

Finland Inequality Report

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Executive Summary

Data

Two datasets on wealth and status distribution in Finland were analyzed: 2016 World Bank quintile and decile estimates of income, and International Labor Organization (ILO) income by occupation data for the years 2017 and 2011.

Results

Finland is known as one of the world's most equal societies, and the analyses conducted for this report reinforce this perception. The low levels of inequality, combined with cultural factors such as a tradition of cooperation and trust in government, most likely contribute to Finland's social stability.

Significance for Risk Taking and Stability

The analyses in this report indicate that Finland is one of the least risk acceptant populations in the world. Consequently, people do not have reasons to challenge the Finnish status quo.

Implications for US Interests

Even though Finland maintains friendly relations with Russia and tries to moderate between Russia and the US and its European allies, Finland is an important check on Russian ambitions in the Scandinavian north. Therefore, Finland's stability is an asset to US interests.

Implications for China's Interests

China is beginning to develop trade ties with Finland and hopes to project its power into the Arctic. Therefore, Finnish stability serves China's aspirations by providing a stable partner.

Implications for Russia's Interests

Russia's near-term primary interest in Finland is as a source for Russian energy exports. Despite Finland's near total reliance on Russian energy (70%), Finland's shift toward sustainable energy and the availability of energy on the open market makes Finland potentially independent of Russian influence. Therefore, Russia's influence in Finland is likely to diminish. Finland's positive relations with the EU, NATO, and the US are liabilities for Russia. Recently, Russia is suspected of cyberattacks and social media campaigns designed to sow discord in Finland.

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Introduction

This is a summary report on inequality in Finland 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 Finland?

Finland was chosen because it is considered the most stable country in the world, and therefore serves as a benchmark against which all other countries can be compared.

Great Power Interests in Finland

The US and Finland have had historically warm relations and that continues to be the case. Finland joined the EU in 1995 and has been a partner to both the US and its European ally.

Despite early Soviet interference with Finland's independence in 1917 and Finland's siding with Axis powers during World War II, during the Cold War Finland adopted a policy of non-alignment and cautious cooperation with Russia, including frequent high-level contacts and attempts to broker relations between Russia and the rest of Europe (Szymanski, 2018). Russia's primary interests in Finland are in maintaining its energy exports and ensuring that Finland does not grow closer with the EU, NATO, and the US. Finland imports over 70% of its energy from Russia (Jaaskelainen, Hoysniemi, Syri, & Tynkkynen, 2018; Szymanski, 2018). Furthermore, Russian owned Rosatom is scheduled to build a nuclear reactor in Finland (Szymanski, 2018). However, Jaaskelainen et al. (2018) argue that Finnish shifts to renewable energy and the fungibility of oil and gas resources mean that their dependence on Russian energy is more apparent than real; furthermore, they point out that Russia has not used energy politically against Finland. However, relations between Russia and Finland have always been underscored by suspicion. Finland has always feared potential Russian aggression along its border and Russia's annexation of Crimea and invasion of Eastern Ukraine has bolstered these fears, causing Finland to state that joining NATO is not off the table for them

(Szymanski, 2018). Russia, for its part fears a Finnish alignment with the West and has made efforts to undermine Finnish stability, sow divisiveness and limit the acceptability of NATO; these efforts include extensive spy recruitment, the opening of an irregular migration route for Middle Eastern refugees across the Russian/Finnish border, extensive information operations on social media, and cyber attacks (Boddy & Shattuck, 2018; Szymanski, 2018). One barrier against Russian media campaigns has been the Finns' high level of education (see below), making manipulating their views difficult (Szymanski, 2018).

China's interests in Finland appear to be related to trade, and a combination of trade and power projection in the Arctic. Finland was one of the first countries to recognize the People's Republic of China in 1950 and has had cordial relations with China ever since (ISDP, 2016). Recently, China has turned its focus on the Baltic and Nordic countries, and especially so in Finland; in 2017, China was Finland's leading trade partner (Brattberg, 2019). In 2010, the Finnish Foreign Ministry published a "Chinese Action Plan" that emphasized developing trade (Ministry for Foreign Affairs of Finland, 2010). China has interest in the Arctic, for both the expansion of its trade as sea lanes open up, and also for its projection of power over this potentially vital trade route; consequently China has expanded its diplomatic ties with the arctic country of Finland (Conley, 2019; Havnes & Seland, 2019).

