GDP per capita is a poor predictor of national well-being

Adrien Fabre (CNRS, CIRED)

January 2024

Introduction

What makes a country happy?

What country is the happiest? $\Rightarrow$ Answer on: **sli.do/2601**

What makes a country happy?

What country is the happiest? $\Rightarrow$ Answer on: **sli.do/2601**

What makes a country happy?

The answer is often in Scandinavia.

What makes a country happy?

What country is the happiest? $\Rightarrow$ Answer on: **sli.do/2601**

The answer is often in Scandinavia.

What do we mean by "happy"?

What makes a country happy?

What country is the happiest? $\Rightarrow$ Answer on: **sli.do/2601**

The answer is often in Scandinavia.

What do we mean by "happy"?

What makes a country happy?

What country is the happiest? $\Rightarrow$ Answer on: **sli.do/2601**

HAPPIEST COUNTRIES IN THE WORLD

1	Finland	7.769
2	Denmark	7.600
3	Norway	7.554
4	Iceland	7.494
5	The Netherlands	7.488
6	Switzerland	7.480
7	Sweden	7.343
8	New Zealand	7.307
9	Canada	7.278
10	Austria	7.246

Source: World Happiness Report 2019

/philstarnews   @philstarnews   philstar GLOBAL

The answer is often in Scandinavia.

What do we mean by "happy"? Subjective well-being.

Literature

## Inglehart & Klingemann (WVS, 2000)
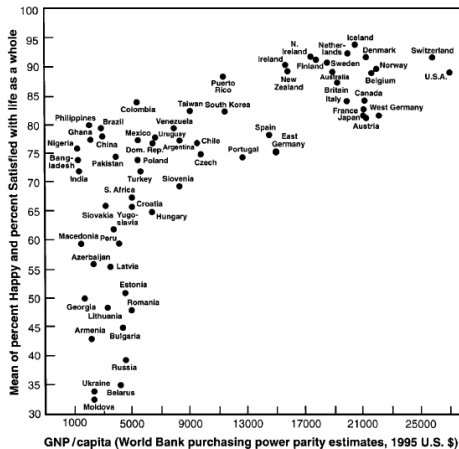
Figure 7.2

Subjective well-being by level of economic development ($R = 0.70$, $N = 65$, $p < 0.0000$).
Source: World Values Surveys; GNP/capita purchasing power estimates from World Bank,
World Development Report, 1997.

Literature

World Happiness Report (Gallup, 2023)

Self-reported life satisfaction vs. GDP per capita, 2022

Self-reported life satisfaction is measured on a scale ranging from 0-10, where 10 is the highest possible life satisfaction. GDP per capita is adjusted for inflation and differences in the cost of living between countries.
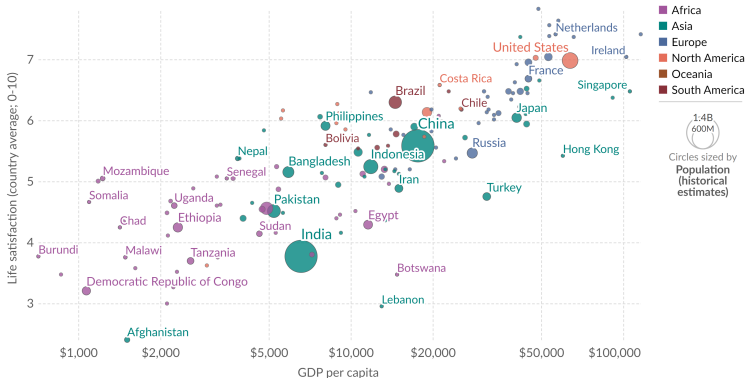
Data source: World Happiness Report (2023); World Bank (2023)
Note: GDP per capita is expressed in international-$[1] at 2017 prices.
OurWorldInData.org/happiness-and-life-satisfaction | CC BY

The literature finds an increasing relationship between GDP pc and well-being.

Literature

The literature finds an increasing relationship between GDP pc and well-being.

Deaton (2008) finds a log-linear relation between average satisfaction and GDP pc PPP using Gallup data ($R^2 = .71$).

Literature

The literature finds an increasing relationship between GDP pc and well-being.

Deaton (2008) finds a log-linear relation between average satisfaction and GDP pc PPP using Gallup data ($R^2 = .71$).

National income is more correlated to satisfaction than happiness (Deaton, 2008; Inglehart et al., 2008).

Literature

The literature finds an increasing relationship between GDP pc and well-being.

Deaton (2008) finds a log-linear relation between average satisfaction and GDP pc PPP using Gallup data ($R^2 = .71$).

National income is more correlated to satisfaction than happiness (Deaton, 2008; Inglehart et al., 2008).

Gallup data shows stronger correlation than World Values Survey (Deaton, 2008).

Literature

The literature finds an increasing relationship between GDP pc and well-being.

Deaton (2008) finds a log-linear relation between average satisfaction and GDP pc PPP using Gallup data ($R^2 = .71$).

National income is more correlated to satisfaction than happiness (Deaton, 2008; Inglehart et al., 2008).

Gallup data shows stronger correlation than World Values Survey (Deaton, 2008).

Blanchflower Bryson (2023)

Literature

The literature finds an increasing relationship between GDP pc and well-being.

Deaton (2008) finds a log-linear relation between average satisfaction and GDP pc PPP using Gallup data ($R^2 = .71$).

National income is more correlated to satisfaction than happiness (Deaton, 2008; Inglehart et al., 2008).

Gallup data shows stronger correlation than World Values Survey (Deaton, 2008).

