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[https://github.com/Lennonwk/CAPP30239\\_FA22](https://github.com/Lennonwk/CAPP30239_FA22)

CAPP 30239 Data Visualization

Final Project 3 Minute Overview

### Falling Numerator / Rising Denominator

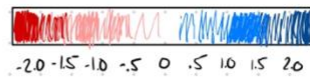
Economists expect the worker to retiree ratio in most developed countries to continue decreasing through 2050. Due to increased life expectancy, countries' mean population ages have been rising. This increased life expectancy is expanding government pension and medical cost expenditures. Meanwhile, the fertility rate in most developed countries has been decreasing. With fewer workers supporting each retiree, governments and community structures must adapt to this demographic shift.

Governments' increase in pension costs paired with a decreased worker to retiree ratio paying income taxes will cause pensions to take an increasing portion of government budgets. Governments must introduce reforms to address the unsustainable path of pensions and increasing healthcare benefits.

Visualization 1

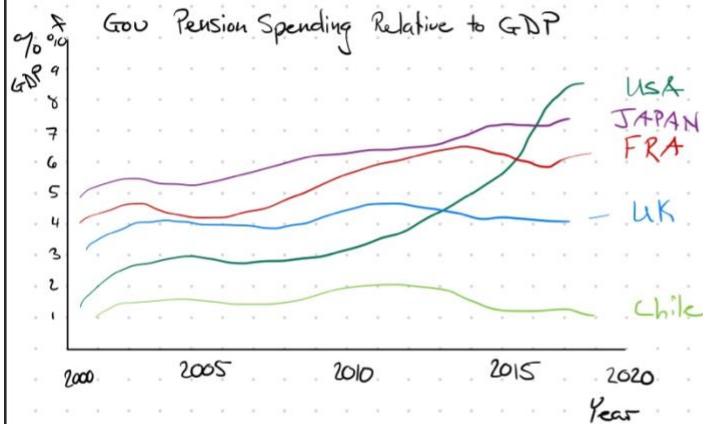


Fertility Rate Change  
1990 - 2020



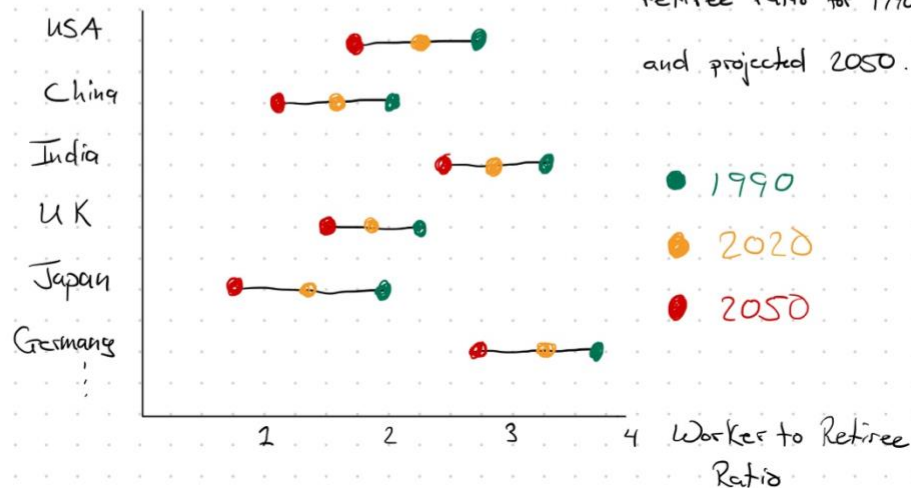
Each country is colored

Visualization 2



Line Chart depicting  
the changes in government  
spending relative to GDP.

Visualization 3



Barbell Chart Showing top  
13 GDP countries worker/  
retiree ratio for 1990, 2020,  
and projected 2050.

● 1990  
● 2020  
● 2050