Literature Review on Inequality in Finland

Finland has the distinction of being designated as the world's most stable, safe, happy, and free country in the world (Henley, 2018). It therefore is included in this study as a benchmark against which other countries can be compared, and as an important case study of the possible relationship between levels of inequality and peaceful and prosperous social outcomes such as stability, safety, freedom, and happiness. Finland is the most stable country in the world, according to the Fragile States Index (**Error! Reference source not found.**). The claim of its being extremely safe is somewhat exaggerated. Its homicide rate, 1.4 per hundred thousand, places it at the lower 25th percentile of countries, and its Terrorism Index places it near the median (**Error! Reference source not found.**). And Finns express the highest level of happiness (Henley, 2018; O'Connell, 2004). Other characteristics of Finnish society often admired by others include very low levels of corruption, stable banking, an extremely high level of education, and the world's highest level of gender equality (Henley, 2018; Plantenga, Remery, Figueiredo, & Smith, 2009; Yusuf & Nabeshima, 2012).

The roots of Finnish success in creating a relatively peaceful, highly stable, and egalitarian society are of great interest to scholars and experts in government. Henley summarizes the arguments as follows. Some of the proposed causes are rooted deep in Finnish history and are arguably entrenched in Finnish culture, and others are more recent social inventions, nonetheless built upon Finnish culture.

Some of these entrenched cultural aspects include:

- A culture of self-reliance and cooperation derived from the necessities of surviving in a harsh and cold land (Henley, 2018).
- A historic lack of class divisions and low levels of inequality, extending back to the middle ages; serfdom as an institution never existed in Finland (Henley, 2018; O'Connell, 2004).
- Eventually Lutheranism spread throughout Finland and every adult was required to read the Bible, making education compulsory and valued by the 1600s. Today's Finnish educational system is admired and studied around the world (Leijola, 2004).

Twentieth century social developments include:

- Women’s emancipation and suffrage established in 1906, perhaps the earliest in the modern world (Henley, 2018).
- A culture and practice of fiscal and political transparency (Henley, 2018; Yusuf & Nabeshima, 2012).
- Heavy investment in its welfare state (over 30% of GDP) (Yusuf & Nabeshima, 2012).
- Intentional construction of its modern welfare state by university professors, often whom became state leaders (Henley, 2018).

Finland’s historic value and investment in education and long-term strategic planning are drivers of the country’s economic success shared broadly throughout society. Finland’s equality is often cited as a driver of its economic success, stability, and the satisfaction of its people (O’Connell, 2004).

Country-Level Measures of Inequality in Finland

Finland was 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.**).

Finland is a wealthy country. Its national per capita GDP is \$45,927, placing it in the top 10% of countries, and it has one of the highest Inequality-adjusted Human Development Index (IHDI) scores. Finland is one of the most unequal countries in the world, and the most in Latin America. Its Gini coefficient is extremely low, ranking it near the bottom of all countries. Finland also has one of the lowest informal employment rates in the world, indicating a high level of state efficiency in providing legitimate employment that produces tax revenues.

Table 1. Finland: Basic Statistics on Inequality

Measure	Value	Rank	Source
Inequality Compared to Other Nations			
Per Capita GDP 2018	\$45,927	16 of 187	WB
Country Measures of Inequality			
Inequality-adjusted Human Development Index (IHDI)	0.868	5 of 151	UN
Gini Coefficient 2015	29.3%	160 of 184	WB
Informal Employment as % of Total Employment 2012	6.3%	109 of 112	ILO
Measures of State Instability			
Fragile States Index 2018	17.9	175 of 175	FFP
Terrorism Index 2018	2.501	72 of 160	IEP
Probability of Mass Killing 2018	0.001	157 of 161	EWP
Risk Sensitivity			
Average Arrow-Pratt Measure 2016	-3.65	12 of 158	This Study
*EWP – Early Warning Project, FFP – Fund for Peace, IEP – Institute for Economics and Peace, ILO – International Labor Organization, UN – United Nations, WB – World Bank			

- 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.

The Fragile States Index lists Finland as the most stable country in the world. Correspondingly, its probability of mass killing is also extremely low. Its terrorism index, however, is near the middle for all countries. The Arrow-Pratt measure of risk sensitivity is one of the highest estimated for all countries, indicating that Finland is among the least risk acceptant countries in the world.

