment. Each treatment column indicates which treatment arm interacts with each attribute level in the row. As is standard in a conjoint analysis, we cluster the standard error at the respondent ID because we use the long form of the data for estimation.[15] In this data format, each row corresponds to a combination of a respondent and a profile, and the dependent variable is a binary indicator of whether the respondent selected the corresponding profile.

4.3.3. Multiple hypothesis testing

As we promised in our pre-analysis plan, given the multitude of outcomes and multiple arms design, we adjust every regression for multiple hypothesis testing. To account for the correlation among outcomes in the analysis of the main experiment, we employ the Westfall and Young (1993) p-value adjustment, as implemented in the statistical program developed by Jones et al. (2019). As for the conjoint analysis, we implement the Holm (1979) p-value adjustment, as we

[14] We did not pre-register which treatment arms are relevant for which outcomes in our pre-analysis plan. We prefer not to regress all outcomes on all treatment arms as it will greatly inflate the number of key hypothesis being tested and substantially raise the risk of false positives.
[15] See Horvath et al. (2022); Lavezzolo et al. (2021)

have only a single outcome variable (whether the profile was chosen) but numerous independent variables.

Both Westfall and Young's (1993) and Holm's (1979) procedures control the family-wise error rate (FWER). This is a more stringent approach than the alternative, the false discovery rate (FDR), for adjusting multiple hypothesis testing (Coppock, 2021). This makes FWER more suitable for a causal analysis that seeks to minimize false positives (Lindquist and Mejia, 2015).

4.3.4. Estimator

We follow the common approach in other closely related studies in employing OLS as our primary estimator to compute the ITT effect and transforming the Likert outcome variables into binary indicators.[16] Likert measures are not suitable as the dependent variable in a linear regression, as they yield a constant, continuous marginal treatment effect, which is an inappropriate interpretation given their discrete, categorical nature (Wooldridge, 2024). The full description of the transformations is available in Appendix D.

Nonetheless, we present the results of the ordered logit regressions, which is a more appropriate estimator for discrete and categorical outcome variables (Wooldridge, 2024), in Appendix I as a robustness check. Using the untransformed Likert measure as a dependent variable also allows us to observe changes in views along the spectrum of the discrete scale as a result of the treatment. This also serves as a check to see whether the OLS results are biased by the way we transform the Likert outcomes into dummy variables.

Finally, to conserve space, we relegate the explanation of the TOT estimation method to Appendix J. Note that we did not pre-register the TOT analysis in our pre-analysis plan. As such, we place it as a secondary line of analysis in this study. Given that real-world interventions will always encounter noncompliance, the ITT effect will be our primary interest, as it is more relevant for evidence-based applications (Angrist and Pischke, 2009). Nonetheless, we believe that analyzing the TOT is useful for illuminating the degree to which noncompliance might alter the treatment effect.

[16] See Dechezleprêtre et al. (2025); Sim et al. (2024). See also Bloem (2019); Friedman (2012); Gibson (2019) on why OLS is an appropriate estimator for binary outcome variables.

5. Analysis

We conduct our analysis in the following sequence. We will first examine treatment compliance before proceeding with the main analysis. In the final section of analysis, we will examine some possible causal mechanisms that drive the results.

5.1. Treatment compliance

To assess whether participants in the treatment group understand the stimulus, we examine the percentage of correct interpretations and reading times for each stimulus. Figure 2 reports the percentage of correct interpretations across the four treatment stimuli and the word count in the original Indonesian text. We do not ask participants in the control group to identify the intended meaning of the stimulus, as the placebo contains only general information about Indonesia.

Figure 2 indicates comprehension is optimized around 75-100 words. Once the narrative script exceeds 100 words, comprehension drops dramatically. The first three narratives ("Fix the distribution", "Balanced development", and "No victimization") yield relatively high accuracy rates, with more than 80% of participants providing correct interpretations. This suggests that these narratives are largely effective in conveying their intended meaning. In contrast, the fourth narrative ("Equal opportunity") exhibits the lowest accuracy rate, with only 46.76% of respondents interpreting it correctly. This may be attributable to its substantially higher word count (130 words), which could have increased cognitive load or diluted the central message.

Figure 2: Word count and comprehension of the narratives

Figure 3 shows the mean difference in stimulus reading time between each treatment arm and the control group. The mean reading time for the control group (placebo stimulus) is 76.71 seconds. All four treatment stimuli result in lower mean reading times compared to the control. We expect this pattern as we deliberately design the placebo stimulus to be longer in text length (211 words in the original Indonesian version). We aim to equalize cognitive load between treatment and control because the control participants have to answer slightly fewer questions than their treatment counterparts.[17]

Figure 3: Mean difference of stimulus reading time from the control group

[17] We do not ask the control participants what they think the meaning of the narrative is, which of the paragraph from the stimulus is the most resonating for them, and to what extent they agree with the paragraph they choose as the most resonating.

Figure 3 also seems to convey that comprehension requires a more careful reading of the script. “No victimization” and “Balanced development”, which have the highest interpretation accuracy rate, exhibit the longest and statistically significant difference in mean stimulus reading time compared to the control group. This is an interesting insight, as these stimuli are not the ones with the lowest word count. Instead, the narrative with the shortest script length, “Fix the distribution”, has a lower mean reading time than “No victimization” and “Balanced development”, and shows no statistical difference compared to the control group. This indicates not only brevity that matters for understanding, but also how we structure and frame the stimulus's sentences to make readers feel engaged with the script.

We then examine whether reading time is associated with interpretation accuracy by comparing the reading duration of respondents who interpret correctly (compliers) with that of those who do not. Figure B1 shows that, on average, respondents who interpret the stimulus correctly indeed spend more time reading it. However, this difference is not statistically significant, as the confidence intervals cross zero.

5.2. Main results

While we have seven families of outcomes, we will focus our reporting of results on five main outcomes: 1) Prioritization of development goals, 2) Opinions about the economy, 3) Support for policy ideas, 4) Personal and collective efficacy, and 5) Conjoint experiment results. To conserve space, we will relegate the analysis of the remaining two outcomes, 1) Whom the government should prioritize during rapid economic growth, and 2) Factors influencing success in the

economy, to Appendix N. Once again, we remind readers that we estimate treatment effects only for outcomes relevant to each treatment arm's content (see Appendix F for the treatment-outcome mapping). We also focus on the ITT results, and thus, we relegate the TOT results to Appendix J.

5.2.1. Development priority

We ask each respondent to choose up to 3 items they believe should be the government's development goals from a list of possible options. The strict multiple-response cap means that respondents have to weigh which goal to include in their top three, essentially making the answer their development priority. Although we focus on answer options relevant to our stimuli, we provide both stimulus-relevant and stimulus-irrelevant options to avoid restricting responses to only stimulus-relevant ones. Given a long list of answer options, we randomize their order in the survey to prevent systematic bias in responses. Figures 4 and 5 show the regression results for nine outcomes within this outcome family, with 95% confidence intervals.

The treatment effects of Narrative 1 (Fix the distribution), which calls for fixing the distribution of development benefits, are largely moot, if not counterproductive. It does not increase the likelihood of prioritizing income improvement for all citizens, providing equitable and quality basic services (such as education, health, and social assistance), and advancing lagging-behind regions. More puzzlingly, it also reduces the likelihood of prioritizing the construction of infrastructure and facilities for public use by around six to seven percentage points.

All the treatment effects of Stimulus 2 (No victimization), which calls for safeguarding the development process from sacrificing the people and the environment, turn up as expected. It increases the likelihood of prioritizing democratic decision-making (though not robust in the third model) by three percentage points, ensuring fairness for all citizens in rights, opportunities, and the law by 9 to 10 percentage points, and ensuring that the next generation has a better life by an impressive 15 percentage points. All three are essential to a sustainable and equitable economy.

Figure 4: Treatment effects on perceptions about development priority

Figure 5: Treatment effects on perceptions about development priority

Stimulus 3 (Balanced development), which emphasizes the balance between human and physical development, increases the likelihood of prioritizing the improvement of human resource quality by an astonishing 18 to 20 percentage points and providing equitable and quality basic services by five to eight percentage points, although the latter is not robust in the second model.

Yet, "Balanced development" also has an unintended consequence. It results in a five to six percentage-point reduction in the probability of prioritizing the construction of public infrastructure and facilities. This might be attributed to the sentence "*The government should reduce waste in building physical facilities to increase the budget for education, research, and culture*.". However, we expect to see a null effect rather than a statistically significant negative effect here. We elaborate on the implications of this result further in Section 6.

"Balanced development" also has some null effects. It does not affect the probability of prioritizing the advancement of underdeveloped regions, despite the presence of an explicit statement of "*the benefits of flyovers and magnificent buildings are only enjoyed by people in big cities*" in the stimulus. It also does not affect the probability of prioritizing enabling citizens to achieve the important goals they set for themselves and ensuring the next generation has a better life, even though both are essential to human development. The former might be related to the collectivist culture prevalent in Indonesian society (Hoon, 2004).

Stimulus 4 (Equal opportunity), which advocates for equalizing opportunities between the rich and the poor, has both positive and negative results. It increases the likelihood of prioritizing the provision of basic services by 13 to 20 percentage points, ensuring fairness for all in rights, opportunities, and the law by 13 to 17 percentage points, and ensuring the next generation has a better life by around five percentage points, although the last one is not robust in the third model.

