Indonesia Inequality Report

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Executive Summary

Data
Five datasets on wealth and status distribution in Indonesia were analyzed: 2013 World Bank quintile and decile estimates of income, International Labor Organization (ILO) income by occupation data from 2017 and 2009, and USAID Demographic Health Survey (DHS) wealth factor scores from 2012 and 2007.

Results
The study examines data from three different sources: World Bank, ILO, and USAID DHS. The data provided by all three sources shows a similar pattern of a risk acceptant population. The World Bank provides information on income, the ILO provides occupational data, and USAID DHS provides data on assets per household. The datasets show the highest earning individuals, occupations, and households owning the most assets as the most accepting of risk.

Significance for Risk Taking and Stability
Indonesia has a strongly risk acceptant population with several cultural, ethnic, religious, and socioeconomic fissures that threaten to cause widespread civil strife. Many of these intergovernmental and societal issues are rising to the forefront of Indonesian political dialogue as it begins its 2019 national election cycle (Pepinsky, 2019). The upcoming elections and varied degrees of civil unrest throughout the country make its risk acceptant population a potential threat to Indonesian stability.

Implications for US Interests
The US has many potential strategic interests in Indonesia; however, many of these interests have yet to be realized. Indonesia’s democratic government and regional importance potentially give the US a capable ally to control the valuable waterways that flow through South Eastern Asia and confront China’s encroachment into the South China Sea (Kurlantzick, 2018). However, recent policy changes for the US saw a decrease in the US’ advocacy for democratic expansion, and the ending of its involvement in the Paris Accord has slightly alienated the US from Indonesia. The risk acceptant nature of Indonesia’s population threatens potential US interests by potentially destabilizing an ally and increasing the possibility of terrorism.

Implications for China’s Interests
China views Indonesia’s hostile stance toward Chinese claims in the South China Sea as an abridgement of China’s sovereign rights (Zhen, 2016). To increase its control over Indonesia, it has tried to increase economic leverage through foreign direct investment (FDI) into the country (Tan, 2019). However, Indonesia’s skepticism of Chinese involvement in its economic and political institutions has been making it harder for China to aggressively pursue this end. The risk acceptance of Indonesia’s population gives the Chinese the opportunity to continue to gain political influence by offering aid to a country eager for economic opportunity (Legarda & Hoffman, 2018).
Implications for Russia’s Interests
Russia views Indonesia as a potential country with which it can build its international prestige (Gurganus & Rumer, 2019). Through utilizing arms sales and energy deals, Russia is gaining influence in the South East Asian country (Tsvetov, 2018). Indonesia’s risk acceptant population gives Russia the potential to increase its involvement through instability much in the same way as China by using political instability to sway political leaders in favor of aid (Metz, 2018), while at the same time posing little threat to Russia’s current, overall-weak interests in the country.
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Introduction

This is a summary report on inequality in Indonesia compiled as part of the Aggrieved Populations project conducted in support of the 2019 Strategic Multilayer Assessment (SMA) Future of Great Power Competition and Conflict project conducted for the JS-J39.

This report provides background on why the country was chosen, relevant historical background, literature review concerning inequality in the country, synopses of empirical data sources and analyses, and a concluding section that summarizes the findings. It is not intended to provide a comprehensive analysis of inequality and grievance in the country, but to place the empirical analyses conducted on this country in their social and political context and to highlight interesting cases of inequality pertinent to risk acceptance and great power competition. The analyses focus on the measurement of population risk sensitivity as a function of measured inequality using the Arrow-Pratt measure of risk aversion, whose positive values indicate risk aversion and negative values indicate risk acceptance. Studies have shown that risk acceptance is associated with social unrest, terrorism, and other forms of social disruption (Kuznar 2007; 2019). The full explanation of the underlying method and theory is presented in the summary report, Inequality, Risk Sensitivity and Grievance in Context: Summary of Aggrieved Populations Country Reports, submitted as part of this SMA project. This report is intended to be supporting material to that report and presumes familiarity with it.

In order to create an inclusive and more representative set of countries, an effort was made to analyze countries from each major region of the world (Africa, Central Asia, East Asia, Europe, Latin America, the Middle East, North America, South Asia).

Why Indonesia?

Indonesia was chosen for two reasons: 1) It is a prominent Southeast Asian country, and 2) it has a history of terrorist incidents and insurgencies.

