The determinants of national wellbeing

Exploring Happiness Research

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Overview

In our previous research, we have dedicated much of our time to studying the determinants of wellbeing at the individual level. We used the main findings from this research to build the Exploring Happiness Index, that allows individuals to track their happiness and wellbeing over time. We are now turning our attentions to wellbeing on a national level. That is, we are looking to identify what exactly it is that causes citizens in one country to be happier than another.

This research article reviews the latest empirical literature on this topic and is broken down into five sections. In section one, we outline the common determinants that often tend to come up in the literature. In section two, we assess how measures of subjective wellbeing on a national scale have changed over time. In section three, we consider the distribution of wellbeing and show that some countries and regions have higher wellbeing inequality than others. In section four, we assess whether social factors such as the culture and history of a country, influence levels of wellbeing. Finally, in section five we look ahead to the future by discussing how environmental quality affects wellbeing. Climate change is expected to change the way that many of us will live our lives in the future and some countries will be impacted more than others. The current empirical literature on the relationship between environmental quality and wellbeing could be useful for indicating how different countries' wellbeing scores may evolve in the future.

Key determinants of national wellbeing

The best source of data regarding countries wellbeing is the <u>Gallup World Poll</u> and these data are summarised each year in the <u>World Happiness Report</u>. In the survey, Gallup asks people to imagine a ladder, with the lowest rung representing the worst possible life and the highest rung representing the best possible life. People rate where they stand today and where they expect to stand in five years. The scale of this ladder is from 0-10. The results show a large amount of variation across countries.

Through data analysis, it is possible to identify a range of factors that explain a significant proportion of the variance in average wellbeing across countries. The World Happiness Report identifies six factors, which when taken together, explain 76 per cent of the variation in average wellbeing across countries. Those six factors are as follows:

1. Trust (this can be measured in a number of different but typically it is done by using measures of perceptions of corruption. <u>See full definition</u>).
2. Generosity (the proportion of people who have donated money in the present month)
3. Social support (the proportion of people who have relatives or friends they can count on to help them whenever they need them)
4. Freedom (the proportion of people who are satisfied with their freedom to choose what they want to do with their life)
5. Health (years of healthy life expectancy)
6. Income (GDP per capita)

Table 1 shows the effect that each variable has on wellbeing. Income, health and social support are all measures that are captured within our Index, which is concerned with wellbeing at the individual level. These measures remain significant at the national level too. The other indicators

included in this analysis pick up social and governance issues within a country and the variation in these measures across countries is very wide. For example, Scandinavian countries tend to have very high levels of trust and freedom, especially when compared to Middle Eastern or African countries.

Table 1: The impacts of the main determinants of national wellbeing

Variable	Change in variable	Impact of change
Trust	100% vs 0%	0.98
Generosity	100% vs 0%	0.85
Social support	100% vs 0%	2.10
Freedom	100% vs 0%	1.27
Health	Extra year	0.03
Income	Doubles	0.25

The findings from this research tend to be supported by other empirical analyses that consider the main determinants of national wellbeing (e.g. OECD (2012). However, this topic is much less well researched than the topic of individual life satisfaction or wellbeing. There remains scope for additional empirical analyses that test whether additional variables or different groups of variables could be more effective at explaining the variation in national wellbeing.

Changes over time

The extent to which the factors outlined in Table 1 contribute towards national wellbeing will change over time as the level of wellbeing also changes. Through both the Gallup World Poll and the Eurobarometer survey we are able to obtain an understanding of how wellbeing on a cross country basis is evolving through time. In Figure 1 we plot data from the World Happiness Report for the last 15 years, split by different regions of the world. The data in this chart is remarkably stable, with the general ranking of regions against one another changing only a little. Life satisfaction measures do not tend to change greatly over time and it makes sense that this is the case. This is because typically those components in Table 1 do not tend to change dramatically over time either. Countries with high levels of trust do not typically have this one year and then lose it completely in the next, this is something that is built up steadily over time. Although it is thought to be harder to build up levels of trust, than it is to break down.