Unfortunately, it does not influence the likelihood of prioritizing other goals, such as increasing the income of all citizens, improving the quality of human resources, and enabling citizens to pursue their goals, all of which are related to equal opportunities. Worse, it reduces the likelihood of prioritizing the construction of public infrastructure and facilities by 10 to 13 percentage points and the advancement of underdeveloped regions by 7 to 8 percentage points.

5.2.2. Opinions about the economy

We ask the respondents to indicate their level of agreement on six statements related to a vision of an equitable and sustainable economy. Figures 6 and 7 visualize the regression results with 95% confidence intervals. Figure 6 shows that none of the narratives has an impact on the first three statements: 1) "*If people's economic conditions are good, we can reduce dependence on economic activities that damage or pollute the environment.*", 2) "*The government may relocate people in order to build public facilities for the public interest (e.g., roads, reservoirs, power plants), provided that the government provides replacement housing.*", and 3) "*We as citizens should not just accept the government's decision.*". Some of the treatment effects are significant based on unadjusted p-values, but they do not survive the multiple-hypothesis testing adjustment. The ordered logit regression results in Figure I1 show that some coefficients are statistically significant only in certain models.

Figure 7 displays some positive results. "Fix the distribution" and "Equal opportunity" reduce the likelihood of agreeing that wealth inequality is normal in a society by five to six percentage points and five to seven percentage points, respectively. They also increase the likelihood of agreeing that "*Laws and rules made by the government determine the chances of people succeeding*" by six percentage points. "Fix the distribution" robustly increases the likelihood of agreeing with "*The choices the government makes determine who is in power in our economy.*" by eight to ten percentage points. "Equal opportunity" has a statistically significant impact on this outcome only in the third model.

The ordered logit results in Figure I2 largely support this inference. The results for the first to the fourth statements are the same as the OLS results. Yet, the results for the fifth ("*Laws and rules made by the government determine the chances of people succeeding.*") and sixth ("*The choices the government makes determine who is in power in our economy.*") statements exhibit a reverse pattern to the OLS results. The ordered logit results show that the coefficient estimates on the sixth statement are statistically significant across treatments and models. Meanwhile, the statistically significant coefficient estimate for the fifth statement is found only in the third model of the "Fix the distribution" treatment.

Figure 6: Treatment effects on opinions about the economy

Figure 7: Treatment effects on opinions about the economy

5.2.3. Policy support

We ask respondents to indicate their level of support for 13 policy ideas that are relevant to building a sustainable and just economy. We randomize the order of appearance of the items in the survey to prevent systematic bias due to item ordering. Figures 11, 12, and 13 visualize the regression results with 95% confidence intervals. The parallel ordered logit results are available in Figures I6, I7, and I8. As the column headers in the figures only display the shortened version of the policy statement, please consult Appendix D or F for the full policy statement.

As in Section 5.2.1, the effects of the "Fix the distribution" narrative are again mostly null, if not negative. The OLS results are consistent with the ordered logit results. Some of the null effects might be good news. It basically means that the narrative does not lead to unintended effects on policy ideas crucial to the energy transition agenda, yet might attract opposition, such as: 1) Fuel and electricity price hikes accompanied by cash transfers to all, not just the poor, and 2) Higher motor vehicle taxes. However, the narrative unfortunately reduces the likelihood of supporting "Subsidies for energy-efficient homes and buildings" (Figure 12) by seven percentage points.

Null effects also mean the narrative is unable to engender progress on essential social equality policy ideas, such as: 1) The government providing financial assistance to people who have recently lost their jobs (unemployment insurance), or 2) Broader coverage of social assistance recipients, including the middle class. It even has no impact on supporting a larger amount of social assistance, which is the most basic form of redistribution. This seems to imply that the public might not perceive social protection as redistribution, but merely as temporary assistance (Bimardhika, 2024).

While we have shown it to be promising in driving key development agendas in Section 5.2.1, "No victimization" has virtually no impact on any policy idea. We expect the narrative to convince people to endorse environmentally friendly policies, given its explicit emphasis on preventing development from sacrificing the environment. The unadjusted regressions suggest that the narrative reduces support for forest clearance for agricultural and infrastructure purposes, but these effects are not sustained after adjusting for multiple hypotheses. The results are consistent across OLS and ordered logit estimators.

"Balanced development" has a mixed impact and some differences in the OLS and ordered logit results. The four policy ideas where the two estimators largely agree are: 1) Residents who are

displaced due to infrastructure development projects benefit from the utilization of the infrastructure, 2) Subsidize industries to switch to green technology and energy, 3) Clearing forest land for infrastructure development, and 4) Subsidies for energy-efficient homes and buildings. Both estimators yield null impacts across models for the first two policy ideas. Both estimators indicate that the narrative reduces the likelihood of supporting the third policy idea by seven to nine percentage points. The treatment effects are robust across models (Figures 13 for OLS and I8 for ordered logit). Both OLS and ordered logit suggest weak evidence that the third narrative lessens support for the fourth policy idea. Alas, the treatment effect is not robust across specifications.

The three policy ideas where the OLS and ordered logit results differ are: 1) Greater government budget for the development of green technology and renewable energy, 2) Larger government budget for the development of a mass, integrated, and environmentally friendly public transportation system, and 3) Clearing forest land for settlement development. For the first policy idea, the OLS results indicate that the third narrative has a null impact (Figure 11). However, the ordered logit results indicate weak evidence of a negative impact of reduced support, as one model yields a statistically significant estimate, although it is not robust across specifications (Figure I6). The remaining policy ideas also exhibit a dissimilar pattern across both estimators. The OLS results indicate weak evidence of reduced support for the second (Figure 11) and for the third policy ideas (Figure 13). In contrast, the ordered logit results show that the treatment effects of reduced support are robust across specifications for the second (Figure I6) and for the third policy ideas (Figure I8).

“Equal opportunity” closely mirrors the results of “Fix the distribution”. Since they share a similar theme, the outcome set is also similar. This narrative is largely ineffective in stimulating changes in policy support. The results are consistent across OLS and ordered logit estimators.

Figure 11: Treatment effects on policy support

Figure 12: Treatment effects on policy support

Figure 13: Treatment effects on policy support

5.2.4. Personal and collective efficacy

We ask respondents five questions about their beliefs regarding personal and collective responsibility for creating an equitable and inclusive economy. We randomize the order of the questions to prevent systematic bias due to ordering. While our narratives do not explicitly call for citizen action, we conjecture that the "Fix the distribution" and "Equal opportunity" narratives might trigger a sense of self-relevance regarding these issues, thereby fostering personal and collective efficacy (Sinclair et al., 2025). We encourage readers to consult Appendix D for an explanation of the dummy-dependent variable transformation used for this family of outcomes.

Figure 14 summarizes the regression results with 95% confidence intervals. We found that the "Fix the distribution" and "Equal opportunity" narratives are largely ineffective in provoking personal and collective efficacy. The only statistically significant estimates are the treatment effects in the third model for both treatments on the question, "*How optimistic or pessimistic do you feel right now that the public can make the government take major steps to improve the economy*?" The coefficients suggest that both narratives reduce the likelihood of feeling optimistic, although this result is not robust across specifications. This pattern also appears in the ordered logit results in Figure I9.

The results of the personal and collective efficacy analysis appear to align with our analysis of the emotions evoked by the stimulus and with the literature on the role of emotions in driving social change. Appendix H shows that sadness is the most dominant emotion across stimuli. Although the evidence for the magnitude of impact from each type of emotion is still mixed (Çakmak et al., 2024; Greenaway et al., 2016), studies have found that sadness is less potent in driving social change compared to hope (Greenaway et al., 2016), while anger is noted as a key emotion for mobilizing activism (Ransan-Cooper et al., 2018).

Figure 14: Treatment effects on personal efficacy

5.2.5. Conjoint analysis

We have three interests in conjoint analysis. The first is to study the relative importance of each development attribute. The second is to examine the Average Marginal Component Effect (AMCE) for each attribute level, which is independent of the main experiment. The third is to investigate how each relevant treatment arm mediated or intensified the AMCE through interaction effects between each attribute level and its respective relevant treatment arms. We encourage readers to refer back to Table F2 to refresh their memory on the regression plan and the codenames for each attribute level.

Figure 15: Decision weight when choosing development profile (%)

Let us begin with the relative importance of each development attribute. Figure 15 illustrates the distribution of decision weights when respondents select their preferred development profile. The distribution of income increase remains the most important factor in people's preferences regarding the development profile. Meanwhile, respondents appeared indifferent to environmental protection concerns. Over two-thirds of respondents' consideration centers on the specific feature of the improvement of economic conditions (ECON) attribute. The remaining consideration weight is distributed across the other three attributes, with environmental protection (ENV) accounting for less than 1 percent of the total. This echoes the insight in our

earlier study that the public's conceptualization of development is shaped by the widespread government's narrative (Bahana and Communication for Change, 2025).

We now inspect the AMCE of each attribute level. Figure 16 visualizes the regression results with 95% confidence intervals. The first six rows of the graph panels represent the AMCE across models.

We find that ECON3 has the largest positive AMCE. ECON2 follows closely. Both levels increase the likelihood of profile selection by more than 25 percentage points compared to ECON1. This means people dislike a development in which income increases are concentrated among the rich. The higher AMCE for ECON3 over ECON2 is also riveting, suggesting that people prefer an income increase that is equal across groups, even though it is modest, rather than one that is higher for the poor or near-poor and lower for middle- and upper-income groups. We interpret this as an indication that the Indonesian public prefers growth that benefits everyone equally, albeit inequitably.