Great Power Interests in Indonesia

China has weak economic interests in Indonesia as the South East Asian country is only responsible for 1.4% of Chinese exports and imports (OEC, 2017). However, China possesses strong influence over Indonesia's economic prosperity as it is Indonesia's largest destination and origin of goods. China uses this unequal economic relationship to ease its access to Indonesian institutions that are susceptible to Chinese investment and influence (Tan, 2019). Indonesia's prominence in the Asia Pacific makes it a geopolitically important state to China. Beijing's control of Indonesian public debt and its business sector is under extreme scrutiny from Indonesian politicians as it prepares for its 2019 presidential election. Presidential hopeful Prabowo Subianto, is highly skeptical of Chinese involvement in Indonesia, causing China to be supportive of the current President Joko Widodo.

Even if President Widodo does remain in office, China will still likely not be engaging with a friendly regime. China's claims to the Nine-Dash Line (a maritime territorial claim that extends hundreds of miles from China), contains contested waters with Indonesia and other South Eastern Asian states (Zhen, 2016). In response to Chinese encroachment on Indonesian fishing waters, Indonesia has bolstered its military defense and naval budget in order to attain more advanced aircraft and naval vessels. It has also demanded that China clearly state its claims to the contested waters. The value of controlling these waters
includes economic incentives as well as strong geopolitical indications for the control of islands and shipping lanes that exist in the contested zone (Lowry Institute, 2019).

Russia’s interests in Indonesia are strongly linked to its goals to both expand as a world power and increase its influence as it seeks to regain lost prestige (Gurganus & Rumer, 2019). Due to Russia’s lack of natural boundaries to protect its borders, its leaders have always taken an aggressive expansionist view. This outward looking tactic was born of the belief that continually expanding or pushing its boundaries is the key to Russian border security. Influence expansion in far flung regions is another form of geopolitical protection for Russia, which looks to protect its global status as a great power. This gives Indonesia and many other states outside of Europe a strong geopolitical appeal. In 2018, Moscow used its arms deals to antagonize the US by selling 11 SU-35 fighter jets to Indonesia (Tsvetov, 2018). This also highlights some of the fissures in Russia’s and China’s alliance, as Indonesia is bolstering its armed forces in response to Chinese encroachment (Zhen, 2016). Russian involvement in Indonesia is an example of Moscow turning toward eastern markets to avoid allowing the US and western Europe to gain further economic leverage over Russian economic prosperity (Gorenburg & Schwartz, 2019). Russia mainly uses arms and energy deals with Association of Southeast Asian Nations (ASEAN) countries to open the east to its influences.

Indonesia's importance to the US is growing. Indonesia's place in the world as the third largest democracy and as a geographically large South Eastern Asian nation makes its relationship with the US an extremely geopolitically important one (Department of State, 2018). The US and Indonesia's bilateral trade totals more than 20 billion dollars (OEC, 2017). However, this is only a small portion of the US's overall trade. Indonesia's leading role in the ASEAN gives the US a potentially strong strategic partner in Southern Asia to confront China's aggressive military encroachment into the South China Sea, and their intrusive economic investments, all of which give China leverage over developing countries' governments and economic prosperity (Kurlantzick, 2018). However, even with the potential implication of advancing relations between Washington and Jakarta, there has been little progress. This is partially due to the United States’ decreasing its emphasis on advocating for democratic expansion and the ending of the US involvement in the Paris accord aimed at tackling issues of global warming, which have caused the two governments to move further apart politically.

Literature Review on Inequality in Indonesia

Indonesia’s geographical characteristic as a multi-island state adds ethnic diversity to the country, it does not have an ethnic majority (Index Mundi, 2018). Its Javanese ethnic group is its largest, totaling 40% of the population. Indonesia’s island composition and the isolation of certain ethnic groups fuel separatist views and create tensions with Indonesia’s central government. This is evident in Papua New Guinea as Papua separatists, mainly located in the western part of the island, have carried out steady attacks against Indonesian police (Ananta, 2016). Like the rest of Indonesia, its east and west provinces of Papua are highly ethnically fractionalized but vary greatly in ethnic polarization, resulting in pockets of potential social conflict that nonetheless does not affect the island as a whole.

While Indonesia is ethnically fractured, it is also religiously homogenous (Indonesia-Investments, 2019), as nearly 90% of Indonesians are Muslim (IndexMundi, 2018). Indonesia does not have an official state religion; however, Islam influences Indonesian politics and extremist groups have gained a noticeable amount of influence due to their threat of violence. This has been a trend in Indonesia since before the

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the fall of Suharto’s New Order regime in 1998, when the central government repressed individual expression.