Prognosis for Change to 2029

Since World War II, Finland has maintained a rapidly growing economy coupled with careful planning in industrial development, education and social services, producing an extremely stable society. As described above, many of the elements that contribute to this stability appear deeply ingrained in Finnish culture. Consequently, one would expect Finland to continue along its path of stability, economic growth, and personal satisfaction.

Empirical Data on Inequality in Finland

Dataset 1: 2016 Finland World Bank Quintile Data

The World Bank provides data on lowest and highest decile, and quintiles of percentage of income or consumption.¹ 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.

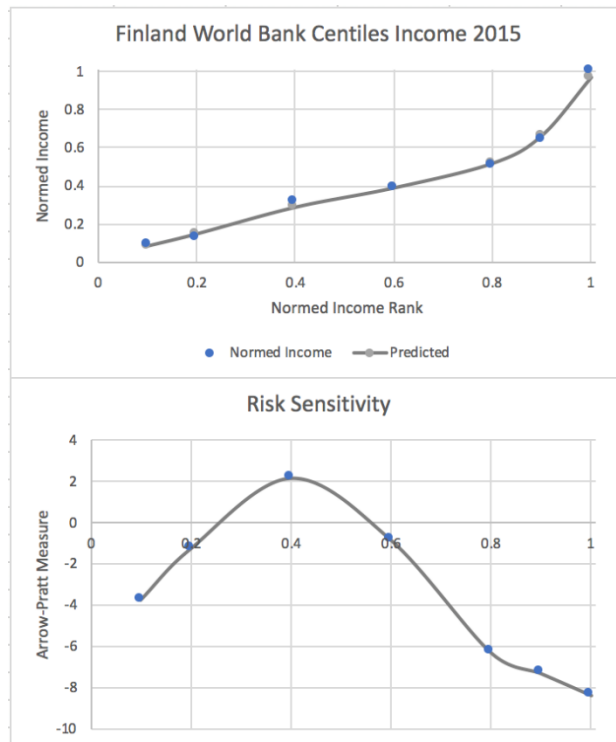


Figure 1: Distribution of Income, World Bank Quintiles Finland 2016 and associated Risk Sensitivity.

Summary Dataset 1: 2016 Finland World Bank Quintile Data

Finland is one of the least risk acceptant (correspondingly most risk averse) populations in the world according to World Bank data. The average Arrow-Pratt measure of risk sensitivity is only -2.95 (**Error! Reference source not found.**). No society is truly egalitarian, and neither is Finland. The poorest and wealthier segments of Finnish society are risk acceptant, and the wealthiest are the most risk acceptant. There is a risk averse middle-class between the 25th and 55th percentiles of income. (**Error! Reference source not found.**).

¹ Data drawn from: <http://wdi.worldbank.org/table/1.3>

Dataset 2: Finland ILO Income by Occupation 2017

The International Labor Organization (ILO) provides data on income by occupation for 2017 for Finland.

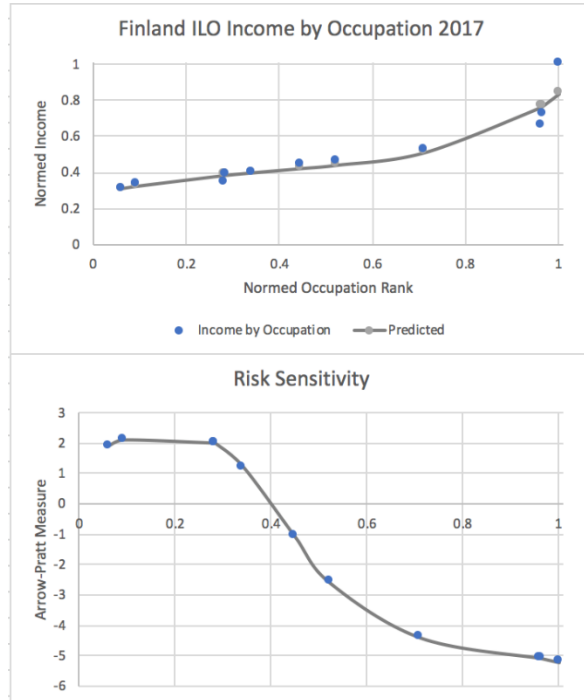


Figure 2. Finland ILO Income by Occupation 2017 and associated Risk Sensitivity

Summary Dataset 2: Finland ILO Income by Occupation 2017

The mean Arrow-Pratt score for these data is a modest -1.29, reflecting the low level of inequality in Finnish society. The most risk averse are lowest occupations including elementary occupations, skilled agriculture, and service and sales workers, and most risk acceptant occupations are professionals, armed services, and managers.