There is a notable gap between ECON2 and RIGHTS2, the next highest positive AMCE. RIGHTS2 increases the likelihood of profile selection by seven percentage points compared to RIGHTS3. This suggests that people cannot simply accept displacement for development, even when compensation is involved. People prefer that citizens also benefit financially from development. The AMCE of RIGHTS1 is negative and statistically significant in the first model, suggesting that people cannot completely rule out the possibility of displacing people for development. Yet, this estimate is not robust across models, and the effect size is minuscule.

Respondents are completely indifferent to the economy's environmental attributes. ENV2 is not statistically significant in any of the models. Finally, PARTICIPATION1 increases the likelihood of profile selection by five percentage points. This suggests that people desire citizen participation in the development process. This is consistent with their preference on RIGHTS2.

Figure 16: Conjoint analysis

The remaining rows in the graph panels are the treatment interaction effect. The only robust and statistically significant estimate is the interaction between the "No victimization" narrative and RIGHTS1. "No victimization" increases the probability of selecting an economic profile with a RIGHTS1 feature by six percentage points. This is understandable given the narrative's explicit focus on not sacrificing the people for development. The "Equal opportunity" narrative seems to reduce the probability of selecting an economic profile with an ECON3 feature in the first model. This is surprising and again showcases the paradoxical results of this narrative. However, this result is not robust across models.

5.3. Mechanism underlying backlash

By now, we have learned that even a well-intentioned narrative can lead to unintended consequences. Let us now try to better understand the driver behind these puzzling results. We suspect that this backlash might be correlated with the most resonating paragraph from each stimulus.[18] To investigate this, we examine the relationship between the most resonating paragraph and the outcome that reveals the backlash.[19]

5.3.1. Fix the distribution

The first narrative (Fix the distribution), which calls for fixing the distribution of development spoils, and the third narrative (Balanced development), which advocates a balanced focus on human and infrastructure development, both have notable unintended effects. They reduce prioritization on building public infrastructure and facilities, and reduce support for some key policy ideas necessary for the energy transition process. For the "Fix the distribution" narrative, it is "Subsidies for energy-efficient homes and buildings". For the "Balanced development" narrative: 1) A larger government budget for the development of a mass, integrated, and environmentally friendly public transportation system, 2) Greater government budget for the development of green technology and renewable energy, and 3) Subsidies for energy-efficient homes and buildings.

[18] To study the respondents' immediate reaction to the stimulus further, refer to Appendix H, which provides an in-depth inspection towards three immediate reactions to the stimulus: which paragraph respondents find most resonant, to what extent they agree with the paragraph, and the emotional reactions they experience after reading the stimulus.

[19] Note that this interpretation is merely correlation and not causal. Selection of paragraph as the most resonating is not random.

The regression results for Stimulus 1 - Fix the distribution (Figure M1) indicate that the likelihood of supporting "Subsidies for energy-efficient homes and buildings" tend to fall when the respondents choose the paragraph "*All this time, the benefits of development have not reached all citizens. Those who enjoy it are the rich and powerful. Those at the bottom are still not prosperous.*" as the most resonating. This seems to imply that people associate energy-efficient homes and buildings (which count as infrastructure) with an extravagance that only the rich can afford.

5.3.2. Balanced development

Meanwhile, in the regression results for Stimulus 3 - Balanced development (Figure M2), we find that the likelihood of supporting the three aforementioned policies is lower when the respondent choose the paragraph "*The government should reduce waste in building physical facilities to increase the budget for education, research, and culture.*", especially among the compliers (those who accurately interpreted the message). Associating "building physical facilities" with "waste" in the script might create the impression that public transport systems, new technologies, alternative energy sources, and energy-efficient buildings are wasteful or non-essential projects.

The fact that Indonesians have limited knowledge of renewable energy and climate change, and prioritize immediate economic fulfillment (Communication for Change, 2022, 2021), may exaggerate the impression of energy transition projects as lavish and elitist. Our earlier study (Communication for Change, 2021) shows that only 23% of urban youth have heard the term "renewable energy" before being interviewed. Additionally, only 50% believed that Indonesia's oil and coal reserves would eventually deplete.

In contrast, the issue of deforestation is more salient among Indonesians (Leiserowitz et al., 2023). Thus, Indonesians are more able to imagine and connect it to what the narrative preaches. This suggests that while Indonesians may understand the danger of deforestation, they may not grasp the urgency of the energy transition. We posit that this is why we observe statistically significant effects of reduced support on destructive land-use policies (forest clearance), but no meaningful impact, or even adverse effects, on energy transition policies.

5.3.3. Equal opportunity

The fourth narrative (Equal opportunity) yields some perplexing results. In terms of development priority, it increases prioritization for ensuring fairness for all, which aligns with the increased emphasis on providing equitable basic services. However, it is inconsistent with reduced prioritization on advancing lagging-behind regions.

These results make sense when we link them back to the paragraph resonance (Appendix H1) and agreement (Appendix H2) analyses. The paragraph about the privilege gap is the least selected as the most resonant. Yet, it draws the most disagreement. In addition, the selection of the most resonant paragraph in this study arm is heavily concentrated in the final paragraph, which mandates that the government provide basic services to equalize opportunities. Clearly, people prefer to redirect the discourse on inequality of opportunity away from stark differences in privilege toward what the government can do to help everyone equally. As such, prioritizing certain groups, such as those living in disadvantaged regions, over others may not be favorable.

In Figure M3, we also show that participants in Treatment 4 (Equal opportunity) are less likely to prioritize advancing underdeveloped regions when they choose the paragraph highlighting the privilege of rich children as the most resonant. As prioritizing the development of underdeveloped regions is a form of redistribution, respondents' disagreement with the privileges of rich children might indicate they do not see redistribution as necessary.

Several other studies strengthen our inference. The findings of Hoy et al. (2024), which suggest that informing Indonesians of their true relative position in the socioeconomic distribution reduces support for redistribution among richer respondents, become especially relevant here to support our interpretation, given that our sample is more urban and educated than the representative national population. The same study also found that Indonesians prefer job creation over redistribution as a means to combat inequality. Our insights also corroborate those of Koo et al. (2023), who found that wealthy individuals who grew up poor tend to be less sensitive to the difficulties faced by the poor and less supportive of redistribution, as they are less likely to believe that social mobility is challenging. This literature also sheds some light on the null effects of the narratives on social protection policies.

Furthermore, this is also a nod to the insight from conjoint analysis. The Indonesian public appears to believe that everyone is entitled to benefit equally (rather than equitably), regardless

of their privileges or lack thereof. As such, exposing people to their privileges appears to be a counterproductive approach to achieving social justice goals.

Critics of our interpretation might comment that the failure of the exposing privilege messaging might simply be due to our sample being more urban and educated. However, another study has provided evidence that it may not work for those who are less well-off as well. Hoy and Mager (2021) demonstrated that individuals who are informed that they are relatively poorer than they initially thought are less likely to be concerned about inequality and are not more supportive of redistribution, as people tend to benchmark their level of welfare to the people around them. In line with this, Arsendy (2020) highlighted that Indonesians tend to live in socially segregated clusters, with people within these clusters being predominantly homogeneous. As such, they mostly interact with people of the same social class.

We suspect that this aversion to discussing privilege might stem from the "just world" belief (Lerner and Montada, 1998). This cognitive bias leads people to believe the world is fundamentally fair and that people get what they work for. As empirical support, Almås et al. (2025) found that Indonesians are more likely to believe that merit plays a larger role than luck in shaping inequality. The same study also documented that the dominant type of fairness in Indonesia is "libertarian", where people believe that it is fair for workers to receive their original earnings and thus do not redistribute at all, regardless of the source of inequality (luck or productivity).

A related concept to "just world" is the principle of proportionality, which is one of the six dimensions that form an individual's moral foundation, according to Atari et al. (2023). In the same vein, Trager and Atari (2025) found that societies with a high respect for proportionality, which we have identified Indonesia to be in earlier studies (Bahana and Communication for Change, 2025; Communication for Change, 2024, 2022; Communication for Change and Bahana, 2025), are more likely to tolerate wealth accumulation. This conceptualization of fairness has significant implications for promoting tax and social protection reforms.

However, the effects the "Equal opportunity" narrative has on opinions about the economy (Section 5.2.2) seem to contest this proposition. The results suggest that this narrative can prompt respondents to acknowledge the role of factors beyond their own efforts (such as government laws, regulations, and decisions) in the economy. The stimulus even makes the

participants less likely to agree that wealth inequality is a normal phenomenon. While bewildering, another study actually also found that Indonesian's belief in meritocracy tends to weaken after receiving information about the state of high income inequality and low social mobility in the country (Mijs and Hoy, 2022).

To explain this paradox, we postulate that it might be easier for those in privileged socioeconomic positions to accept that external factors influence individuals' socioeconomic achievement than to acknowledge some degree of undeservedness in their success. Most Indonesians are Muslims, and 98% of Indonesians believe that religion plays a vital part in their life (Tamir et al., 2020). One of the most popular aphorisms in Islam is "Man proposes, God disposes", and we speculate that accepting this undeservingness may run contrary to the saying and trigger discomfort. Arsendy (2021) has also noted how people eventually resort to mentioning luck as a justification for their success, rather than acknowledging their privileges.

Ultimately, the key message about equal opportunity remains appealing; however, we need a more effective framing when discussing fairness with the Indonesian public.

