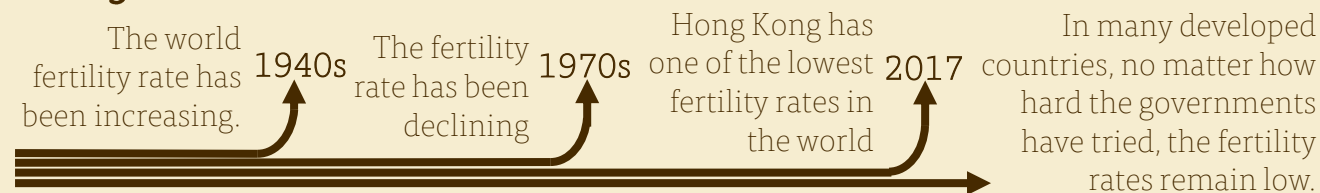


INVESTIGATION IN FERTILITY RATE IN THE DEVELOPED COUNTRIES

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1. To find out the significant factors affecting the level of fertility in developed countries
2. To give an insight to the public and government on what to be mainly focused on when it comes to solving declining population growth

Background Information



Literature Review

- High Female Unemployment Rate > Lifetime Income Penalty for Women
- Persistent Unemployment Rate > Lower Spousal Earning in Long-term
- High Female Labour Participation > Low Marriage Rate



Data & Methodology

Data: 2007-2017

Hong Kong		
Canada	France	United States
Singapore	Japan	United Kingdom

Variables

Female Unemployment Rate <i>uemp_w</i> (-)	Consumer Price Index <i>cpi</i> (-)
Housing Prices Indicator <i>house</i> (-)	Average Annual Wage Growth Rate <i>wage</i> (+)
Education Index <i>edu</i> (-)	Carbon Dioxide Emission <i>co2</i> (-)
Political Risk Index <i>political</i> (+)	Crude Marriage Rate <i>marriage</i> (+)
Average Weekly Working Hour <i>working_week</i> (-)	Female Life Expectancy <i>life_w</i> (-)

Regression Model

$$Fertility_{it} = \beta_0 + uemp_w_{it} + wage_{it} + marriage_{it} + \varepsilon_{it}$$

Findings & Analysis

1. **Female Unemployment Rate:** Short-term female unemployment → lower O.C. of child bearing → more time in raising children
2. **Average Wage Growth Rate:** Higher income → more savings → easier to afford cost of child bearing
3. **Crude Marriage Rate:** Marriage as a commitment to raise up and nurture children



Limitations

- ⊖ Insufficient data variables
- ⊖ Some variables may not be the best proxy to represent the factor

Conclusion

Major factors affecting the fertility level in developed countries:

1. Female unemployment rate: ☺ Provide short-term unemployment benefit
2. Annual average wage growth rate: ☺ Set a higher minimum wage/regulations
3. Crude marriage rate: ☺ Provide household benefit