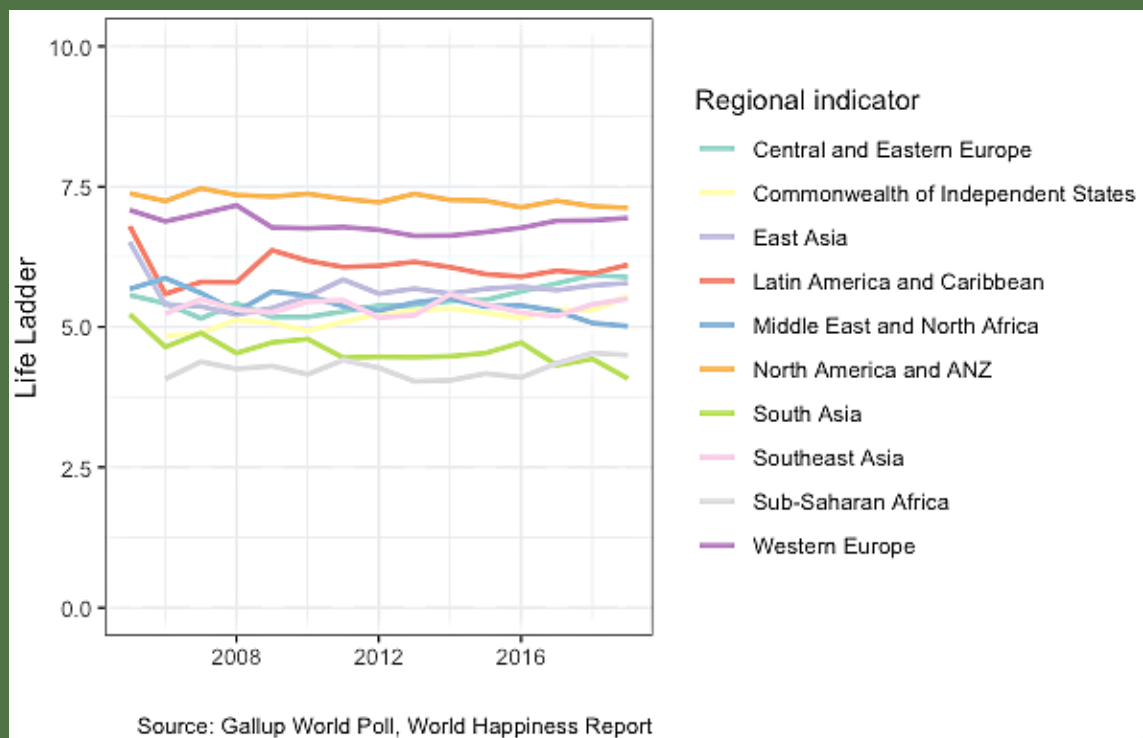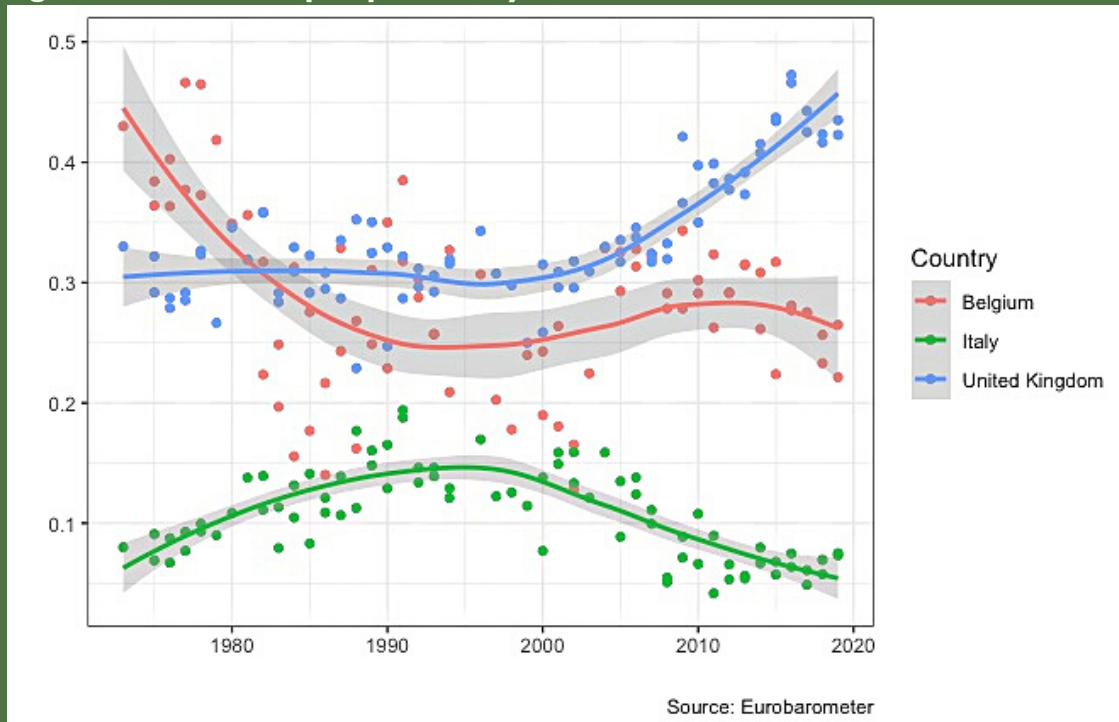**Figure 1: Subjective Wellbeing split by regions (2005-2019)**