Blanchflower Bryson (2023)

We challenge this finding.

Primer of the results

Income is only weakly correlated with national well-being.

Primer of the results

Income is only weakly correlated with national well-being.

The relationship heavily depends on the well-being indicator chosen.

Primer of the results

Income is only weakly correlated with national well-being.

The relationship heavily depends on the well-being indicator chosen.

Primer of the results

Income is only weakly correlated with national well-being.

The relationship heavily depends on the well-being indicator chosen.
For some indicators, the happiest country is in Africa or Latin America.

Primer of the results

Income is only weakly correlated with national well-being.

The relationship heavily depends on the well-being indicator chosen.
For some indicators, the happiest country is in Africa or Latin America.

Another simple variable, the country's (macro) region, is a better predictor of national well-being.

Design

Data

World Values Survey (WVS): representative surveys on 440,000 respondents over 108 countries.
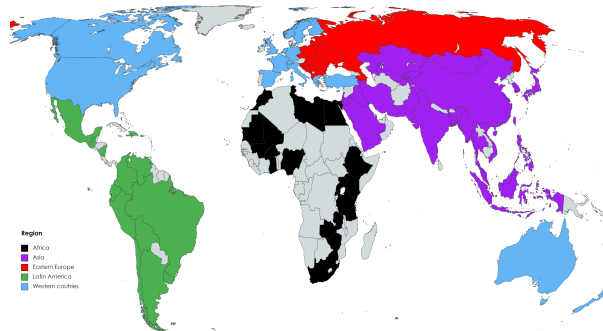
Data

World Values Survey (WVS): representative surveys on 440,000 respondents over 108 countries. 304 country $\times$ year observations among 7 waves from 1981 to 2022.

Data

World Values Survey (WVS): representative surveys on 440,000 respondents over 108 countries.

304 country $\times$ year observations among 7 waves from 1981 to 2022.

Two subjective well-being questions:

Region
- Africa
- Asia
- Eastern Europe
- Latin America
- Western countries
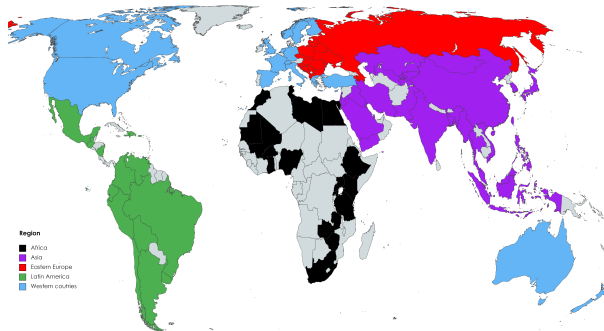
Data

World Values Survey (WVS): representative surveys on 440,000 respondents over 108 countries.

304 country × year observations among 7 waves from 1981 to 2022.

Two subjective well-being questions:

Happiness: "Taking all things together, would you say you are:"
Very happy; *Quite happy*; *Not very happy*; *Not at all happy*; PNR

Data

World Values Survey (WVS): representative surveys on 440,000 respondents over 108 countries.

304 country $\times$ year observations among 7 waves from 1981 to 2022.

Two subjective well-being questions:

Happiness: "Taking all things together, would you say you are:"
Very happy; *Quite happy*; *Not very happy*; *Not at all happy*; PNR

Satisfaction: "All things considered, how satisfied are you with your life as a whole these days?"
1-Completely dissatisfied – 10-Completeley satisfied; PNR
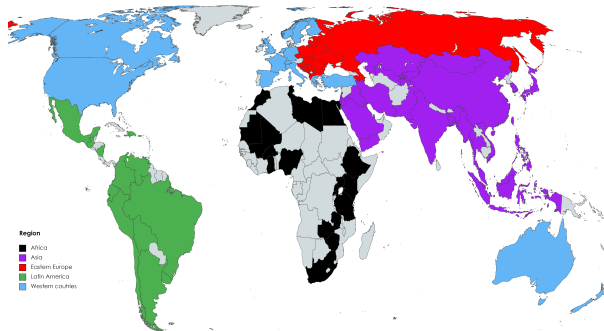
Region
- Africa
- Asia
- Eastern Europe
- Latin America
- Western coutries

What is national well-being?

With the two well-being questions, we can define various national indicators (all weighted using survey weights, all excluding PNR).

Happy: share answering *Quite* or *Very happy*

What is national well-being?

With the two well-being questions, we can define various national indicators (all weighted using survey weights, all excluding PNR).

Happy: share answering *Quite* or *Very happy*

Very Happy: share answering *Very happy*

What is national well-being?

With the two well-being questions, we can define various national indicators (all weighted using survey weights, all excluding PNR).

Happy: share answering *Quite* or *Very happy*

Very Happy: share answering *Very happy*

Very Unhappy: share answering *Very unhappy*

What is national well-being?

With the two well-being questions, we can define various national indicators (all weighted using survey weights, all excluding PNR).

Happy: share answering *Quite* or *Very happy*

Very Happy: share answering *Very happy*

Very Unhappy: share answering *Very unhappy*

V. Happy – V. Unhappy: difference **Very Happy** minus **Very Unhappy**

What is national well-being?

With the two well-being questions, we can define various national indicators (all weighted using survey weights, all excluding PNR).

Happy: share answering *Quite* or *Very happy*

Very Happy: share answering *Very happy*

Very Unhappy: share answering *Very unhappy*

V. Happy – V. Unhappy: difference **Very Happy** minus **Very Unhappy**

Happiness (mean): mean happiness recoded into -3; -1; $+1$; $+3$

What is national well-being?