Indonesia has been a strong up and coming economic power in South East Asia for several decades. It has an increasingly large middle class, however its economic growth has led to a large income gap and increasing economic inequality (Suryahadi, 2018). The increasing gap of wealth attainment has led to governmental policies that aim at decreasing the growth of socioeconomic inequality. The members that make up Indonesia’s wealthiest socioeconomic class are predominantly ethnically Chinese and Christian (Warburton & Muhtadi, 2019). This is the source of some social tension because the wealthy are a small minority, both ethnically and religiously, that possesses an inordinate amount of power in the country.

Country-Level Measures of Inequality in Indonesia

Indonesia will be initially assessed with a collection of country-level metrics. These metrics provide measures of the country’s inequality compared to other nations, inequality within the country, social conditions that may be consequences of that inequality, and the prognosis for stability in the future (Error! Reference source not found.). Indonesia is a poorer than average country with a GDP per Capita of $3876. The Gini Coefficient is lower than the median score in the study; however, the informal employment as a percent of total employment is very high, with a value of more than 80%. It scored highly on both the Fragile States Index and the Terrorism Index, showing the capability for conflict and violence. While it does not have a disproportionately low Arrow-Pratt Measure, its score of -4.18 nonetheless indicates that Indonesia’s population is risk acceptant.

Table 1. Indonesia: Basic Statistics on Inequality

<table>
<thead>
<tr>
<th>Measure</th>
<th>Value</th>
<th>Rank</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inequality Compared to Other Nations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Per Capita GDP 2018</td>
<td>$3876</td>
<td>114 of 187</td>
<td>WB</td>
</tr>
<tr>
<td>Country Measures of Inequality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inequality-adjusted Human Development Index (IHDI) 2018</td>
<td>0.563</td>
<td>84 of 151</td>
<td>UN</td>
</tr>
<tr>
<td>Gini Coefficient 2013</td>
<td>44.5%</td>
<td>47 of 184</td>
<td>WB</td>
</tr>
<tr>
<td>Informal Employment as % of Total Employment 2009</td>
<td>85.6%</td>
<td>28 of 112</td>
<td>ILO</td>
</tr>
<tr>
<td>Measures of State Instability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fragile States Index 2018</td>
<td>72.3</td>
<td>90 of 175</td>
<td>FFP</td>
</tr>
<tr>
<td>Terrorism Index 2018</td>
<td>4.543</td>
<td>42 of 160</td>
<td>IEP</td>
</tr>
<tr>
<td>Probability of Mass Killing 2018</td>
<td>0.013</td>
<td>48 of 161</td>
<td>EWP</td>
</tr>
<tr>
<td>Risk Sensitivity</td>
<td>-4.18</td>
<td>63 of 158</td>
<td>This Study</td>
</tr>
</tbody>
</table>


-The Inequality-adjusted Human Development Index (IHDI) is a UN measure of well-being and is a scale based on per capita GDP, life expectancy and education levels of the population.
- The Fragile States Index is based on twelve conflict risk that include security apparatus, factionalized elites, group grievance, economy, economic inequality, human flight and brain drain, public services, state legitimacy, human rights and rule of law, demographic pressure, refugees and IDPs, and external interventions. The potential range of the index is zero (no fragility to 120 total fragility).
- The Terrorism Index scores each country on a scale from 0 to 10; where 0 represents no impact from terrorism and 10 represents the highest measurable impact of terrorism.
Indonesia is at a crucial turning point for its democracy and its role in South Eastern Asian security. In 2019 the country will be celebrating two decades of democracy. However, there are mixed feelings about the government’s performance, leading to concerns about democratic backsliding (Aspinall, 2018). Indonesia has been on a downward trajectory with respect to its democratic status with the Economist’s Intelligence Unit giving Indonesia a democracy score of 6.39 out of 10 (indicating a weak democracy). Indonesia’s slide toward a more restrictive government is occurring through executive aggrandizement, and constitutionally mandated restrictions on speech and political competition (Pepinsky, 2019).