Source: Gallup World Poll, World Happiness Report

Figure 2: Share of people "Very satisfied" with their lives (1973-2019)

Source: Eurobarometer

Even at this highly aggregated level, we are still able to take conclusions from the data in Figure 1 about various regions. In South Asia, measures of subjective wellbeing have trended lower over the last 15 years, while they have trended high in Central and Eastern Europe.

In Figure 2, using data from the Eurobarometer, we plot the share of people who are very satisfied with their lives over a period of 46 years. In the survey, the full question asks: "On the whole, are you very satisfied, fairly satisfied, not very satisfied or not at all satisfied with the life you lead?". This data shows quite substantial variations across countries and over time too. In Italy, the share of people very satisfied with their lives is lower than for Belgium and the UK, and has also been declining since the late 1990's. Belgium had the highest share across these three countries initially, but this trended lower across the 1970's and 1980's and has remained roughly constant since then. The UK on the other hand has experienced a significant increase over the last 20 years.
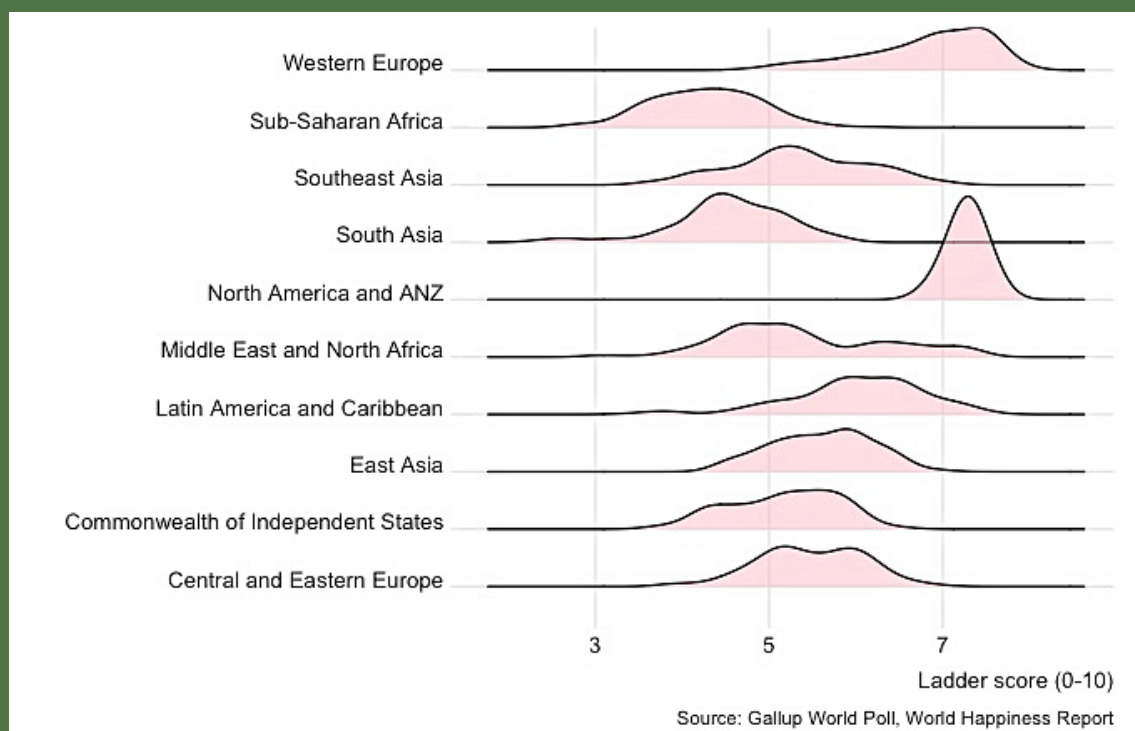
While data is not available for all European countries over this time period, there is data available for most countries over the last 20 years. Using this metric, most European countries life satisfaction increased

