

Separate and Unequal: Israel's Jewish-Arab Divide

An Analysis of Economic and Social Inequalities in Israel

Overview

When we think about Israel and social issues, there tends to be an onus placed on the ongoing occupation of Palestinian territories and the detrimental effects this has had on the those living under occupation. However, inside Israel-proper there is another disturbing trend regarding the Jewish state's Arab minority. While OECD and additional independent reports document economic and social discrimination against Israel's Arab citizens, for which I'll use the term 'Israeli-Arab', or 'Arab-Israeli', Israel's census data presents several indicators, economic and social, that indicate an inequality between Jews and Arabs. I will produce spatial visualizations of these indicators.

Research Questions

What is the geographical distribution of Arabi-Israeli inequality indicators, by sub-district level, inside Israel-proper? Which sectors (i.e labor, education, household wealth) provide the greatest indicators of this inequality?

Israel at a Glance



This project focuses on Israel-proper, with no data extracted from the occupied West Bank, Gaza, or Jewish settlement blocks.

Methodology

Identifying the Socio-Economic Indicators

I assessed the vulnerability of Arab-Israelis by first breaking down their population by sub-district, and then identifying socio-economic indicators within those sub-districts. These indicators, with their associated percentages, were entirely extracted from Israel's Central Bureau of Statistics and the 2007-2008 census. While both ethnic breakdowns and the indicators were listed per sub-district, there was no indication of which ethnic groups (i.e Jews and Arabs) accounted for their respective portions of the percentage. Therefore, I had to use a ranking scale for each socio-economic category.

Scoring

The key to displaying total vulnerability indicators, or each socio-economic category (i.e unemployment, occupations, education levels, and household level) was to determine thresholds within each category which were applied to the sub-districts. I then developed a risk score of 1 thru 4; 1 being the least vulnerable and 4 being the most. Depending on which category I was using, sometimes higher percentages (i.e for unemployment and construction occupations) indicated the more vulnerable risk scores while other categories (i.e household indicators and higher education levels) saw higher percentages indicate lower risk scoring. However, the ranking of low to high vulnerability remained the same throughout.

Compiling the Data Scoring

The final step was aggregating the data by summarizing the ranking, using the software's calculator, which generated a total vulnerability score of 10-37, 10 indicating the most well-off and least vulnerable sub-districts with 37 indicating the least well-off and most vulnerable sub-districts. However, the infrastructure scoring would change these scores.

Infrastructure Scoring

The next portion of this analysis was locating an element of infrastructure, hospitals, and displaying these points on the map. After finding these from open sourced maps, I then applied a ranking to them by "distance to..", as in making four classes of distance circles around each hospital, 1 signifying areas within 10km (least vulnerable) and 4 signifying areas over 40 km away. (most vulnerable). I conducted the same steps for Israel's roads, 1 signifying areas within 2km (least vulnerable) and 4 signifying areas within 80 km (most vulnerable).

Final Data Compilation and Comparison

I then added this ranking score into the aggregated scores from the first portion, including an element of infrastructure vulnerability to the socio-economic categories. This is what constitutes the map under vulnerability results. By comparing the Arab-Israeli population breakdown map to the vulnerability results, we can see a correlation between sub-districts heavily populated with Arab Israelis and those that are less well-off.