Indonesia’s sliding democracy, increasing influence over business and public institutions by Islamic extremists (Index Mundi, 2018), Indonesia’s ethnically diverse and in some cases polarized population (Ananta, 2016), and the fact that a small ethnic and religious minority controls a vast amount of the country’s wealth (Warburton & Muhtadi, 2019) represent future potential internal threats. Some of Indonesia’s external threats include increased influence from China in its business sector (Tan, 2019), the threat of Chinese encroachment further in the South China sea, and the lack of communication between Indonesia and the United States (Kurlantzick, 2018). The pressure that these factors place on Indonesia’s population coupled with its risk acceptance, could combine to result in greater amounts of civil unrest and turmoil in the oncoming years.
Empirical Data on Inequality in Indonesia

Dataset 1: 2013 Indonesia World Bank Quintile Data

The World Bank provides data on lowest and highest decile, and quintiles of percentage of income or consumption. These data are used to calculate their Gini coefficients. While not exactly measuring the actual income, the percentage of overall income provides an approximation. The Honduran data were gathered in 2016. Error! Reference source not found. presents the original data and the fitted distribution curve from which the Arrow-Pratt risk sensitivity measures will be derived, as well as the Arrow-Pratt measures of risk sensitivity.

Summary Dataset 1: 2016 Indonesia World Bank Quintile Data
The data provided by the World Bank shows a risk acceptant population with a mean Arrow-Pratt score of -4.18. After the second quintile, there is a linear relationship between risk acceptance and income earned. The most risk acceptant group of income earners in Indonesia are the highest earners with an Arrow-Pratt score of less than -8. The only section of the population that shows risk aversion is found at the 40th percentile, with a score just above zero.

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Data drawn from: http://wdi.worldbank.org/table/1.3
Data provided by ILO gives an occupational breakdown of how many people are employed in an occupation and how much on average each occupation earns.

Figure 2. ILO Indonesia Income by Occupation 2017 and associated Risk Sensitivity

Summary Dataset 2: ILO Indonesia Income by Occupation 2017
According to occupational data, Indonesia is a highly risk acceptant population with a mean Arrow-Pratt score of -6.12. The most risk acceptant occupations are those earning the highest incomes. The lowest occupations are risk adverse. Forty percent of Indonesia is composed of agrarian workers who make up the lowest paid occupations. These occupations score as risk adverse with the highest score of risk adversity occurring at the 40th percentile. After this, the level of risk adversity decreases and the population steadily becomes more risk acceptant. The most risk acceptant occupations as categorized and listed in descending order by ILO are professionals, technicians, military, and managers.
Dataset 3: ILO Indonesia Income by Occupation 2009

The third data set is also occupational data provided from the ILO. It uses the same methodology and provides a perspective on changes in risk acceptance from 2009 to 2017.

Figure 3. ILO Indonesia Income by Occupation 2009 and associated Risk Sensitivity

Summary Dataset 3: ILO Indonesia Income by Occupation 2009
The mean Arrow-Pratt score according to occupational data taken from 2009 is -7.30. This shows more risk acceptance than in 2017. Indonesia’s population was more risk acceptant in 2009 than in 2017. It increased in risk aversity from -7.30 to -6.12. Instead of the highest earning occupations being the most risk acceptant the occupations that were most acceptant of risk can be found between the 70th and 80th percentiles in 2009. In 2009, the occupations that were most acceptant of risk were manufacturing, transportation, utilities, finance, and mining.
The data used in the fourth dataset was provided by USAID Demography and Household Survey (DHS) Wealth Factor Score in 2012 based on 43852 households. Instead of using income or occupation to show wealth attainment it uses assets owned per household. This includes house size, appliances, agricultural land, and whether the household has servants among many other factors.

![Indonesia USAID 2012 Wealth Factor Score](image)

**Figure 3. Indonesia 2012 Wealth Factor Score and associated Risk Sensitivity**

**Summary Dataset 4: USAID DHS 2012 Indonesia Wealth Factor Score**

The data provided from Indonesia Wealth Factor Score, shows an Indonesian population that is on average risk acceptant with a mean Arrow-Pratt score of -1.04. Like the 2017 World Bank income data, and the ILO income by occupation data, there is a risk averse segment of society around the 40th percentile. Of the more than 43,000 households that were put into the study, the ones that possess the most assets are the most risk acceptant.