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over this period. The levels in this measure also correlate with the data from the Gallup World Poll. For example, the Scandinavian countries tend to have the highest share of people that are satisfied with their lives, followed by Western Europe and then Central and Eastern Europe.

Wellbeing inequality

The data in Figure 1 shows the average level of subjective wellbeing for each region over time, while Figure 3 shows the distribution around the mean. Ideally, if the data was available, we would show the distribution of all of the responses to the Gallup World Poll for each region. The central peaks of this plot would be similar to those in Figure 3, but there would be greater variation around this. Showing wellbeing data in this format is a useful reminder that even in regions with high average levels of wellbeing, this is not universal. Given wellbeing measures are typically used as indicators of social progress, we should be concerned with not just achieving a high average level of wellbeing, but also a low level of variation around this mean.

Figure 3: Distributions of subjective wellbeing

Western Europe
Sub-Saharan Africa
Southeast Asia
South Asia
North America and ANZ
Middle East and North Africa
Latin America and Caribbean
East Asia
Commonwealth of Independent States
Central and Eastern Europe

3　　5　　7

Ladder score (0-10)

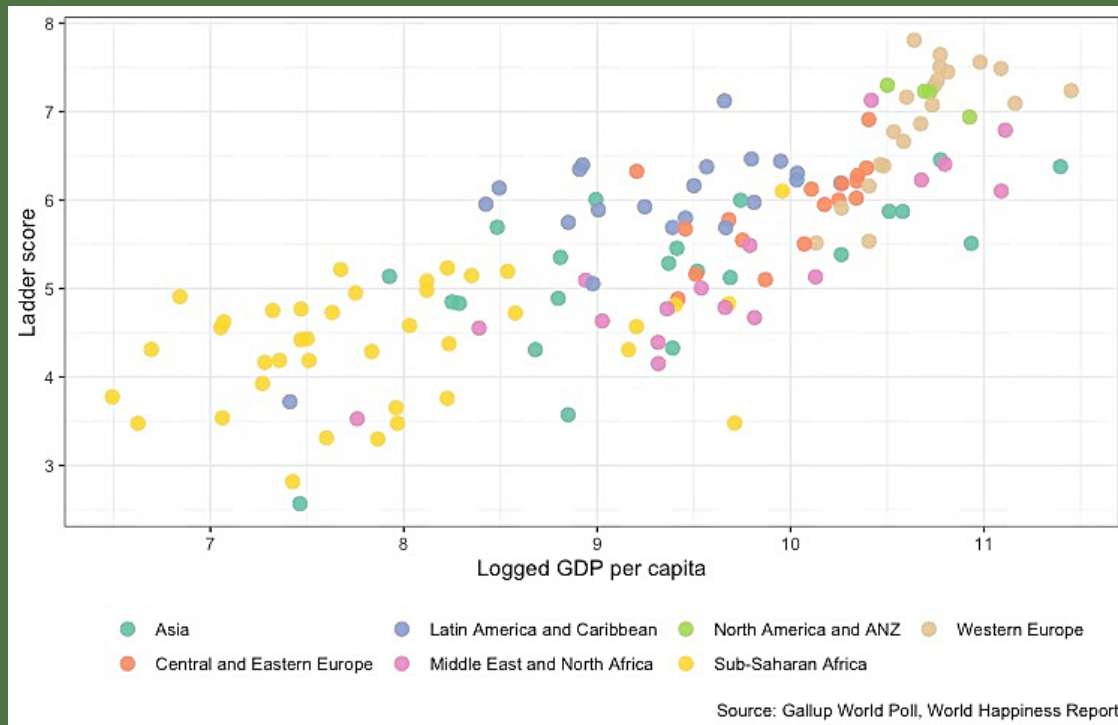Source: Gallup World Poll, World Happiness Report

