

Evolution of employment shares by sector of the top 3 countries by GDP

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Dataset

- World Development Indicators Dataset

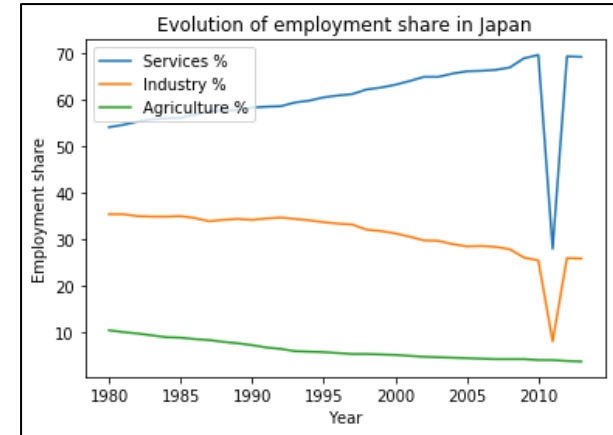
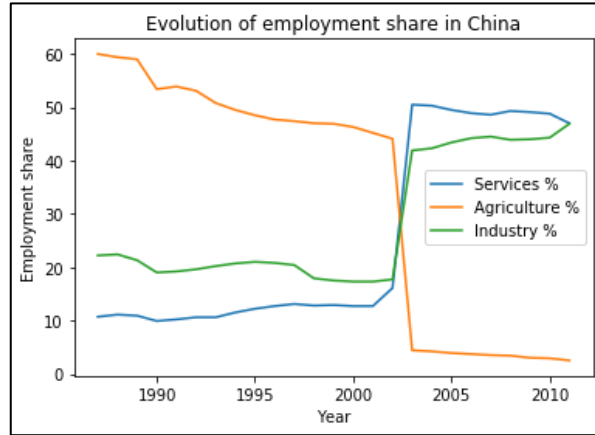
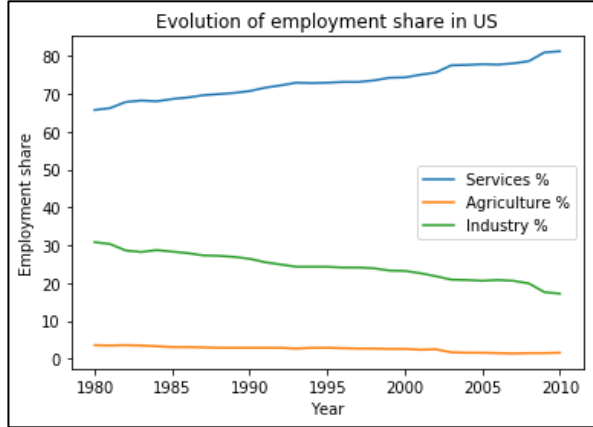
Motivation

One of the dominant changes that characterises a growing economy is the proportionate decline in the agricultural sector. The natural economic progression of a nation goes from agrarian economy, to industrial economy to a service economy. Thus, with the dataset that we have, we are going to scrutinize whether this trend holds in top 3 countries by GDP in 2018 which are US, China and Japan respectively.

Research Question

Concretely, we are aiming to determine whether the listed countries achieved GDP growth by investing in services sector which will lead to an increased employment share . If yes we can also determine the period at which this shift happened.

Findings



- In above line plots we see the evolution of employment shares in US, China and Japan from around 1980 to 2010 (these data is unavailable for China till 1987, resulting in around a 10-year shift in x axis)
- Figures show that although the shares of agriculture and industry are quite different in US and Japan, services are the dominant sector of employment in both countries.
- One interesting point to note is the severe drop in share of services and industry in Japan in 2011 due to Fukushima Daiichi nuclear disaster.
- The trends of employment share are totally different in China, compared to US and Japan, as China is a developing country and progression towards services sector happened later, yet very aggressively between 2002 and 2004. Industry also preserves a high share in China at around 45% by 2012.

References

- [https://www.wikiwand.com/en/List_of_countries_by_GDP_\(nominal\)](https://www.wikiwand.com/en/List_of_countries_by_GDP_(nominal))
- https://www.wikiwand.com/en/Fukushima_Daiichi_nuclear_disaster