Results

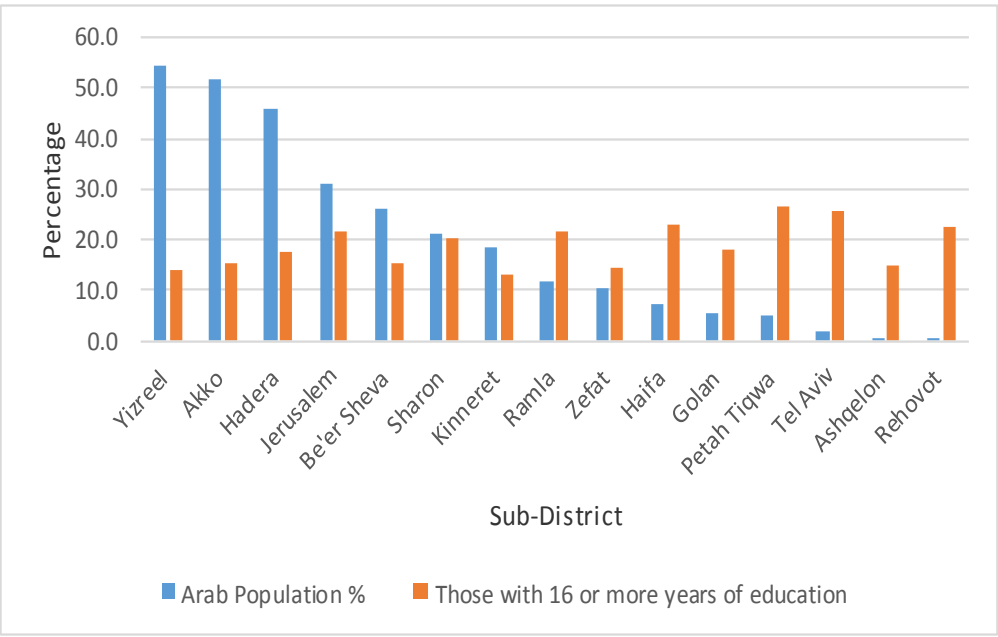
Arab-Israeli Population



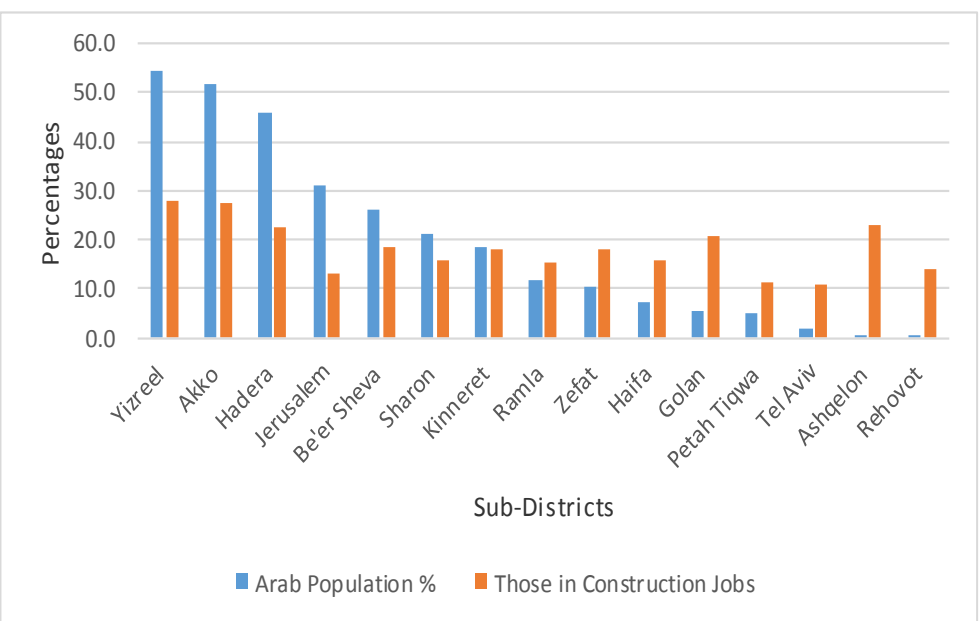
Socio-Economic Vulnerability Results



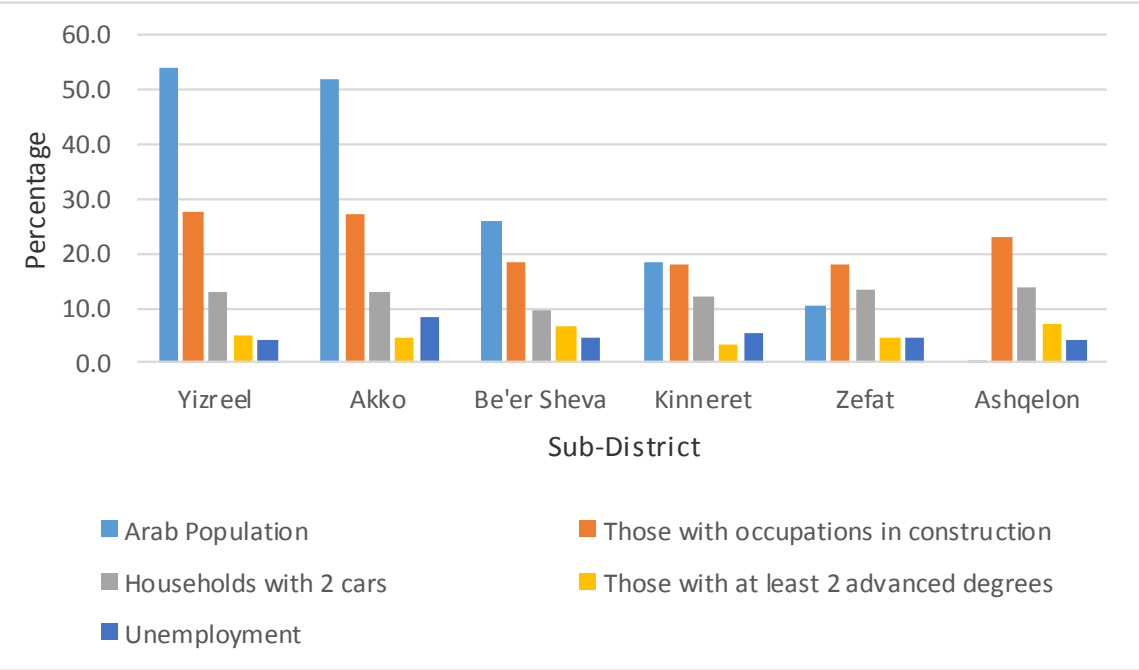
Arab Populations and Socio-Economic Vulnerability Indicators: Correlation with Education Level