With the two well-being questions, we can define various national indicators (all weighted using survey weights, all excluding PNR).

Happy: share answering *Quite* or *Very happy*

Very Happy: share answering *Very happy*

Very Unhappy: share answering *Very unhappy*

V. Happy – V. Unhappy: difference **Very Happy** minus **Very Unhappy**

Happiness (mean): mean happiness recoded into $-3; -1; +1; +3$

Satisfaction (mean): mean satisfaction

What is national well-being?

With the two well-being questions, we can define various national indicators (all weighted using survey weights, all excluding PNR).

Happy: share answering *Quite* or *Very happy*

Very Happy: share answering *Very happy*

Very Unhappy: share answering *Very unhappy*

V. Happy – V. Unhappy: difference **Very Happy** minus **Very Unhappy**

Happiness (mean): mean happiness recoded into -3; -1; $+1$; $+3$

Satisfaction (mean): mean satisfaction

Satisfied: share answering 6 to 10 at satisfaction

What is national well-being?

With the two well-being questions, we can define various national indicators (all weighted using survey weights, all excluding PNR).

Happy: share answering *Quite* or *Very happy*

Very Happy: share answering *Very happy*

Very Unhappy: share answering *Very unhappy*

V. Happy – V. Unhappy: difference **Very Happy** minus **Very Unhappy**

Happiness (mean): mean happiness recoded into $-3; -1; +1; +3$

Satisfaction (mean): mean satisfaction

Satisfied: share answering 6 to 10 at satisfaction

Happy + Satisfied: average of **Happy** and **Satisfied**
This is the variable used by Inglehart & Klingemann (2000)

What is national well-being?

With the two well-being questions, we can define various national indicators (all weighted using survey weights, all excluding PNR).

Happy: share answering *Quite* or *Very happy*

Very Happy: share answering *Very happy*

Very Unhappy: share answering *Very unhappy*

V. Happy – V. Unhappy: difference **Very Happy** minus **Very Unhappy**

Happiness (mean): mean happiness recoded into $-3; -1; +1; +3$

Satisfaction (mean): mean satisfaction

Satisfied: share answering 6 to 10 at satisfaction

Happy + Satisfied: average of **Happy** and **Satisfied**
   This is the variable used by Inglehart & Klingemann (2000)

Bond & Lang (19) show that no single indicator can reliably identify two group's relative well-being, justifying reliance on several indicators.

How we measure income

Our benchmark *income* indicator is the **log** GDP per capita (pc) in **PPP** (constant 2017 $, World Bank)

How we measure income

Our benchmark *income* indicator is the **log** GDP per capita (pc) in **PPP** (constant 2017 $, World Bank)

How we measure income

Our benchmark *income* indicator is the **log** GDP per capita (pc) in **PPP** (constant 2017 $, World Bank)
We also use discrete indicators:

How we measure income

Our benchmark *income* indicator is the **log** GDP per capita (pc) in **PPP** (constant 2017 $, World Bank)
We also use discrete indicators:

Income sextile: quantile of income (6 quantiles)

How we measure income

Our benchmark *income* indicator is the **log** GDP per capita (pc) in **PPP** (constant 2017 \$, World Bank)
We also use discrete indicators:

Income sextile: quantile of income (6 quantiles)

Income cluster ($k = $ **5**, **6** or **7**): income cluster, with the k clusters found by the k-means algorithm

How we measure income

Our benchmark *income* indicator is the **log** GDP per capita (pc) in **PPP** (constant 2017 \$, World Bank)

We also use discrete indicators:

Income sextile: quantile of income (6 quantiles)

Income cluster ($k = $ **5**, **6** or **7**): income cluster, with the k clusters found by the k-means algorithm

For robustness, we also run our analyses using the log *nominal* GDP pc (constant 2015 \$, World Bank) and corresponding income group and clusters.

How we measure income

Our benchmark *income* indicator is the **log** GDP per capita (pc) in **PPP** (constant 2017 $, World Bank)

We also use discrete indicators:

Income sextile: quantile of income (6 quantiles)

Income cluster ($k = $ **5**, **6** or **7**): income cluster, with the k clusters found by the k-means algorithm

For robustness, we also run our analyses using the log *nominal* GDP pc (constant 2015 $, World Bank) and corresponding income group and clusters.

We manually impute missing income data using IMF data.

How we measure income

Our benchmark *income* indicator is the **log** GDP per capita (pc) in **PPP** (constant 2017 $, World Bank)

We also use discrete indicators:

Income sextile: quantile of income (6 quantiles)

Income cluster ($k = $ **5**, **6** or **7**): income cluster, with the k clusters found by the k-means algorithm

For robustness, we also run our analyses using the log *nominal* GDP pc (constant 2015 $, World Bank) and corresponding income group and clusters.

We manually impute missing income data using IMF data.

For robustness, we also run our analyses without this imputation (excluding countries with missing GDP data).

