Gender Inequality Index Summary

A concise overview of the Gender Inequality Index data analysis project — written for the recruiter who wants the full picture in the shortest time.

Tool used across all projects: MySQL Workbench · Datasets sourced from Kaggle

Project 1

Gender Inequality Index — Global Analysis Across 194 Countries, 1990–2021

What This Project Was About

For this project, I worked with a dataset from Kaggle tracking the Gender Inequality Index (GII) across 194 countries over a 31-year period, from 1990 to 2021. The GII is a composite measure that captures inequality between men and women based on reproductive health, education, and labour market participation. My goal was to go beyond just reporting numbers — I wanted to understand where inequality is worst, where it is improving, and what factors are associated with higher or lower levels of gender equality.

What I Discovered

The most striking finding was how strongly Human Development Group (HDG) — a measure of a country's education, wealth, and life expectancy — predicts gender inequality. Without exception, every country in the lowest-inequality group had a High HDG rating. Every country in the highest-inequality group had a Low or Medium HDG. The data makes the argument plainly: poverty, low literacy, and short life expectancy and gender inequality are not just correlated — they move together as a system.

Geographically, Africa dominated the high-inequality end of the spectrum, with 9 of the 10 most unequal countries located on the continent. Europe, meanwhile, claimed 9 of the 10 most equal countries. What gives me pause is that this pattern is so consistent — it suggests the problem is structural and continental, not just a matter of individual national policy.

The most hopeful finding came from the longitudinal trend analysis. Global average GII dropped from 0.488 in 1990 to 0.322 in 2021 — a 34% reduction over three decades. The United Arab Emirates showed the single most dramatic national improvement, at 92.6% over the same period, which tells me that rapid change is achievable when there is genuine political will behind it. That is a data point worth holding onto.

What I Think Could Be Improved

The most honest limitation I can flag is that 66 of 194 countries lacked complete data and had to be excluded from the distribution analysis. That is a third of the world essentially absent from the picture — and my instinct tells me those missing countries are not randomly distributed. Countries with weak institutions and limited infrastructure are more likely to have incomplete data, and those same countries are more likely to have higher inequality. That means the global average we calculated is probably more optimistic than reality.

If I were to extend this project, I would investigate the missing data directly — is it missing because a country refused to report, because the infrastructure to collect it does not exist, or because the inequality is so severe it goes undocumented? Each of those scenarios tells a different story and warrants a different response.

My Overall Take

This project confirmed something I suspected going in but wanted to verify with data: gender inequality is not a standalone issue. It is deeply bound up with economic development, access to education, and a country's broader human development trajectory. The analysis holds together well across all seven queries — the findings in Query 1 (most unequal countries) are reinforced by Query 3 (continental averages), which are reinforced again by Query 6 (African country deep dive). Everything points in the same direction, which gives me confidence in the conclusions. That internal consistency is, to me, one of the strongest things about this analysis.