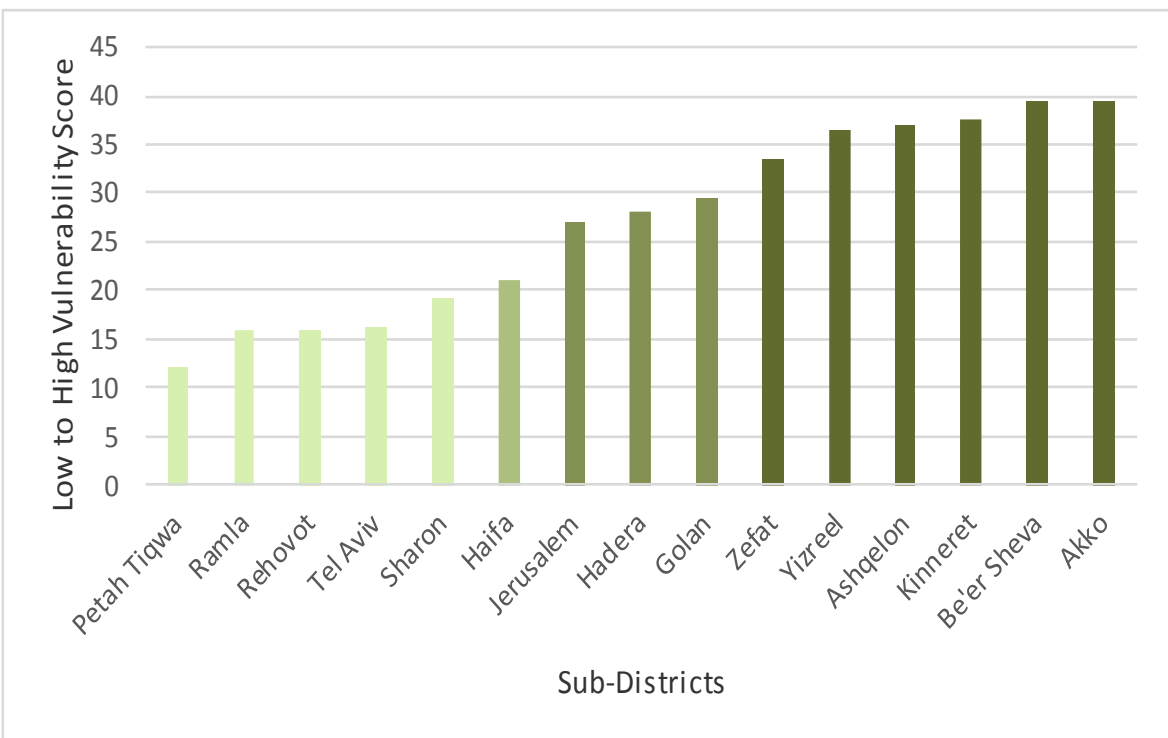
Arab Populations and Socio-Economic Vulnerability Indicators: Correlation with Manual Labor Jobs



Most Vulnerable Sub-Districts



Summary: Low to High End Vulnerability by Sub-District



- Summary of vulnerability scores place six sub-districts into the highest socio-economic vulnerability scoring category of 4: Zefat, Yizreel, Ashdod, Kinneret, Be'er Sheva, and Akko.
- Out of these six sub-districts which have the highest vulnerability scores, are two of the three sub-districts with highest concentrations of Arab-Israelis: Yizreel (54.3%) and Akko (51.9%).
- Out of these six sub-districts which have the highest vulnerability scores are two sub-districts with significant populations of Arab-Israelis: Kinneret (18.5%) and Be'er Sheva (26%).

Final Thoughts

- The accuracy of Israeli census data permitted this analysis to be done with highly accurate numbers per geographic location.
- There appears to be a correlation between Arab-populated areas in Israel and higher levels of inequality in professional sectors, education levels, and wealth indicators.
- However, there are additional factors that dictate high-levels of inequality in certain Israeli sub-districts; Be'er Sheva has a high level of Ethiopian Jews (28%) as well as far infrastructure based on its desert landscape.
- Jewish poverty: The Haredim, the ultra-Orthodox Jews, have well-documented levels of poverty and unemployment which likely contributed to higher vulnerability scores in some areas.
- Infrastructure indicators: Hospitals and roads, as indicators of vulnerability, did not effect scores to a great degree. Israel is a highly developed country, therefore hospitals and roads exist in almost all sub-districts (not including the southern Negev desert areas).

Citations

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Cartographer: Ryan Gardiner

Class: DHP P207-GIS for International Applications

Date: May 10, 2016

Projection: WGS_1984_UTM_Zone_36

Data Sources: Israeli Central Bureau of Statistics, Adalah Inequality Report, OECD, Open Street Map, Btselem