National well-being and income

Graphical evidence

Happy vs. log GDP p.c. (PPP) — All waves of WVS.
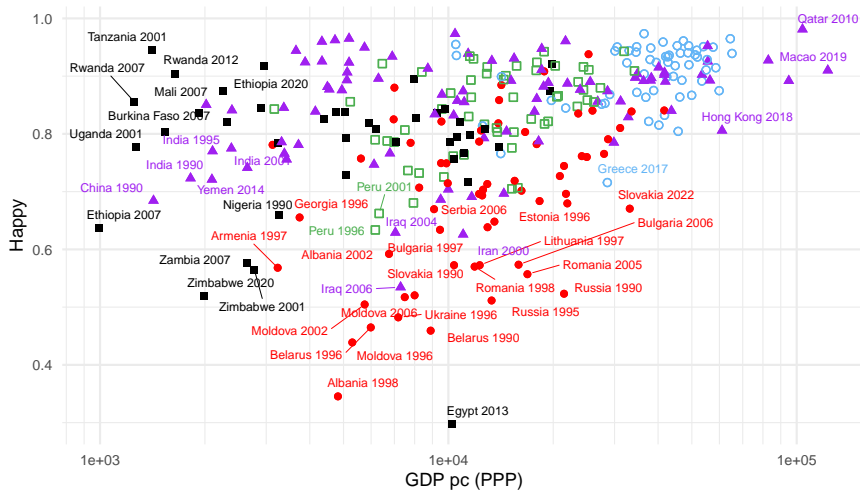
Graphical evidence

Very Happy vs. log GDP p.c. (PPP) — All waves of WVS.
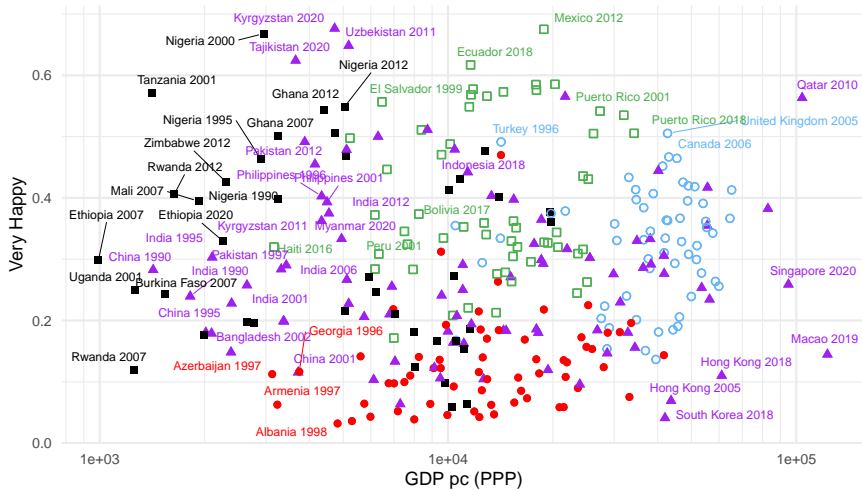
Graphical evidence

Very Unhappy vs. log GDP p.c. (PPP) — All waves of WVS.
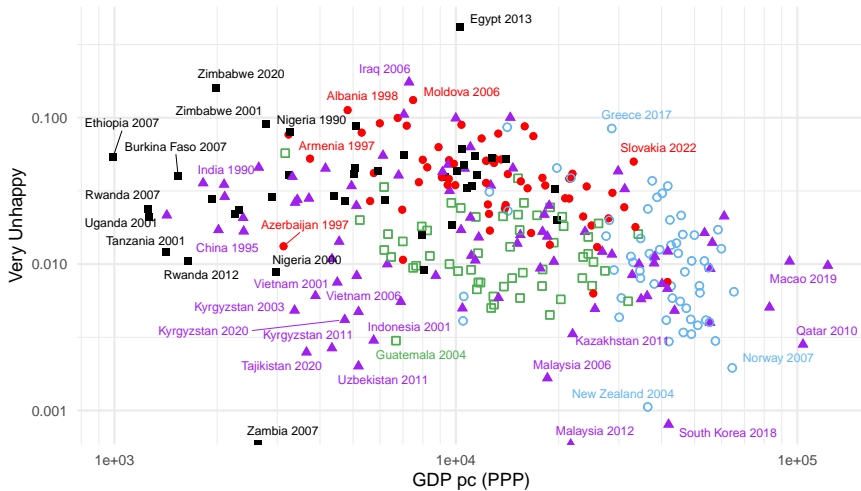
Graphical evidence

V. Happy – V. Unhappy vs. log GDP p.c. (PPP) — All waves of WVS.
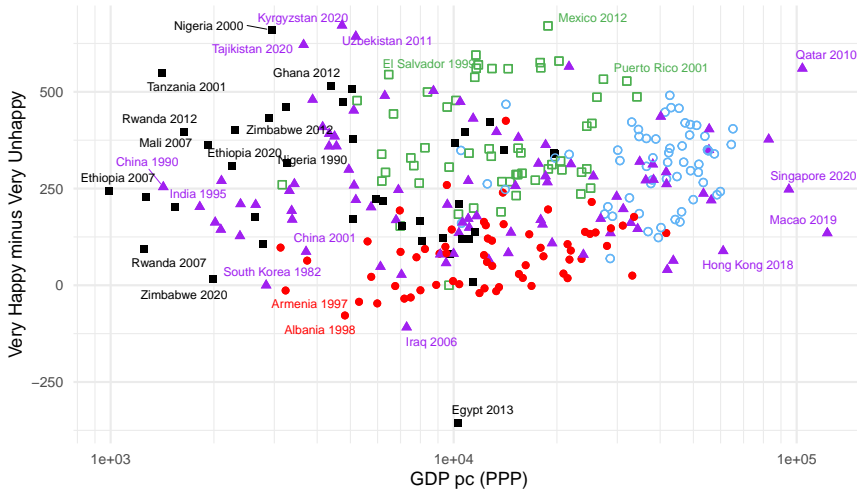
Graphical evidence