6. Discussions and implications

Our key takeaway is that caution and care are advised when designing narratives, as they might lead to unintended consequences. Among the four narratives, we deem the "No victimization" and "Balanced development" narratives to be the most favorable, provided we make some alterations to the narrative script. We recommend utilizing these two narratives in campaign efforts to attract public support for an equitable and sustainable economy.

The "No victimization" narrative, which emphasizes the need to prevent development from sacrificing the people and the environment, appears to be the safest. It can move the needle on development agendas essential to an equitable and sustainable economy, make people regard others' rights more, and does not exhibit any unwanted negative effects, unlike all the other narratives.

Indeed, it still lacks the ability to mobilize policy support. We attribute this problem to the lack of specificity of the call to action (CTA) in the final paragraph of this narrative (see Figure H2). We design this narrative to influence opinions on the development approach in general, without referring to any specific policy. While this narrative achieves its objective of modifying views

about development goals, we also learn a disadvantage in not specifying the policy we aim to support or oppose in the script. Revising the CTA of this narrative might yield impactful policy support.

The next promising narrative is the “Balanced development” narrative. It has major positive impacts on development prioritization and land-use policies. Yet, the narrative also results in several backlashes in infrastructure development and energy transition policies because the stimulus script associates them with wastefulness. Revising the CTA of this narrative might also help ameliorate the problem. We might reframe the CTA to infrastructure development efficiency, or more effective infrastructure spending, rather than outright associating infrastructure spending with wastefulness.

Furthermore, the fact that we discover a positive impact of the “Balanced development” narrative on forest and land use policies, but a negative impact on energy transition policies, confirms that information and narratives are complementary. While information provision alone may not be sufficient to shift attitudes and beliefs, as the public may lack the necessary lens to interpret it, information deficiency may also hinder the effectiveness of narratives or create framing that can be counterproductive. Therefore, rather than discarding this narrative, we recommend being more careful and cautious about wordings and information vacuum among the public when using this kind of messaging. This means that basic information interventions aimed at improving public knowledge of renewable energy, the energy transition, and the climate crisis are still necessary, alongside narrative-based campaigns.

In terms of social equality narratives, the “Equal opportunity” narrative is more effective than the “Fix the distribution” narrative at improving the prioritization of progressive development goals. However, we need a better framing than exposing privileges, as it is counterproductive to the objectives of fairness. Given that Indonesians uphold the value of proportionality in high regard (Bahana and Communication for Change, 2025; Communication for Change, 2024, 2022; Communication for Change and Bahana, 2025), we might find better success using the framing of how much value you contribute versus how much you receive in return in messages about social justice.

7. Conclusion

This study provides one of the first randomized assessments of broad economic development narratives in a middle-income, rapidly growing economy. By experimentally exposing over 3,600 Indonesian adults to four alternative narratives—(1) equitable distribution of development benefits, (2) safeguarding people and the environment, (3) balancing human and physical development, and (4) equalizing opportunities—we test how narratives can shift public perceptions of development priorities, economic beliefs, and policy support.

This study contributes a new piece of evidence on the kinds of narratives civil society organizations (CSOs) and think tanks can utilize in their campaign and policy advocacy work. While many think tanks and CSOs have expended a great deal of effort to shift the economic narrative in Indonesia, we are still a long way from achieving the vision of an equitable and sustainable economy. Past studies and attempts have taught us that information provision alone might not be sufficient to shift attitudes and beliefs. They need to be framed in the direction that reformers desire. Narratives help form that frame in people's minds.

For policy advocates and civil society organizations, these results underscore the importance of narrative design: messages that emphasize concrete protections for people and the environment are both effective and safe, while those dwelling on inequality of opportunity or distributional gaps must be crafted with caution to avoid unintended resistance. Complementing narrative framing with accessible information and repeated exposure is likely necessary to sustain attitude change and build momentum for reform.

Our study has limitations. The online, quota-based sample overrepresents urban, slightly more educated Indonesians, and the short-term measurement cannot capture enduring shifts in beliefs or behavior. Future research should test refined narratives among more diverse populations, explore multimedia delivery channels, and examine the cumulative effects of repeated storytelling. By advancing the experimental study of development narratives, this work lays the groundwork for more strategic communication campaigns that align Indonesia's growth story with social justice and environmental sustainability.

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Appendices

Appendix A. Sample characteristics

Figure A1: Gender distribution

Figure A2: Age group distribution

Figure A3: Education distribution

Figure A4: Geographical distribution based on time zones

Figure A5: Urban-rural distribution

Figure A6: Social assistance recipient distribution

Note: Population data are calculated from BPS Susenas (March 2023)

Figure A7: Household head gender distribution

Note: Population data are calculated from BPS Susenas (March 2023)

Figure A8: Household size distribution

Note: Population data are calculated from BPS Susenas (March 2023)
There are respondents with household size >10, but the proportion is below 1% both in sample and population data.

Figure A9: Statistical difference of key characteristics between the sample and the population

Appendix B. Comprehension and stimulus reading time

Figure B1: Mean difference of reading time between the correct and incorrect groups

Notes: Incorrect group mean of reading time is 42.66 seconds

Appendix D. Variable construction

Variable	Description
Basic characteristics	
Region1	An indicator variable equal to 1 if the unit lives in the Western Indonesia Time zone
Region2	An indicator variable equal to 1 if the unit lives in the Central Indonesia Time zone
Region3	An indicator variable equal to 1 if the unit lives in the Eastern Indonesia Time zone
Urban	An indicator variable equal to 1 if the unit lives in an urban area
Male	An indicator variable equal to 1 if the unit is male
Age	Unit's age (in years, discrete, untransformed from raw data)
Unmarried	An indicator variable equal to 1 if the unit is unmarried
Edu1	An indicator variable equal to 1 if the unit's educational attainment is less than the primary level
Edu2	An indicator variable equal to 1 if the unit's educational attainment is at the primary level
Edu3	An indicator variable equal to 1 if the unit's educational attainment is junior secondary level
Edu4	An indicator variable equal to 1 if the unit's educational attainment is senior secondary level
Edu5	An indicator variable equal to 1 if the unit's educational attainment is tertiary level
HH head female	An indicator variable equal to 1 if the unit's household head is female

Variable	Description
No social assistance	An indicator variable equal to 1 if the unit's household never receives social assistance
HH size	The total number of individuals living in the unit's household
Treatment indicators	
Treat1	An indicator variable equal to 1 if the unit was randomly assigned to the treatment arm 1
Treat2	An indicator variable equal to 1 if the unit was randomly assigned to the treatment arm 2
Treat3	An indicator variable equal to 1 if the unit was randomly assigned to the treatment arm 3
Treat4	An indicator variable equal to 1 if the unit was randomly assigned to the treatment arm 4
Outcomes	
Development priority – Increase the income or economic capability of all citizens	Indicator variable equal to 1 if the unit thought that increasing the income or economic capability of all citizens ought to be the government's development goals
Development priority – Advancing the quality of human resources.	Indicator variable equal to 1 if the unit thought that advancing the quality of human resources ought to be the government's development goals
Development priority – Encouraging people to make decisions about their lives democratically.	Indicator variable equal to 1 if the unit thought that encouraging people to make decisions about their lives democratically ought to be the government's development goals
Development priority – Erecting infrastructure and facilities for public use.	Indicator variable equal to 1 if the unit thought that erecting infrastructure and facilities for public use ought to be the government's development goals

Variable	Description
Development priority – Provide equitable and quality basic services (education, health, social assistance).	Indicator variable equal to 1 if the unit thought that providing equitable and quality basic services (education, health, social assistance) ought to be the government's development goals
Development priority – Advancing underdeveloped regions.	Indicator variable equal to 1 if the unit thought that advancing underdeveloped regions ought to be the government's development goals
Development priority – Enable Indonesians to achieve the important things of their choice.	Indicator variable equal to 1 if the unit thought that enabling Indonesians to achieve the important things of their choice ought to be the government's development goals
Development priority – Ensure fairness for all citizens in rights, opportunities, and the law.	Indicator variable equal to 1 if the unit thought that ensuring fairness for all citizens in rights, opportunities, and the law ought to be the government's development goals
Development priority – Ensuring the next generation has a better life.	Indicator variable equal to 1 if the unit thought that ensuring the next generation has a better life ought to be the government's development goals
Opinions about the economy – If people's economic conditions are good, we can reduce dependence on economic activities that damage or pollute the environment.	Indicator variable equal to 1 if the unit chose "*slightly agree*", "*agree*", or "*strongly agree*" to the statement "*If people's economic conditions are good, we can reduce dependence on economic activities that damage or pollute the environment*"
Opinions about the economy – The government may relocate people in order to build public facilities for the public interest (e.g., roads, reservoirs, power plants), provided that the government provides replacement housing.	Indicator variable equal to 1 if the unit chose "*slightly agree*", "*agree*", or "*strongly agree*" to the statement "*The government may relocate people in order to build public facilities for the public interest (e.g., roads, reservoirs, power plants), provided that the government provides replacement housing*"

Variable	Description
Opinions about the economy – We, as citizens, should not just accept the government's decision.	Indicator variable equal to 1 if the unit chose "*slightly agree*", "*agree*", or "*strongly agree*" to the statement "*We, as citizens, should not just accept the government's decision.*"
Opinions about the economy – It is natural that there are differences in wealth within society.	Indicator variable equal to 1 if the unit chose "*slightly agree*", "*agree*", or "*strongly agree*" to the statement "*It is natural that there are differences in wealth within society.*"
Opinions about the economy – Laws and rules made by the government determine the chances of people succeeding.	Indicator variable equal to 1 if the unit chose "*slightly agree*", "*agree*", or "*strongly agree*" to the statement "*Laws and rules made by the government determine the chances of people succeeding.*"
Opinions about the economy – The choices the government makes determine who is in power in our economy.	Indicator variable equal to 1 if the unit chose "*slightly agree*", "*agree*", or "*strongly agree*" to the statement "*The choices the government makes determine who is in power in our economy.*"
Who should the government prioritize? – People with capital	Indicator variable equal to 1 if the unit ranked people with capital among the top three most deserving of government support during rapid economic growth.
Who should the government prioritize? – People in power	Indicator variable equal to 1 if the unit ranked people in power among the top three most deserving of government support during rapid economic growth.
Who should the government prioritize? – People with extensive connections	Indicator variable equal to 1 if the unit ranked people with extensive connections among the top three most deserving of government support during rapid economic growth.
Who should the government prioritize? – People who work diligently	Indicator variable equal to 1 if the unit ranked people who work diligently among the top three most deserving of government support during rapid economic growth.
Who should the government prioritize? – People who are good at seizing opportunities	Indicator variable equal to 1 if the unit ranked people who are good at seizing opportunities among the top three most deserving of government support during rapid economic growth.

