A New Way to Measure National Happiness

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National Income vs National Happiness

- GDP has been collected consistently since the 1930s.

- Economic historians argue that is not enough and have rolled back national income data for the whole world to 1820, and many are going back much further.

- Measuring national income using GDP has been accepted for decades.

- Survey data on national happiness exists from 1970s onwards.

- The UN has collected world-wide data from 2011.

- Measuring national happiness using survey data remains controversial.

So GDP wins, right? Not quite…

- GDP simply fails to capture everything that matters for wellbeing.

- Simon Kuznets an early developer of GDP had issues with military spending.

- What about the environment? The BP Deep Horizons oil spill **increased** US GDP!

- What about mental and physical health, or even just people who want leisure not income?

- So we need measures of wellbeing that are separate from GDP: this is well understood in government and among policy-makers.

The Solution?

- Survey data is being used right now and despite its critics it seems a reasonable way to proceed.

- But to gather **historical data** we need to think outside the box.

- There is something that has been around a very long time and grants us a way to infer mood…

… language!

- We know from psychology that mood can be inferred from **words**, and words have been around for a long time.

- Working with colleagues in psychology and linguistics we have developed a way to measure happiness in the past by analysing the words people used: using billions of words in **books and newspapers** across multiple languages going back centuries we have formed a new historical index. It is robust to the evolution of language and correlates well with survey measures where they co-exist.

- One of the many corpora we use is the Google Books Ngram corpus: https://books.google.com/ngrams