Dataset 3: Finland ILO Income by Occupation 2011

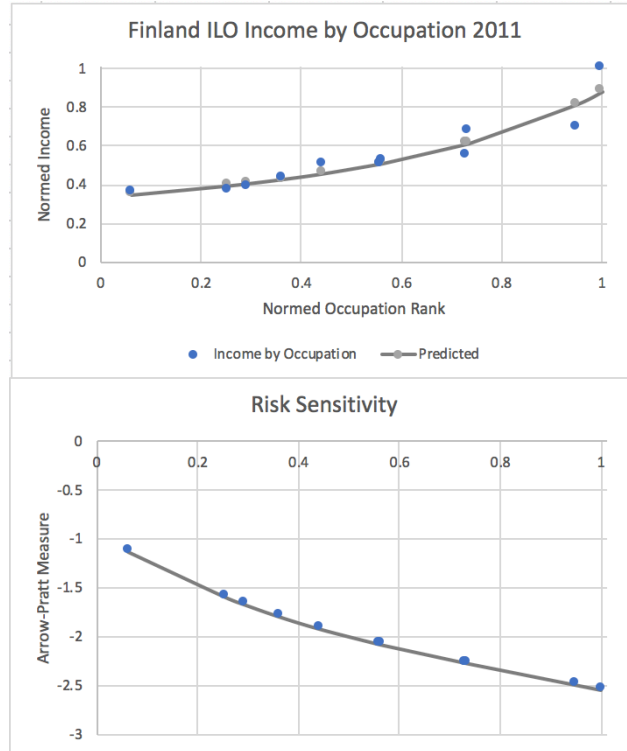


Figure 3. Finland ILO Income by Occupation 2011 and associated Risk Sensitivity

Summary Dataset 3: Finland ILO Income by Occupation 2011

ILO data from 2011 also represent a modestly risk acceptant population (mean Arrow-Pratt of -1.98), although one that is entirely risk acceptant, even if only to a small degree. This is due to a poor fit of the expo-sigmoid curve to the data, producing a purely exponential increase that fails to capture the middle class “bump” in the curve. Nonetheless, the curve does capture the relatively greater risk acceptance of the wealthiest Finns and the overall low degree of risk acceptance due to the relatively small gap between the poorest and wealthiest Finns compared to other countries.

Findings on Inequality in Finland

Relevance to Instability and Social Cleavages

Finland is, compared to other countries, an extremely egalitarian society with a highly efficient government. Furthermore, Finland is extremely homogenous country; 90% of the country is ethnic Finn, with most of the remaining 10% made of Swedish and Russian minorities.² Compared to other countries, Finland is pretty much cleavage free, although recent Russian-aided illegal migration of Middle Eastern refugees has led to the emergence of nationalist white supremacist Finnish organizations such as the Soldiers of Odin and the Finnish Resistance Movement (Szymanski, 2018).

Opportunities and Pitfalls for the US and Adversaries

Since US interests are generally supported by stability and democracy, Finland should be an exemplar of US hopes. Finland's non-alignment policy does, however, provide Russia and China with opportunities further their interests.

China

Finland's openness to diplomatic and trade relations with China provides China with opportunities for economic enrichment and to extend its political influence into the Arctic. Finland's stable society, supported by the low level of risk acceptance of its population, probably furthers China's aims.

Russia

As with China, Finland's openness to diplomatic and trade relations with China provides China with opportunities for economic enrichment and to extend its political influence into the Arctic. However, Russia's aim of undermining Finland's stable democracy is thwarted by the low risk acceptance and extreme social stability of Finnish society. Russia's attempts to recruit spies and to sow division within the population through information operations therefore makes sense, although the highly educated and satisfied Finnish population is probably the most inoculated against such measures.

² <https://www.worldatlas.com/articles/ethnic-groups-and-nationalities-in-finland.html>

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