Variable	Description
Who should the government prioritize? – People who don't give in to circumstances	Indicator variable equal to 1 if the unit ranked people who don't give in to circumstances among the top three most deserving of government support during rapid economic growth.
Who should the government prioritize? – People who are poor or underprivileged	Indicator variable equal to 1 if the unit ranked people who are poor or underprivileged among the top three most deserving of government support during rapid economic growth.
Who should the government prioritize? – People living in underdeveloped areas	Indicator variable equal to 1 if the unit ranked people living in underdeveloped areas among the top three most deserving of government support during rapid economic growth.
Factors influencing the Indonesian economy – Laws and rules	Indicator variable equal to 1 if the unit believed that laws and rules play a "*big*" or "*very big*" role in influencing the economy in Indonesia
Factors influencing the Indonesian economy – Human and nature	Indicator variable equal to 1 if the unit believed that human and nature play a "*big*" or "*very big*" role in influencing the economy in Indonesia
Factors influencing the Indonesian economy – World events	Indicator variable equal to 1 if the unit believed that world events play a "*big*" or "*very big*" role in influencing the economy in Indonesia
Factors influencing the Indonesian economy – Fate	Indicator variable equal to 1 if the unit believed that fate plays a "*big*" or "*very big*" role in influencing the economy in Indonesia
Policy support – Fuel and electricity price hikes accompanied by cash transfers to all, not just the poor.	Indicator variable equal to 1 if the unit was "*supportive*" or "*very supportive*" of the policy idea of fuel and electricity price hikes, accompanied by cash transfers to all, not just the poor.
Policy support – A larger government budget for the development of a mass, integrated, and environmentally friendly public transportation system.	Indicator variable equal to 1 if the unit was "*supportive*" or "*very supportive*" of the policy idea of a larger government budget for the development of a mass, integrated, and environmentally friendly public transportation system.

Variable	Description
Policy support – Greater government budget for the development of green technology and renewable energy.	Indicator variable equal to 1 if the unit was "*supportive*" or "*very supportive*" of the policy idea of a greater government budget for the development of green technology and renewable energy.
Policy support – Residents displaced by infrastructure development projects benefit from the use of the new infrastructure.	Indicator variable equal to 1 if the unit was "*supportive*" or "*very supportive*" of the policy idea that residents who are displaced due to infrastructure development projects benefit from the utilization of the infrastructure.
Policy support – Subsidies for energy-efficient homes and buildings.	Indicator variable equal to 1 if the unit was "*supportive*" or "*very supportive*" of the policy idea of subsidies for energy-efficient homes and buildings.
Policy support – Greater value of social assistance.	Indicator variable equal to 1 if the unit was "*supportive*" or "*very supportive*" of the policy idea of a greater value of social assistance.
Policy support – Broader coverage of social assistance recipients, even for the middle class.	Indicator variable equal to 1 if the unit was "*supportive*" or "*very supportive*" of the policy idea of broader coverage of social assistance recipients, even for the middle class.
Policy support – Higher motor vehicle tax.	Indicator variable equal to 1 if the unit was "*supportive*" or "*very supportive*" of the policy idea of higher motor vehicle tax
Policy support – Subsidize industries to switch to green technology and energy.	Indicator variable equal to 1 if the unit was "*supportive*" or "*very supportive*" of the policy idea of subsidizing industries to switch to green technology and energy.
Policy support – The government provides financial assistance for people who have recently lost their jobs.	Indicator variable equal to 1 if the unit was "*supportive*" or "*very supportive*" of the policy idea of the government, which provides financial assistance for people who have recently lost their jobs.

Variable	Description
Policy support – Clearing forest land for agriculture or plantations, even for the purpose of producing petroleum substitute fuels (such as biofuels/bioethanol).	Indicator variable equal to 1 if the unit was "*supportive*" or "*very supportive*" of the policy idea of clearing forest land for agriculture or plantations, even for the purpose of producing petroleum substitute fuels (such as biofuels/bioethanol).
Policy support – Clearing forest land for settlement development.	Indicator variable equal to 1 if the unit was "*supportive*" or "*very supportive*" of the policy idea of clearing forest land for settlement development.
Policy support – Clearing forest land for infrastructure development.	Indicator variable equal to 1 if the unit was "*supportive*" or "*very supportive*" of the policy idea of clearing forest land for infrastructure development.
Personal efficacy – How much can we as a society do right now to create an economy that meets everyone's needs?	Indicator variable equal to 1 if the unit believed that society can do "*many*" or "*very much*" things now to create an economy that meets everyone's needs
Personal efficacy – How much can members of the public do right now to force the government to take steps to create an economy that meets everyone's needs?	Indicator variable equal to 1 if the unit believed that members of the public can do "*many*" or "*very much*" things now to force the government to take steps to create an economy that meets everyone's needs
Personal efficacy – How optimistic or pessimistic do you feel right now that the public can make the government take major steps to improve the economy?	Indicator variable equal to 1 if the unit felt "*somewhat optimistic*", "*optimistic*", or "*very optimistic*" that the public can make the government take major steps to improve the economy
Personal efficacy – How much obligation does our society have to ensure that everyone has the opportunity to succeed?	Indicator variable equal to 1 if the unit believed that the society has "*large*" or "*very large*" responsibility to ensure that everyone has the opportunity to succeed

Variable	Description
Personal efficacy – How much responsibility does our society have to ensure that everyone can live a good life?	Indicator variable equal to 1 if the unit believed that the society has "*large*" or "*very large*" responsibility to ensure that everyone can live a good life
Cognitive controls	
Stimulus reading time	How long did it take the unit to read the stimulus (in seconds)
Section completion time	Length of completing the relevant survey section (in seconds). For example, if the outcome is a policy support variable, then this variable measures how long it took the respondent to complete the policy support section.
Social desirability index	Please see Reynolds (1982) for detailed guidance
Agree with stimulus	Indicator variable equal to 1 if the unit agreed with the sentence block they chose as the most resonating
Correct message interpretation	Indicator variable equal to 1 if the unit correctly interpreted the intended meaning of the stimulus

Appendix E. Conventional balance testing results

Group	West	Central	East	Urban	Male	Age	Primary	JHS	SHS	Tertiary	HH head female	No soc. asst.	Household size
Treatment 1	0.024	-0.007	-0.017	0.013	0.044	0.337	-0.000	-0.002	0.027	-0.025	0.012	0.029	-0.072
	(0.018)	(0.017)	(0.006)	(0.021)	(0.025)	(0.512)	(0.004)	(0.006)	(0.024)	(0.025)	(0.017)	(0.025)	(0.073)
Treatment 2	-0.018	-0.005	0.023	-0.031	-0.097***	-2.362***	-0.004	0.000	0.056	-0.053	0.032	-0.016	0.177
	(0.019)	(0.017)	(0.010)	(0.021)	(0.025)	(0.538)	(0.004)	(0.007)	(0.024)	(0.025)	(0.018)	(0.025)	(0.078)
Treatment 3	0.004	0.011	-0.015	-0.023	-0.048	-3.358***	-0.000	0.004	0.034	-0.038	0.032	-0.009	0.136
	(0.019)	(0.018)	(0.007)	(0.021)	(0.025)	(0.552)	(0.004)	(0.007)	(0.024)	(0.025)	(0.018)	(0.025)	(0.075)
Treatment 4	0.000	0.009	-0.009	-0.004	-0.004	-0.815	-0.003	-0.001	0.029	-0.026	0.008	-0.003	0.097
	(0.019)	(0.018)	(0.007)	(0.021)	(0.025)	(0.522)	(0.004)	(0.006)	(0.024)	(0.025)	(0.017)	(0.025)	(0.076)

Statistical significance based on Holm p-values: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.10$. Standard errors in parentheses.