Some Snapshots of the Index

Book-based index from 1820 onwards
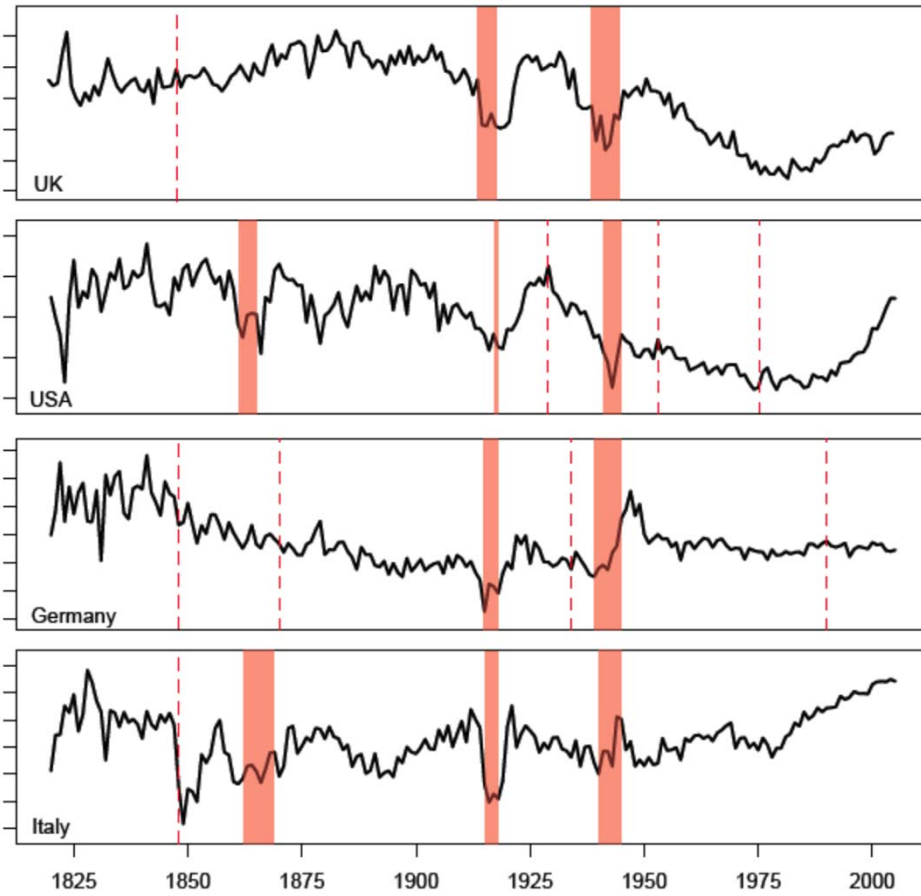
Books (blue) vs newspapers (red)
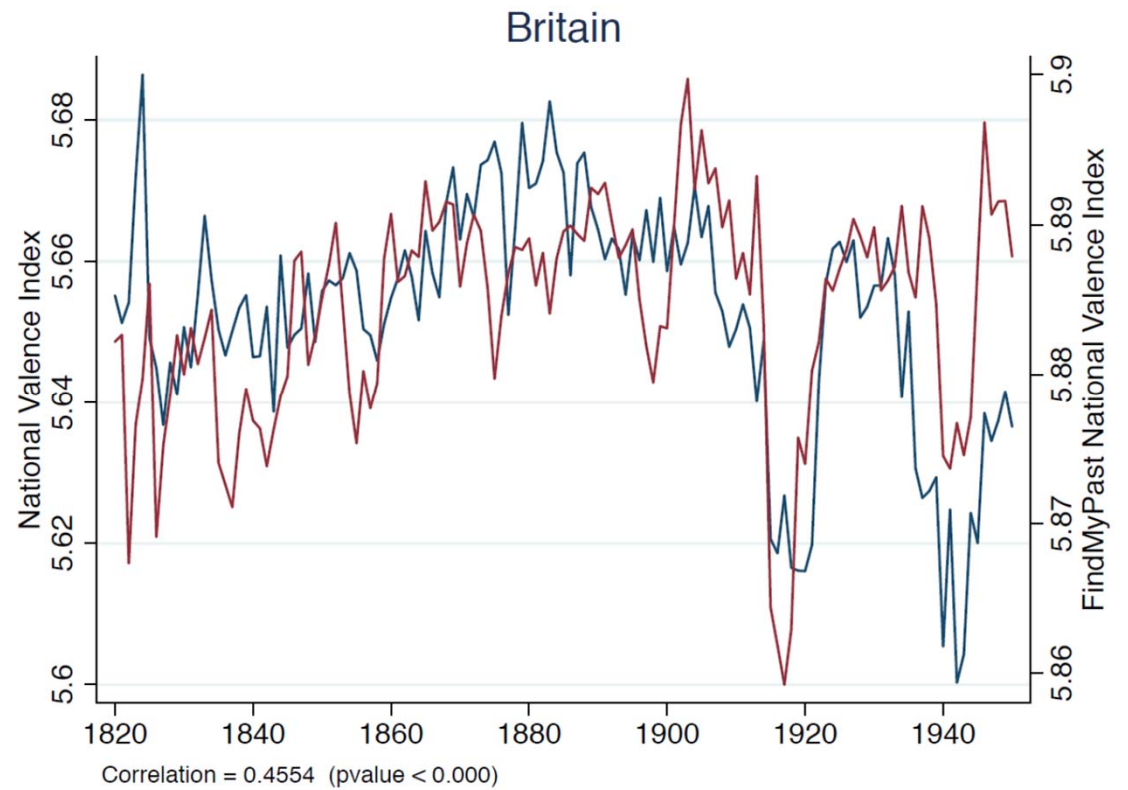
Findings?

- Using the index we can say a few things about happiness in the past.

- GDP does correlate with national happiness but it takes a huge rise to have a noticeable impact on happiness at the national level.

- National health may be a more important driver of national happiness for developed nations.

- Avoiding wars and civil unrest seems especially crucial.
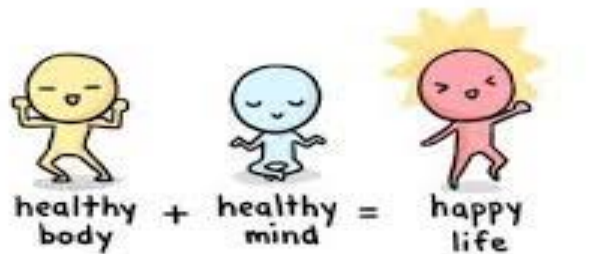
The Future

- This is a good example of how **Big Data**, advances in **technology** and **interdisciplinary** work may prove increasing important in understanding happiness and to economics and the social sciences more generally.