Happiness (mean) vs. log GDP p.c. (PPP) — All waves of WVS.
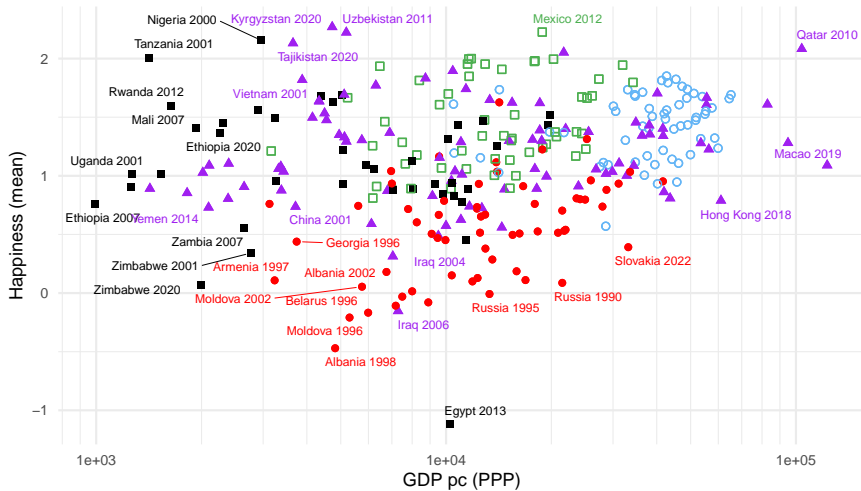
Graphical evidence

Satisfaction (mean) vs. log GDP p.c. (PPP) — All waves of WVS.
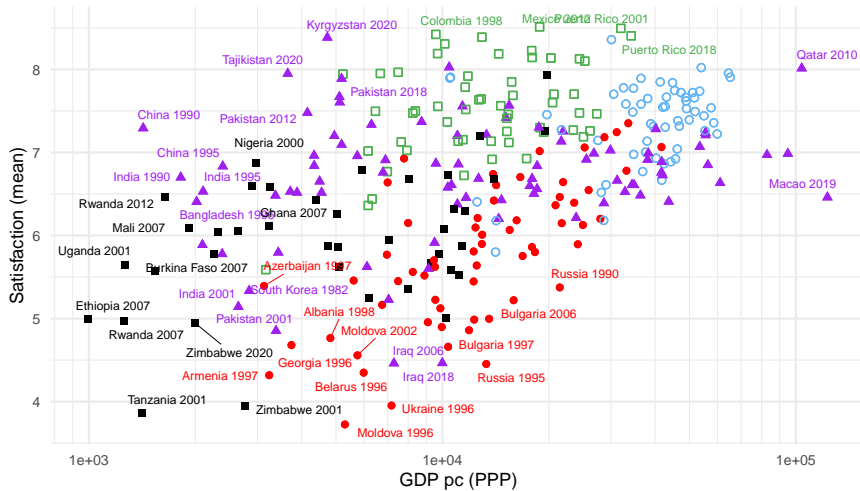
Graphical evidence

Satisfied vs. log GDP p.c. (PPP) — All waves of WVS.
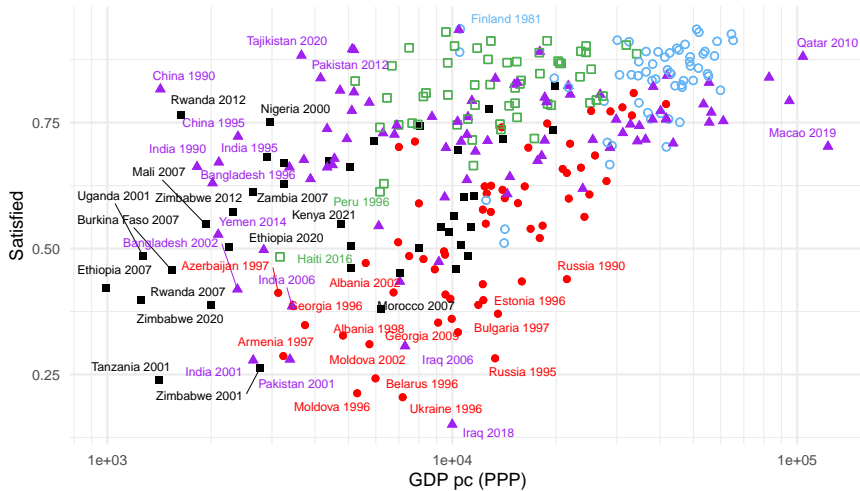
Graphical evidence

Happy + Satisfied vs. log GDP p.c. (PPP) — All waves of WVS.
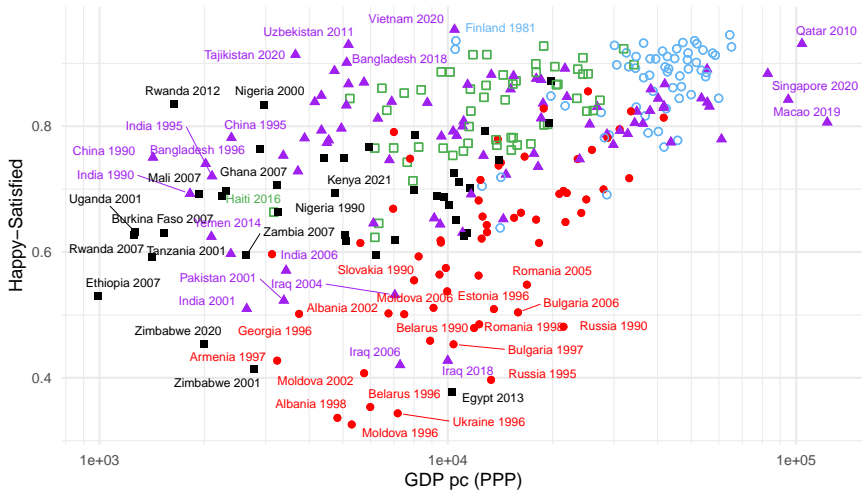
Graphical evidence