Appendix F. Regression plan

Table F1: Regression plan main experiment

Outcome family	Outcome	Treatment 1	Treatment 2	Treatment 3	Treatment 4	OLS/2SLS	Ordered Logit
Development priority	Increase the income or economic capability of all citizens.	1			1	1	
Development priority	Advancing the quality of human resources.	1		1	1	1	
Development priority	Encouraging people to make decisions about their lives democratically.		1			1	
Development priority	Erecting infrastructure and facilities for public use.	1		1	1	1	
Development priority	Provide equitable and quality basic services (education, health, social assistance).	1		1	1	1	
Development priority	Advancing underdeveloped regions.	1		1	1	1	
Development priority	Enable Indonesians to achieve the important things of their choice.			1	1	1	
Development priority	Ensure fairness for all citizens in rights, opportunities, and the law.		1		1	1	
Development priority	Ensuring the next generation has a better life.		1	1	1	1	
Opinions about the economy	If people's economic conditions are good, we can reduce dependence on economic activities that damage or pollute the environment.	1	1		1	1	1

Outcome family	Outcome	Treatment 1	Treatment 2	Treatment 3	Treatment 4	OLS/2SLS	Ordered Logit
Opinions about the economy	The government may relocate people in order to build public facilities for the public interest (e.g., roads, reservoirs, power plants), provided that the government provides replacement housing.		1	1		1	1
Opinions about the economy	We, as citizens, should not just accept the government's decision.		1			1	1
Opinions about the economy	It is natural that there are differences in wealth within society.	1			1	1	1
Opinions about the economy	Laws and rules made by the government determine the chances of people succeeding.	1			1	1	1
Opinions about the economy	The choices the government makes determine who is in power in our economy.	1			1	1	1
Who should the government prioritize?	People with capital	1			1	1	1
Who should the government prioritize?	People in power	1			1	1	1

Outcome family	Outcome	Treatment 1	Treatment 2	Treatment 3	Treatment 4	OLS/2SLS	Ordered Logit
Who should the government prioritize?	People with extensive connections	1			1	1	1
Who should the government prioritize?	People who work diligently	1			1	1	1
Who should the government prioritize?	People who are good at seizing opportunities	1			1	1	1
Who should the government prioritize?	People who don't give in to circumstances	1			1	1	1
Who should the government prioritize?	People who are poor or underprivileged	1			1	1	1
Who should the government prioritize?	People living in underdeveloped areas	1			1	1	1
Factors influencing Indonesian economy	Laws and rules	1			1	1	1

Outcome family	Outcome	Treatment 1	Treatment 2	Treatment 3	Treatment 4	OLS/2SLS	Ordered Logit
Factors influencing Indonesian economy	Human and nature	1			1	1	1
Factors influencing Indonesian economy	World events	1			1	1	1
Factors influencing Indonesian economy	Fate	1			1	1	1
Policy support	Fuel and electricity price hikes accompanied by cash transfers to all, not just the poor.	1	1		1	1	1
Policy support	A larger government budget for the development of a mass, integrated, and environmentally friendly public transportation system.		1	1		1	1
Policy support	Greater government budget for the development of green technology and renewable energy.		1	1		1	1
Policy support	Residents who are displaced due to infrastructure development projects benefit from the utilization of the infrastructure.	1	1	1		1	1
Policy support	Subsidies for energy-efficient homes and buildings.	1	1	1		1	1
Policy support	Greater value of social assistance.	1			1	1	1

Outcome family	Outcome	Treatment 1	Treatment 2	Treatment 3	Treatment 4	OLS/2SLS	Ordered Logit
Policy support	Broader coverage of social assistance recipients, even for the middle class.	1			1	1	1
Policy support	Higher motor vehicle tax.	1	1			1	1
Policy support	Subsidize industries to switch to green technology and energy.		1	1		1	1
Policy support	The government provides financial assistance for people who have recently lost their jobs.	1			1	1	1
Policy support	Clearing forest land for agriculture or plantations, even for the purpose of producing petroleum substitute fuels (such as biofuels/bioethanol).	1	1			1	1
Policy support	Clearing forest land for settlement development.		1	1		1	1
Policy support	Clearing forest land for infrastructure development.		1	1		1	1
Personal efficacy	How much can we as a society do right now to create an economy that meets everyone's needs?	1			1	1	1
Personal efficacy	How much can members of the public do right now to force the government to take steps to create an economy that meets everyone's needs?	1			1	1	1
Personal efficacy	How optimistic or pessimistic do you feel right now that the public can make the government take major steps to improve the economy?	1			1	1	1

Outcome family	Outcome	Treatment 1	Treatment 2	Treatment 3	Treatment 4	OLS/2SLS	Ordered Logit
Personal efficacy	How much obligation does our society have to ensure that everyone has the opportunity to succeed?	1			1	1	1
Personal efficacy	How much responsibility does our society have to ensure that everyone can live a good life?	1			1	1	1

Table F2: Regression plan conjoint analysis

Attributes	Levels	Base group	Treatment 1	Treatment 2	Treatment 3	Treatment 4
Improvement of economic conditions	The incomes of the rich rose the most, while the incomes of others rose only modestly. (ECON1)	1	1			1
Improvement of economic conditions	The incomes of the poor or near-poor rose the most, while the incomes of the middle and upper classes rose only modestly. (ECON2)		1			1
Improvement of economic conditions	All levels of society experienced modest increases in income, but no one became poorer. (ECON3)		1			1
The rights of others	To build something that will benefit many people in the future, no group should be displaced or lose their livelihood, even if they receive commensurate compensation. (RIGHTS1)			1	1	

Attributes	Levels	Base group	Treatment 1	Treatment 2	Treatment 3	Treatment 4
The rights of others	To build something that will benefit many people in the future, residents should not only be compensated appropriately, but also financially benefit from what is built. (RIGHTS2)			1	1	
The rights of others	To build something that will benefit many people in the future, it is natural that some residents will be forced to be evicted or lose their livelihoods, as long as they receive commensurate compensation. (RIGHTS3)	1		1	1	
Environmental preservation	There should be no destruction of the environment at all, even if it is to build something that will benefit many people in the future. (ENV1)	1		1	1	
Environmental preservation	It is acceptable to destroy the environment to some extent, as long as it is to build something that will benefit many people in the future. (ENV2)			1	1	
Citizen participation	Citizens are comfortable and free to actively provide input, ask questions, or submit complaints to the government, so that development programs can take place more carefully. (PARTICIPATION1)			1		
Citizen participation	After voting in the election, citizens entrust and delegate discretion to the government, allowing development programs to proceed more smoothly and efficiently. (PARTICIPATION2)	1		1		

Appendix G. Unadjusted differences of outcomes

Table G1: Unadjusted differences of outcomes in binary indicator format

Outcome family	Outcome	Control mean	Mean difference to control			
			Treatment 1	Treatment 2	Treatment 3	Treatment 4
Development priority	Increase the income or economic capability of all citizens.	0.45323	-0.00683			-0.04146
Development priority	Advancing the quality of human resources.	0.41537			0.18877	-0.01390
Development priority	Encouraging people to make decisions about their lives democratically.	0.04232		0.03318		
Development priority	Erecting infrastructure and facilities for public use.	0.19376	-0.06307		-0.05344	-0.10112
Development priority	Provide equitable and quality basic services (education, health, social assistance).	0.56793	-0.02608		0.06427	0.12913
Development priority	Advancing underdeveloped regions.	0.23051	-0.01906		-0.02667	-0.07316
Development priority	Enable Indonesians to achieve the important things of their choice.	0.05234			0.01413	0.00501
Development priority	Ensure fairness for all citizens in rights, opportunities, and the law.	0.38864		0.08714		0.13489
Development priority	Ensuring the next generation has a better life.	0.20045		0.15283	0.02998	0.05691
Opinions about the economy	If people's economic conditions are good, we can reduce dependence on economic activities that damage or pollute the environment.	0.89310	0.02908	-0.00563		0.02602

Outcome family	Outcome	Control mean	Mean difference to control			
			Treatment 1	Treatment 2	Treatment 3	Treatment 4
Opinions about the economy	The government may relocate people in order to build public facilities for the public interest (e.g., roads, reservoirs, power plants), provided that the government provides replacement housing.	0.89866		0.00162	-0.03751	
Opinions about the economy	We, as citizens, should not just accept the government's decision.	0.91871		0.02859		
Opinions about the economy	It is natural that there are differences in wealth within society.	0.87639	-0.05114			-0.05286
Opinions about the economy	Laws and rules made by the government determine the chances of people succeeding.	0.69042	0.06141			0.06399
Opinions about the economy	The choices the government makes determine who is in power in our economy.	0.68040	0.08025			0.05195
Who should the government prioritize?	People with capital	0.06904	-0.01177			0.00008
Who should the government prioritize?	People in power	0.04009	0.01571			-0.00774
Who should the government prioritize?	People with extensive connections	0.08909	0.00783			-0.01262
Who should the government prioritize?	People who work diligently	0.62361	0.01516			-0.00449
Who should the government prioritize?	People who are good at seizing opportunities	0.30624	-0.02136			-0.00771

Outcome family	Outcome	Control mean	Mean difference to control			
			Treatment 1	Treatment 2	Treatment 3	Treatment 4
Who should the government prioritize?	People who don't give in to circumstances	0.58686	-0.02445			0.02049
Who should the government prioritize?	People who are poor or underprivileged	0.69488	0.01878			0.01689
Who should the government prioritize?	People living in underdeveloped areas	0.59020	0.00011			-0.00491
Factors influencing Indonesian economy	Laws and rules	0.80958	-0.03718			-0.00517
Factors influencing Indonesian economy	Human and nature	0.55011	-0.00386			-0.00599
Factors influencing Indonesian economy	World events	0.45657	-0.02045			-0.04186
Factors influencing Indonesian economy	Fate	0.30624	-0.05073			-0.00624
Policy support	Fuel and electricity price hikes accompanied by cash transfers to all, not just the poor.	0.28062	-0.00896	0.04416		-0.03209
Policy support	A larger government budget for the development of a mass, integrated, and environmentally friendly public transportation system.	0.83519		-0.03177	-0.07743	
Policy support	Greater government budget for the development of green technology and renewable energy.	0.79287		-0.03504	-0.05284	