The good news on this front is that despite increases in income inequality since the 1980's for many Western countries, happiness inequality has fallen for countries that have experienced income growth (an unfortunately not in those who have not). The authors suggest that the extension of various public goods helps to explain this greater happiness homogeneity. The results of this analysis hold both within and across countries. In addition to this, a different study identified that between 1972-2006 happiness inequality in the US across demographic groups has also declined. Two-thirds of the black-white happiness gap has been erased and the gender happiness gap has disappeared (women used to be slightly happier). Lastly, a paper from 2013 identified that happiness and inequality is negatively correlated in Western countries and they found that trust in institutions plays an important role in shaping this relationship.

Cultural factors

A working paper from the OECD in 2012 looked to identify the determinants of wellbeing for OCED countries and found that income, health, employment status and the quality of our social relationships were all particularly important for wellbeing. This is consistent with the evidence base. This analysis showed that these key determinants differed little across countries. However, there were some small country differences, such as income and health being more important in countries performing more poorly on these indicators. They also found that cultural differences across countries do not appear to be a major driver of differences in life satisfaction. The differences in country rankings were not due to fundamental differences in the relationship between determinants and wellbeing, but rather differences in the measured levels of these differences.

Figure 4 helps to show that while income is important at explaining the difference in subjective wellbeing across countries, it is not the only factor at play. For example, Latin American and Caribbean countries have high levels of wellbeing given their level of income. Further research is necessary to fully identify the drivers of these differences.

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Figure 4: Subjective wellbeing against logged GDP per capita, 2019

Source: Gallup World Poll, World Happiness Report

Environmental quality

Much of the analysis thus far has been taken from survey responses to the Gallup World Poll and this survey is also used to regularly ask people about their attitudes towards the environment. When given the choice, 62% of respondents say they would prioritise environmental protection over economic growth. In addition, approximately 85% of respondents believe that climate change will make their lives harder.

Given these attitudes and the expectation that the implications of climate change will play an increasing role in our lives, this has sparked an academic interest in relationship between the environment and happiness recently. This tends to fall into two broad categories. First, identifying how the environment affects people's subjective wellbeing. And second, how pro-environmental behaviour affects people's subjective wellbeing, and in turn, how people's emotional states can be leveraged to nudge them to behaving in more environmentally friendly ways. There is potential that environmental factors may play an increasing role in determining national levels of subjective wellbeing in the future.

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For now, that remains speculative, but what do we know about the relationship between the quality of our environmental and subjective wellbeing today? In the 2020 World Happiness Report, Christian Krekel and George MacKerron looked to provide some answers to this question. They follow two approaches in the analysis.

In the first, they take aggregated data on environmental quality and estimate their impact on wellbeing levels (both evaluative and experiential) across OECD countries. They find significant effects of climate and air pollutant emissions on reducing wellbeing while controlling for a number of other factors.

Their second approach zooms in to analyse a large panel of individuals' momentary hedonic experiences in a range of environments found within one large city (London). Despite the difference in method, the result support the findings in the first approach. The authors find significant weather effects, strong positive effects of both green and blue spaces on subjective wellbeing.

Conclusion

The analysis in research article identified the common factors that tend to be identified as the main determinants of wellbeing. These factors tend to come up frequently in studies that have looked at this question. However, the empirical literature on the determinants of national wellbeing is less dense than is the case for individual wellbeing. Further research may identify additional groups of determinants that are more effective at predicting wellbeing. The impact of these determinants may also change over time too, with the potential that environmental factors may play an increasingly important role. The impact of cultural factors on national wellbeing is another area that requires additional research.