Happy vs. log DP p.c. (nominal) — Wave 7 (2017-22) of WVS, weighted by population.
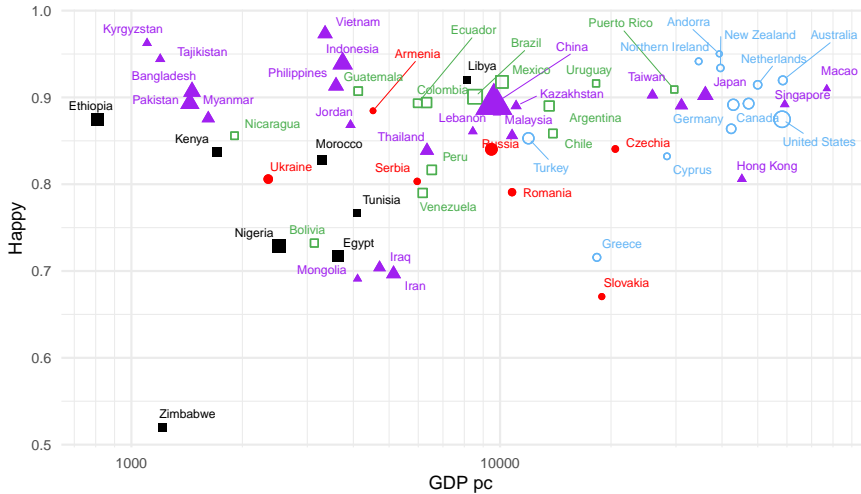
For different *well-being* and *income* indicators, we compute the R^2 of the regression:

$$\textit{well-being}_i = \alpha + \beta \, \textit{income}_i + u_i$$

Variance explained by GDP p.c. ▸ More results

Happiness variable	log GDP p.c.		Income cluster					Mean	Max
	PPP	nominal	sextile PPP	k = 5 PPP	k = 6 PPP	k = 7 PPP	k = 7 nominal		
Very Happy	0	0	0.04	0.01	0.06	0.03	0.03	0.02	0.06
Happy	0.1	0.12	0.14	0.13	0.15	0.14	0.16	0.13	0.16
Very Unhappy	0.04	0.06	0.07	0.07	0.08	0.08	0.11	0.07	0.11
Satisfied	0.2	0.24	0.2	0.21	0.2	0.2	0.24	0.21	0.24
Satisfaction (mean)	0.14	0.17	0.13	0.15	0.14	0.14	0.17	0.15	0.17
Happiness (mean)	0.03	0.04	0.07	0.06	0.09	0.07	0.07	0.06	0.09
Happy + Satisfied	0.18	0.22	0.19	0.2	0.2	0.19	0.23	0.2	0.23
V. Happy – V. Unhappy	0	0.01	0.04	0.02	0.06	0.03	0.04	0.03	0.06
Mean	0.09	0.11	0.11	0.1	0.12	0.11	0.13	0.11	0.13
Max	0.2	0.24	0.2	0.21	0.2	0.2	0.24	0.21	0.24
Number of obs.	304	304	304	304	304	304	304		

For different *well-being* and *income* indicators, we compute the R^2 of the regression:

$$\textit{well-being}_i = \alpha + \beta \, \textit{income}_i + u_i$$

Nominal income clustered into 7 groups is the income indicator that explains best well-being.

Variance explained by GDP p.c.

For different *well-being* and *income* indicators, we compute the R^2 of the regression:

$$well\text{-}being_i = \alpha + \beta\, income_i + u_i$$

Nominal income clustered into 7 groups is the income indicator that explains best well-being.
On average over well-being indicators, this indicator explains 13% of the variance.

Variance explained by GDP p.c.

For different *well-being* and *income* indicators, we compute the R^2 of the regression:

$$well\text{-}being_i = \alpha + \beta\, income_i + u_i$$

Nominal income clustered into 7 groups is the income indicator that explains best well-being.
On average over well-being indicators, this indicator explains 13% of the variance.
Satisfied is the well-being indicator that is best explained by income (19% to 24%).

Variance explained by GDP p.c.

For different *well-being* and *income* indicators, we compute the R^2 of the regression:

$$well\text{-}being_i = \alpha + \beta\,income_i + u_i$$

Nominal income clustered into 7 groups is the income indicator that explains best well-being.

On average over well-being indicators, this indicator explains 13% of the variance.

Satisfied is the well-being indicator that is best explained by income (19% to 24%).

Happy + Satisfied —chosen by Ingelhart et al. (2008)— comes close (17% to 23%).

Variance explained by GDP p.c.

For different *well-being* and *income* indicators, we compute the R^2 of the regression:

$$well\text{-}being_i = \alpha + \beta\, income_i + u_i$$

Nominal income clustered into 7 groups is the income indicator that explains best well-being.

On average over well-being indicators, this indicator explains 13% of the variance.

Satisfied is the well-being indicator that is best explained by income (19% to 24%).

Happy + Satisfied —chosen by Ingelhart et al. (2008)— comes close (17% to 23%).

Happiness (mean) is poorly explained by income (8% at best).

What are the happiest countries?

What is the happiest country?

What are the happiest countries?

What is the happiest country?

Looking at all waves combined, Kyrgyzstan–2020 is the happiest country–year according to 3 indicators
Finland, Malaysia, Mexico, Qatar, Vietnam according to other indicators.