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2 Wealth Factor Score is an alternative approach of measuring socioeconomic status. Instead of using income, education or occupation as a measure of status, a household’s status is measured by assets such as home construction material, house size, appliances, vehicles, agricultural land, and services such as do servants, water availability and electricity. A full description of the approach and its methodology is found in Rutstein and Johnson (2004) [https://dhsprogram.com/pubs/pdf/cr6/cr6.pdf](https://dhsprogram.com/pubs/pdf/cr6/cr6.pdf)
Dataset 5: USAID DHS 2007 Indonesia Wealth Factor Score

Indonesia's Wealth Factor Score provides data from 2007 and provides the study with two separate snapshots in time of risk acceptance based on a house holds assets.

![Graph of Indonesia USAID 2007 Wealth Factor Score and associated Risk Sensitivity]

Figure 4. Indonesia 2007 Wealth Factor Score and associated Risk Sensitivity

Summary Dataset 5: USAID DHS 2007 Indonesia Agricultural Land Ownership

The 2007 Wealth Factor Score and associated risk sensitivity shows households who on average are risk acceptant with a mean Arrow-Pratt score of -1.10. The data provided by USAID DHS from 2007 onwards shows little change from 2007 to 2012. The 2012 study expanded to nearly 500 more houses and increased in risk adversity by .06. The overall pattern is the same, though with risk adverse households from the 20th to the 60th percentiles and the households claiming the most assets as being risk acceptant.
Findings on Inequality in Indonesia

Relevance to Instability and Social Cleavages
Indonesia is comprised of islands that cause it to be highly ethnically fractured, and the integration of many different ethnic groups has been slow (Ananta, 2016; Bazzi, 2017). In order to create a stronger national identity, large scale integration programs have been put into place on the regional and national level, aiming at integrating Indonesia’s vast array of ethnic identities (Bazzi, 2017). Throughout Indonesia, varied levels of ethnic and religious polarization have lead to hot spots for potential and social unrest. Some groups hold separatist views while others seek to push their ideologized agenda through gaining influence in Indonesia’s central government. Indonesia suffers from Islamic extremist influences (Index Mundi, 2018) and a slowing degrading democracy and a widening wage gap (Warburton & Muhtadi, 2019). Indonesia's ethnic and political divisions, combined with the high levels of risk acceptance from its population, could lead to further widespread instability.

Opportunities and Pitfalls for the US and Adversaries
The US has the potential to create a strong regional ally in Indonesia that could work with it to further democratic principles throughout the region and confront Chinese encroachment into the South China Sea (Kurlantzick, 2018). However, a lack of communication between the US and Indonesia has slowed down the growth of furthering a geopolitically important relationship. This is partly due to mercantilist approaches by the US and the downgrading of Indonesia’s democracy (Aspinall, 2018; Kurlantzick, 2018). While the US is not currently a large stakeholder in Indonesia's democratic success and growth, the potential the US has to form a stronger alliance with the region’s largest democracy is placed in jeopardy due to Indonesia's risk acceptant population and its potential to fuel social and political discontents and weaken the Indonesian government.

China
China possesses few economic interests in Indonesia. Furthermore, Indonesia's risk acceptant population and the potential for instability in a country, the third largest democracy in the world, gives China strong potential for increasing its influence and control over Indonesia's government (Tan, 2019). While many of Indonesia’s politicians and institutions are wary of Chinese investments and control, further instability would allow China to gain more influence over Indonesia’s political and financial system, which fits in with China’s recent trend of conflict mediation and manipulation to favor those in power that have close ties to China’s Communist Party (Legarda & Hoffman, 2018). Indonesian instability would also allow China to assert itself in the contested waters of the South China sea (Lowry Institute, 2019).

Russia
Russia views Indonesia as a potential actor that can aid it in preventing economic encirclement by the US and its Western European partners (Gorenburg & Schwartz, 2019). It also allows Russia to return to its old expansionist ways that are viewed by the Kremlin as both tools to protect its sovereign borders and assert itself as a great power (Gurganus & Rumer, 2019). In order to achieve this goal, Russia has pursued arms and energy deals with Indonesia (Tsvetov, 2018). Russia’s current relationship with Indonesia puts it in a place where Indonesia’s risk acceptant population does not pose a threat to its interests. More civil strife would likely widen Russia’s potential to gain influence in a politically vulnerable state, much in the way it has attempted to gain influence in the Balkans and Mediterranean (Metz, 2018).
References


IndexMundi. 2018. Indonesian Ethnic Groups. CIA World Factbook. From: https://www.indexmundi.com/indonesia/ethnic_groups.html