Outcome family	Outcome	Control mean	Mean difference to control			
			Treatment 1	Treatment 2	Treatment 3	Treatment 4
Policy support	Residents who are displaced due to infrastructure development projects benefit from the utilization of the infrastructure.	0.76615	-0.04221	-0.06387	-0.04237	
Policy support	Subsidies for energy-efficient homes and buildings.	0.78619	-0.07547	-0.02978	-0.06832	
Policy support	Greater value of social assistance.	0.68151	-0.04715			-0.01240
Policy support	Broader coverage of social assistance recipients, even for the middle class.	0.51782	-0.03470			-0.00311
Policy support	Higher motor vehicle tax.	0.16481	-0.00769	-0.00527		
Policy support	Subsidize industries to switch to green technology and energy.	0.87082		-0.01470	-0.03035	
Policy support	The government provides financial assistance for people who have recently lost their jobs.	0.76169	-0.05244			0.00448
Policy support	Clearing forest land for agriculture or plantations, even for the purpose of producing petroleum substitute fuels (such as biofuels/bioethanol).	0.59020	-0.03660	-0.06029		
Policy support	Clearing forest land for settlement development.	0.27394		-0.01611	-0.06567	
Policy support	Clearing forest land for infrastructure development.	0.29844		-0.05628	-0.09312	
Personal efficacy	How much can we as a society do right now to create an economy that meets everyone's needs?	0.57684	-0.00268			-0.00478

Outcome family	Outcome	Control mean	Mean difference to control			
			Treatment 1	Treatment 2	Treatment 3	Treatment 4
Personal efficacy	How much can members of the public do right now to force the government to take steps to create an economy that meets everyone's needs?	0.62138	0.00417			-0.00962
Personal efficacy	How optimistic or pessimistic do you feel right now that the public can make the government take major steps to improve the economy?	0.73163	-0.04000			-0.00516
Personal efficacy	How much obligation does our society have to ensure that everyone has the opportunity to succeed?	0.75835	-0.00211			-0.00541
Personal efficacy	How much responsibility does our society have to ensure that everyone can live a good life?	0.75167	-0.00277			0.01156

Table G2: Unadjusted differences of outcomes in Likert format

Outcome family	Outcome	Control mean	Mean difference to control			
			Treatment 1	Treatment 2	Treatment 3	Treatment 4
Opinions about the economy	If people's economic conditions are good, we can reduce dependence on economic activities that damage or pollute the environment.	4.97884	0.04025	-0.11132		0.07116
Opinions about the economy	The government may relocate people in order to build public facilities for the public interest (e.g., roads, reservoirs, power plants), provided that the government provides replacement housing.	4.90646		0.04796	-0.16791	
Opinions about the economy	We, as citizens, should not just accept the government's decision.	4.92984		0.16275		
Opinions about the economy	It is natural that there are differences in wealth within society.	4.59465	-0.22314			-0.22260
Opinions about the economy	Laws and rules made by the government determine the chances of people succeeding.	4.11915	0.17160			0.11908
Opinions about the economy	The choices the government makes determine who is in power in our economy.	3.98775	0.28097			0.19313
Who should the government prioritize?	People with capital	6.23719	0.00803			-0.02984
Who should the government prioritize?	People in power	7.41759	-0.04608			0.07064
Who should the government prioritize?	People with extensive connections	5.75612	0.08528			0.15711

Outcome family	Outcome	Control mean	Mean difference to control			
			Treatment 1	Treatment 2	Treatment 3	Treatment 4
Who should the government prioritize?	People who work diligently	2.99777	-0.03155			-0.00513
Who should the government prioritize?	People who are good at seizing opportunities	4.09911	0.07857			0.02589
Who should the government prioritize?	People who don't give in to circumstances	3.36414	0.00884			-0.11561
Who should the government prioritize?	People who are poor or underprivileged	2.77283	-0.08414			-0.12430
Who should the government prioritize?	People living in underdeveloped areas	3.35523	-0.01896			0.02124
Factors influencing Indonesian economy	Laws and rules	4.15479	-0.05787			0.04374
Factors influencing Indonesian economy	Human and nature	3.61136	0.00538			0.03864
Factors influencing Indonesian economy	World events	3.46771	-0.07857			-0.06918
Factors influencing Indonesian economy	Fate	2.95212	-0.03728			0.06847
Policy support	Fuel and electricity price hikes accompanied by cash transfers to all, not just the poor.	2.77506	-0.03056	0.11668		-0.08535

Outcome family	Outcome	Control mean	Mean difference to control			
			Treatment 1	Treatment 2	Treatment 3	Treatment 4
Policy support	A larger government budget for the development of a mass, integrated, and environmentally friendly public transportation system.	4.15479		-0.05507	-0.20353	
Policy support	Greater government budget for the development of green technology and renewable energy.	4.03898		-0.05607	-0.10545	
Policy support	Residents who are displaced due to infrastructure development projects benefit from the utilization of the infrastructure.	3.92762	-0.04362	-0.11565	-0.09896	
Policy support	Subsidies for energy-efficient homes and buildings.	3.95991	-0.13612	-0.02259	-0.13273	
Policy support	Greater value of social assistance.	3.81626	-0.08204			-0.01773
Policy support	Broader coverage of social assistance recipients, even for the middle class.	3.38976	-0.05495			-0.02799
Policy support	Higher motor vehicle tax.	2.33630	-0.06171	0.00985		
Policy support	Subsidize industries to switch to green technology and energy.	4.17372		-0.01418	-0.08362	
Policy support	The government provides financial assistance for people who have recently lost their jobs.	3.98664	-0.07768			-0.01164
Policy support	Clearing forest land for agriculture or plantations, even for the purpose of producing petroleum substitute fuels (such as biofuels/bioethanol).	3.56125	-0.11191	-0.10968		
Policy support	Clearing forest land for settlement development.	2.81849		-0.04641	-0.20992	

Outcome family	Outcome	Control mean	Mean difference to control			
			Treatment 1	Treatment 2	Treatment 3	Treatment 4
Policy support	Clearing forest land for infrastructure development.	2.86748		-0.15096	-0.28107	
Personal efficacy	How much can we as a society do right now to create an economy that meets everyone's needs?	3.62584	-0.03993			-0.00966
Personal efficacy	How much can members of the public do right now to force the government to take steps to create an economy that meets everyone's needs?	3.69710	-0.02897			0.00584
Personal efficacy	How optimistic or pessimistic do you feel right now that the public can make the government take major steps to improve the economy?	5.93096	-0.12773			-0.03537
Personal efficacy	How much obligation does our society have to ensure that everyone has the opportunity to succeed?	3.98330	-0.02441			-0.01859
Personal efficacy	How much responsibility does our society have to ensure that everyone can live a good life?	3.95212	-0.04022			0.00524

Appendix H. Stimulus response distributions

To help us make sense of the results, it is useful to examine how respondents respond to the stimulus. In this section, we analyze three immediate reactions: which paragraph respondents find most resonant, the extent to which they agree with the paragraph, and the emotional reactions they experience after reading the stimulus. Overall, we find that differences in stimulus response between all treatment units and only among those who correctly interpreted the stimulus (compliers) are not substantial. This suggests that noncompliance does not significantly distort the data, which may explain why our ITT and TOT results (available in Appendix J) are largely consistent.

H1 Statement resonance

To explore which part of the stimulus script resonates most with respondents, we divide each stimulus into four paragraphs and ask participants to select the paragraph they find most compelling. Figures H1 to H4 compare, for each stimulus, the distribution of responses across all treatment units and those who correctly interpret the message (compliers).

Fix the distribution – No single paragraph stands out as the most resonating, as all four have similar percentages. This pattern appears both in the full treatment sample and only among those who correctly interpret the stimulus.

Figure H1: Sentence resonance of the "Fix the distribution" narrative

No victimization – Among respondents exposed to this narrative, the final paragraph, "*The government should ensure that no one's life or the environment is sacrificed for the sake of development*", resonates most strongly. About 36 percent of the full treatment group and 38 percent of those who correctly interpret the stimulus select that paragraph. Conversely, the least resonant paragraph is "*For the sake of development, forests are deforested. For the sake of development, many people lose their homes or livelihoods. This is not progress, but regression*.", selected by only 12 percent of the full group and 11 percent of the compliers.

Figure H2: Sentence resonance of the "No victimization" narrative

Balanced development – Respondents find the first and the second paragraphs to be the most resonating ones. The paragraph "*The quality of human resources improves if the quality of our education improves. Consequently, school graduates can solve problems and make innovations, have discipline, and can work with others*." receive the highest selection rate (36 percent). "*What is the point of having flyovers and magnificent buildings like the developed countries, if the quality of human resources is still lagging behind?*" closely follows, receiving a 34 percent response rate. This pattern persists among compliers, with 35% resonance for the first paragraph and 34% for the second.

Figure H3: Sentence resonance of the "Balanced development" narrative

Equal opportunity – Unlike the other narratives, responses to this stimulus exhibit a stark divergence in paragraph selection. Over half of the respondents in both the full treatment group (53 percent) and the correct interpretation subgroup (52 percent) select the paragraph "*The government should improve the coverage and quality of health, education, and social services so that children from rich and poor families can have equal opportunities to live prosperous lives.*" In contrast, the third paragraph, which describes the advantages wealthy families enjoy, receives meager selection (3 percent and 2 percent, respectively).