What are the happiest countries?

What is the happiest country?

Looking at all waves combined, Kyrgyzstan–2020 is the happiest country–year according to 3 indicators

Finland, Malaysia, Mexico, Qatar, Vietnam according to other indicators.

Counting the occurrences of countries for each wave–indicator (including all waves combined), Switzerland is the happiest (10 occurrences) followed by Mexico (9) and Kyrgyzstan (6).

What are the happiest countries?

What is the happiest country?

Looking at all waves combined, Kyrgyzstan–2020 is the happiest country–year according to 3 indicators

Finland, Malaysia, Mexico, Qatar, Vietnam according to other indicators.

Counting the occurrences of countries for each wave–indicator (including all waves combined), Switzerland is the happiest (10 occurrences) followed by Mexico (9) and Kyrgyzstan (6).

The happiest countries are Western (24), in Latin America (19), Asia (16) or Africa (6).

What are the happiest countries?

What is the happiest country?

Looking at all waves combined, Kyrgyzstan–2020 is the happiest country–year according to 3 indicators
Finland, Malaysia, Mexico, Qatar, Vietnam according to other indicators.

Counting the occurrences of countries for each wave–indicator (including all waves combined), Switzerland is the happiest (10 occurrences) followed by Mexico (9) and Kyrgyzstan (6).

The happiest countries are Western (24), in Latin America (19), Asia (16) or Africa (6).

Blanchflower & Bryson (2023) show that on respective positive/negative affects, the happiest state is: Bhutan (well-rested), Denmark (satisfaction), Finland (anger), Hawaï (enjoy), Paraguay (smile), Taiwan (sadness), Uzbekistan (worry), Vietnam (pain).

Region vs. GDP per capita
as predictor of well-being

Region grouping

WVS countries grouped into the five UN regional groups.
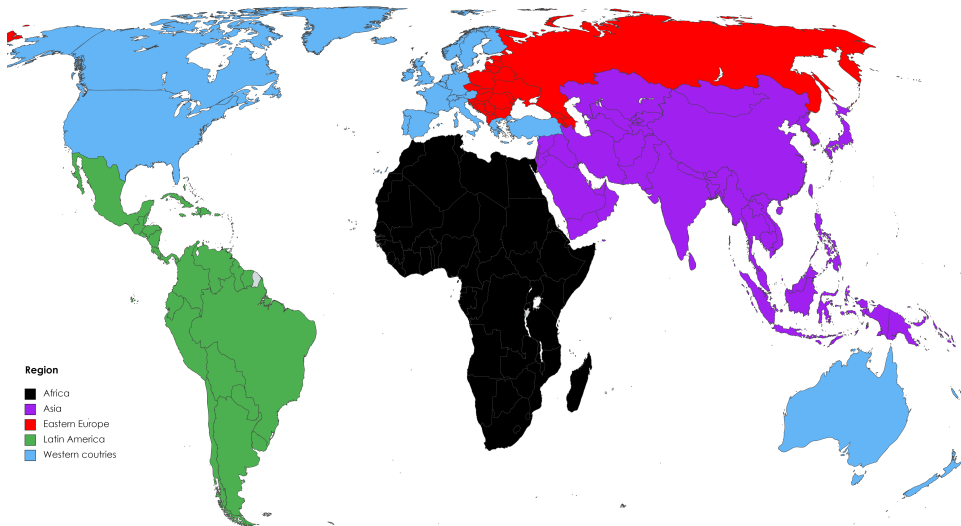
Share of explained variance that is explained by income ▸ More results

| Happiness variable | log GDP p.c. | | Income cluster | | | | | Mean | Max |
	PPP	nominal	sextile PPP	k = 5 PPP	k = 6 PPP	k = 7 PPP	k = 7 nominal		
Very Happy	0	0.01	0.11	0.03	0.14	0.07	0.08	0.06	0.14
Happy	0.24	0.3	0.32	0.31	0.34	0.32	0.37	0.32	0.37
Very Unhappy	0.24	0.32	0.35	0.36	0.37	0.36	0.48	0.35	0.48
Satisfied	0.35	0.42	0.35	0.36	0.36	0.36	0.42	0.37	0.42
Satisfaction (mean)	0.26	0.31	0.24	0.26	0.25	0.26	0.32	0.27	0.32
Happiness (mean)	0.08	0.12	0.18	0.14	0.21	0.16	0.19	0.15	0.21
Happy + Satisfied	0.32	0.39	0.34	0.35	0.35	0.35	0.41	0.36	0.41
V. Happy – V. Unhappy	0.01	0.03	0.12	0.05	0.15	0.09	0.1	0.08	0.15
Mean	0.19	0.23	0.25	0.23	0.27	0.24	0.3	0.25	0.3
Max	0.35	0.42	0.35	0.36	0.37	0.36	0.48	0.37	0.48
Number of obs.	304	304	304	304	304	304	304		

Region is a better predictor of national well-being than income

From the previous table, income is never a better predictor than region ($s_i < 50\%$)

Region is a better predictor of national well-being than income

From the previous table, income is never a better predictor than region ($s_i < 50\%$)

For the best-predicting income indicator, income explains 30% of the explained variance, on average over all well-being indicators

Region is a better predictor of national well-being than income

From the previous table, income is never a better predictor than region ($s_i < 50\%$)

For the best-predicting income indicator, income explains 30% of the explained variance, on average over all well-being indicators

This indicator explains 19% of the explained variance for **Happiness** and 32% for **Satisfaction**.

Region is a better predictor of national well-being than income

From the previous table, income is never a better predictor than region ($s_i < 50\%$)

For the best-predicting income indicator, income explains 30% of the explained variance, on average over all well-being indicators

This indicator explains 19% of the explained variance for **Happiness** and 32% for **Satisfaction**.

Region is a better predictor than region in 94% of alternative specifications: looking at each wave separately, weighting countries by population, dropping pandemic years...
(including 86% of 88 specifications involving the best-predicting income variable) ▸ More results

Conclusion

Take away and future research

National well-being is more correlated with the world region than with the GDP p.c.

Take away and future research

National well-being is more correlated with the world region than with the GDP p.c.

Richest countries are not necessarily the happiest.

Take away and future research

National well-being is more correlated with the world region than with the GDP p.c.

Richest countries are not necessarily the happiest.

If there is a link between income and well-being, it is that rich countries do not experience low well-being.

Take away and future research

National well-being is more correlated with the world region than with the GDP p.c.

Richest countries are not necessarily the happiest.

If there is a link between income and well-being, it is that rich countries do not experience low well-being.

Poor countries can be happy too. Growth is not necessarily the best goal.

Take away and future research

National well-being is more correlated with the world region than with the GDP p.c.

Richest countries are not necessarily the happiest.

If there is a link between income and well-being, it is that rich countries do not experience low well-being.

Poor countries can be happy too. Growth is not necessarily the best goal.

$\Rightarrow$ Absolute income is not as determining for well-being as is often thought.

Take away and future research

National well-being is more correlated with the world region than with the GDP p.c.

Richest countries are not necessarily the happiest.

If there is a link between income and well-being, it is that rich countries do not experience low well-being.

Poor countries can be happy too. Growth is not necessarily the best goal.

$\Rightarrow$ Absolute income is not as determining for well-being as is often thought.

$\Rightarrow$ We should seek reforms that improve well-being rather than growth.

Take away and future research

National well-being is more correlated with the world region than with the GDP p.c.

Richest countries are not necessarily the happiest.

If there is a link between income and well-being, it is that rich countries do not experience low well-being.

Poor countries can be happy too. Growth is not necessarily the best goal.

⇒ Absolute income is not as determining for well-being as is often thought.

⇒ We should seek reforms that improve well-being rather than growth.

Non-material dimensions seem key to well-being ⇒ Need to study mechanisms.

Take away and future research

National well-being is more correlated with the world region than with the GDP p.c.

Richest countries are not necessarily the happiest.

If there is a link between income and well-being, it is that rich countries do not experience low well-being.

Poor countries can be happy too. Growth is not necessarily the best goal.

⇒ Absolute income is not as determining for well-being as is often thought.

⇒ We should seek reforms that improve well-being rather than growth.

Non-material dimensions seem key to well-being ⇒ Need to study mechanisms.

Despite evidence against translation issues (Diener & Suh, 2000),
We should check whether emotions are better predicted by region than income.

Robustness checks

Variance explained by PPP income cluster (k = 7)

Happiness variable	All waves	Only selected waves							
	Pop. weight	1 & 2	3	4	5	6	7	Mean	Max
Very Happy	0.05	0.25	0.06	0.17	0.06	0.12	0.21	0.13	0.25
Happy	0.21	0.19	0.24	0.23	0.22	0.17	0.06	0.19	0.24
Very Unhappy	0.04	0.2	0.15	0.19	0.16	0.1	0.08	0.13	0.2
Satisfied	0.23	0.2	0.22	0.35	0.26	0.23	0.1	0.23	0.35
Satisfaction (mean)	0.16	0.23	0.17	0.32	0.2	0.21	0.05	0.19	0.32
Happiness (mean)	0.09	0.18	0.13	0.22	0.15	0.14	0.07	0.14	0.22
Happy + Satisfied	0.27	0.2	0.25	0.33	0.27	0.21	0.09	0.23	0.33
V. Happy – V. Unhappy	0.05	0.16	0.07	0.19	0.08	0.12	0.16	0.12	0.19
Mean	0.14	0.2	0.16	0.25	0.18	0.16	0.1	0.17	0.25
Max	0.27	0.25	0.25	0.35	0.27	0.23	0.21	0.23	0.35
Number of obs.	304	26	56	40	58	60	64		

Share of explained variance that is explained by PPP income cluster (k = 7)

Happiness variable	All waves Pop. weight	Only selected waves							
		1 & 2	3	4	5	6	7	Mean	Max
Very Happy	0.19	0.3	0.08	0.36	0.13	0.37	0.47	0.27	0.47
Happy	0.54	0.33	0.36	0.58	0.39	0.48	0.26	0.42	0.58
Very Unhappy	0.25	0.26	0.28	0.57	0.44	0.43	0.34	0.37	0.57
Satisfied	0.57	0.35	0.28	0.56	0.38	0.42	0.25	0.4	0.57
Satisfaction (mean)	0.36	0.37	0.22	0.47	0.3	0.38	0.12	0.32	0.47
Happiness (mean)	0.31	0.25	0.18	0.46	0.25	0.43	0.23	0.3	0.46
Happy + Satisfied	0.57	0.32	0.32	0.57	0.39	0.42	0.24	0.41	0.57
V. Happy – V. Unhappy	0.22	0.22	0.1	0.38	0.16	0.41	0.38	0.27	0.41
Mean	0.38	0.3	0.23	0.5	0.3	0.42	0.29	0.34	0.5
Max	0.57	0.37	0.36	0.58	0.44	0.48	0.47	0.42	0.58
Number of obs.	304	26	56	40	58	60	64		