Figure H4: Sentence resonance of the "Equal opportunity" narrative

H2 Agreement with sentences

To further assess how participants respond to the content of the stimulus, we examine their level of agreement with the paragraph they consider most resonant. Figures H5 to H12 present the distribution of agreement responses for each paragraph in each stimulus, disaggregated by all treatment respondents and only those who correctly interpret the stimulus (compliers). We generally find that respondents tend to choose the paragraphs they agree with as the most resonating, except for treatment 4, where the pattern is more polarized.

Fix the distribution – Overall, agreement is high across all paragraphs. Compliers consistently show higher levels of strong agreement. These results highlight that understanding the intended meaning of the stimulus appears to amplify endorsement.

No victimization – Across both the full sample and compliers, there is a high level of agreement with the paragraph respondents choose. Again, understanding the intended meaning of the stimulus appears to amplify endorsement as compliers show higher levels of agreement.

Balanced development – We generally observe the same pattern as in the preceding two stimuli. Agreement levels are high across the four paragraphs, and compliers show lower levels of disagreement.

Equal opportunity – This stimulus exhibits quite a unique pattern compared to the other stimuli. Compared to other stimuli, we observe more instances of respondents selecting the paragraph they disagree with as the most resonant one. We still observe a high level of agreement among respondents who choose the first and fourth paragraphs as the most resonating. These two paragraphs also have the highest selection (see Figure H4). However, we discover a substantial disagreement among those who select the two other paragraphs, which have a low selection rate. Among all treatment respondents, the second paragraph, which depicts the disadvantages that poor children face, is responded to with considerable disagreement, with more than 18 percent expressing some level of disagreement. Among compliers, the third paragraph, which highlights the advantages wealthy children possess, draws the most disagreement (20%). This seems to imply that Indonesians (or at least urban middle-class Indonesians) prefer not to discuss differences in privileges and instead focus on what the government can do to help the less fortunate.

Figure H5: Degree of agreement with the "Fix the distribution" narrative, all treatment units

Figure H6: Degree of agreement with the "Fix the distribution" narrative, correct interpretation subgroup

Figure H7: Degree of agreement with the "No victimization" narrative, all treatment units

Figure H8: Degree of agreement with the "No victimization" narrative, correct interpretation subgroup

Figure H9: Degree of agreement with the "Balanced development" narrative, all treatment units

Figure H10: Degree of agreement with the "Balanced development" narrative, correct interpretation subgroup

Figure H11: Degree of agreement with the "Equal opportunity" narrative, all treatment units

Figure H12: Degree of agreement with the "Equal opportunity" narrative, correct interpretation subgroup

H3 Emotional responses to stimuli

We also ask the treatment group to choose two of the nine emotions they feel dominantly after reading their respective stimulus. Figure H13 shows that sadness is the most frequently reported emotion across all stimuli. Across narratives, the emotional response pattern is generally consistent between the full sample and those with correct interpretation, as shown in Figure H14. However, differences in intensity are evident: correct understanding appears to amplify the dominant emotions (e.g., sadness in "Fix the distribution", anxiety in "No victimization") while dampening the less evoked emotions (e.g., fear in "Balanced development", happiness in "Equal opportunity"). "Balanced development" is the one that evokes emotions of calm, longing, and happiness the most.

Figure H13: Emotions evoked by each stimulus, all treatment units

Figure H14: Emotions evoked by each stimulus, correct interpretation subgroup

Appendix I. Ordered logit regression results

Figure I1: Treatment effects on opinions about the economy

Figure I2: Treatment effects on opinions about the economy

Figure I3: Treatment effects on opinions about whom the government should prioritize

Figure I4: Treatment effects on opinions about whom the government should prioritize

Figure I5: Treatment effects on beliefs about factors influencing the economy

Figure I6: Treatment effects on policy support

Figure I7: Treatment effects on policy support

Figure I8: Treatment effects on policy support

Figure I9: Treatment effects on personal efficacy

Appendix J. TOT regression results

We follow the standard approach to estimate the TOT effect using the 2SLS method. The instrument is the initial treatment assignment variable (ITT indicator), while the instrumented variable is the compliance with treatment assignment (interaction between the initial treatment assignment variable and an indicator variable for whether they accurately interpret the stimulus – TOT indicator).

In this approach, we estimate the treatment effect of each relevant treatment arm under each outcome in separate regressions that include only the relevant treatment units and the control group. This procedure differs from the ITT approach, which estimates the treatment effects of multiple relevant arms under each outcome using a single regression. We do this to ensure that each ITT indicator instrument only the relevant TOT indicator (for example, the ITT indicator for treatment 1 will instrument only the TOT indicator for treatment 1). We consider this a fair technique, given that treatment assignment is random and thus each treatment indicator is orthogonal to the others; hence, performing separate regressions will not introduce bias. Including multiple treatment arms in a single 2SLS regression will cause all treatment ITT indicators to jointly instrument each treatment TOT indicator, which is an incorrect approach.

Therefore, we modify Equations 1 and 2 to write the parallel structural equations of 3 and 4.

$$Y_i = \beta_i + \tau_{ij} D_{ij} + \varepsilon_i \quad (3)$$

$$Y_i = \beta_i + \tau_{ij} D_{ij} + \sum_{k=1}^{k} \theta_{ik} X_{ik} + \varepsilon_i \quad (4)$$

D_{ij} is the treatment compliance dummy (TOT indicator), and $\boldsymbol{\tau}_{ij}$ is the TOT effect for individual i assigned to treatment j. For each structural equation, we write the reduced form equations in Equations 5 and 6, respectively. Models 2 and 3 will utilize Equations 4 and 6. As the formula shows, we include all relevant covariates in both the structural and reduced-form equations.

$$D_i = \beta_i + \alpha_{ij} T_{ij} + \varepsilon_i \quad (5)$$

$$D_i = \beta_i + \alpha_{ij} T_{ij} + \sum_{k=1}^{k} \mu_{ik} X_{ik} + \varepsilon_i \quad (6)$$

Figure J1: Treatment effects on perceptions about development priority

Figure J2: Treatment effects on perceptions about development priority

Figure J3: Treatment effects on opinions about the economy

Figure J4: Treatment effects on opinions about the economy

Figure J5: Treatment effects on opinions about whom the government should prioritize

Figure J6: Treatment effects on opinions about whom the government should prioritize

Figure J7: Treatment effects on beliefs about factors influencing the economy

Figure J8: Treatment effects on policy support

Figure J9: Treatment effects on policy support

Figure J10: Treatment effects on policy support

Figure J11: Treatment effects on personal efficacy

Figure J12: Conjoint analysis

Appendix L. Results of narrative 5 regressions

Narrative 5 script

Why do we still doubt the government that has held the people's mandate?

The government is the only entity in power because the people have elected it. This means that the government has the full authority to lead and make decisions on behalf of all the people.

The government has the right to set rules, enforce laws, and take actions that are deemed necessary for the benefit of the country, even if it is sometimes against the wishes of some people.

People may submit ideas or complaints. However, the final decision remains in the hands of the government.

Figure L1: OLS treatment effect on beliefs about the role of government (ITT)

Figure L2: Ordered logit treatment effect on beliefs about the role of government (ITT)

Figure L3: 2SLS treatment effect on beliefs about the role of government (TOT)

Appendix M. Mechanism analysis

Figure M1: Relationship between support to selected policy ideas and the most resonating paragraph from "Fix the distribution"

Figure M2: Relationship between support to selected policy ideas and the most resonating paragraph from “Balanced development”

Note: We set the data into long format. Each row represents a respondent-policy combination. The dependent variable is a dummy whose value is equal to one if the respondent answered either “Support” or “Strongly support” to the selected policy ideas.

Figure M3: Relationship between prioritization of selected development goal and most resonating paragraph from “Equal opportunity"

Appendix N. Analysis of additional outcomes

N1 Whom the government should prioritize

We task the respondents with ranking eight types of people based on who the government should prioritize during rapid economic growth. We hope that "Fix the distribution" and "Equal opportunity" might persuade the public that poor individuals and those in lagging-behind regions need government support the most during times of rapid economic growth, enabling them to enjoy economic benefits like everyone else. To prevent systematic bias, we randomize the order of answer options.

Figures N1 and N2 visualize the regression results with 95% confidence intervals. Both figures indicate that the treatments do not affect the ranking of whom the government should prioritize in the event of rapid economic growth. The ordered logit results support this finding, although the third model of the "Equal opportunity" treatment, which highlights the stark privilege between the poor and the rich, shows that well-connected people are more likely to be in the top three ranking.

Figure N1: Treatment effects on opinions about whom the government should prioritize

Figure N2: Treatment effects on opinions about whom the government should prioritize

N2 Factors influencing the economy

We ask respondents to rate four key factors based on how much they play a role in influencing the economy. We suspect that “Fix the distribution” and “Equal opportunity” narratives may convince people that laws and regulations play a sizeable role in determining the state of the economy, while fate or human nature less so. This belief serves as a crucial foundation for an equitable economy.

Figure N3 visualizes the regression results with 95% confidence intervals. We find virtually no impact of treatments, except for “Fix the distribution”, which exhibits a statistically significant effect on reducing the likelihood of believing that fate plays a large role, although only in the third model. The ordered logit regressions in Figure I5 yield the same result.

Figure N3: Treatment effects on beliefs about factors influencing the economy