

Data Sources and Analysis for “Our Economic Future (Part I): How Come We Are Not Getting Happier?”

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Data Sources:

World Happiness Report. The master data for happiness levels and “inputs” can be found here: <https://worldhappiness.report/ed/2023/#appendices-and-data>.

General Social safety data: <https://gssdataexplorer.norc.org/>.

Correlations of Happiness with “inputs” for 2019 from the World Happiness Report

	happin~s	hdi	log_gd~a	social~t	health~h	freedo~s	genero~y	percep~n	positi~t	negati~t
happiness	1.0000									
hdi	0.7775	1.0000								
log_gdp_per_capa	0.7865	0.9525	1.0000							
social_support	0.7484	0.7411	0.7188	1.0000						
healthy_life	0.7437	0.9039	0.8490	0.6499	1.0000					
freedom_choose	0.5502	0.3870	0.3859	0.4195	0.3898	1.0000				
generosity	0.1069	-0.0747	-0.0793	0.0313	-0.0543	0.2478	1.0000			
percep_corrupt	-0.4964	-0.3805	-0.3986	-0.2744	-0.3521	-0.4693	-0.2342	1.0000		
positive_affectt	0.5177	0.2375	0.2558	0.4464	0.2503	0.5778	0.2705	-0.3119	1.0000	
negative_affectt	-0.4313	-0.4074	-0.4245	-0.5864	-0.2921	-0.3120	-0.0485	0.3270	-0.3521	1.0000

World Happiness Regression Results

This table shows the results of the happiness measure regressed on measures of GDP per capita, social support, life expectancy at birth, freedom to choose perception, generosity behavior, and perception of corruption.

The first case regresses happiness levels on the levels of the variable, except for ln(GDP per capita). The second regression shows the standardized (beta) coefficient which normalizes all variables in standard deviation units. The third regression shows the results where all variables are in natural logs.

Equations (2) and (3) allow us to compare the impact of unit changes (the first is in standard deviations and the second in % changes of the ind. Vars.). They both show the greatest impact on happiness is per capita GDP, then social support, then freedom, and then lack of corruption (I find no cet. par. effect from life expectancy).

	(1) happiness	(2) happiness (beta)	(3) lnhappiness
log_gdp_per_a	0.568*** (10.54)	0.576	0.110*** (9.37)
social_suppt	2.321*** (12.79)	0.251	0.346*** (12.75)
healthy_life	-0.0110* (-1.87)	-0.0682	-0.0289 (-0.76)
freedom_choose	0.826*** (6.09)	0.102	0.130*** (7.13)
generosity	0.650*** (5.60)	0.092	0.139*** (5.40)
Corruption	-0.794*** (-5.22)	-0.129	-0.0357** (-2.06)
_cons	-0.753 (-1.08)		0.883*** (4.28)
N	1964		1964
R-sq	0.905		0.874
adj. R-sq	0.895		0.862
AIC	1826.2		-4433.0
BIC	2825.5		-4299.0
Year Dummies	Yes	Yes	Yes
Country Dummies	Yes	Yes	Yes

t statistics in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

Note equation (1) all variables are in levels, except ln(GDP per capita). Equation (2) are standardized "beta" coefficients from regression (1). Regression three all variables are in logs.

Note that in these regressions, I do not find a role for the healthy lifespan variable, likely because it is multi-colinear with GDP and social support. The regressions in the *World Happiness Report*, however, find it statistically significant. The high VIF values for GDP and lifespan show this to be true.

Variable	VIF	1/VIF
log_gdp_PC	56.08	0.017832
healthy_life	24.98	0.040035
corruption	11.41	0.087612
social_sup~t	7.25	0.138003
free_choose	5.23	0.191171
generosity	5.07	0.197415

Trends in the OECD+ Countries

Here are individual simple regressions of the log of variables on the year for the OECD+ countries to demonstrate trends. The regressions are for the years 2007 to 2022. They also include country fixed effects.

Var	Trend Coeff	se	t-val	p-val	CI_L	CI_U
Incorrupton	-0.0141084	0.001422	-9.92	0	-0.02	-0.01
Infreedom	0.0017665	0.000828	2.13	0.034	0.00	0.00
Ingenerosity	-0.0053444	0.000771	-6.93	0	-0.01	0.00
Inhappiness	-0.0012031	0.000478	-2.52	0.012	0.00	0.00
Inhealthy	0.0013675	4.69E-05	29.16	0	0.00	0.00
Insocialsuppt	-0.0009596	0.000393	-2.44	0.015	0.00	0.00
log_gdp_per cap	0.0089332	0.000841	10.62	0	0.01	0.01

The variables show that generosity, social support, and happiness (in bold) have declined over the period.

US Regression Results from the GSS

The dependent variable is the happiness measure (3=very happy, 2=somewhat happy, 1=not very happy). Equation (1) basic controls are work status dummies, age, age-squared, marital status dummies, number of siblings, highest grade of schooling, educational, degree dummies, # of children dummies, religious denomination dummies, income, race dummies, log of the population of place live in, year dummies, and dummies for region.

Equation (2) is the same as (1) but with the trust index variable (3=can trust, 2=not sure, 1=can't be too careful). Equation (3) is the same as (2) but with party affiliation strength. Equation (4) adds dummies for newspaper readership levels. See below for descriptive statistics.

	(1)	(2)	(3)	(4)
2.wrkstst	-0.0123 (-1.43)	-0.0323*** (-2.88)	-0.0314*** (-2.79)	-0.00809 (-0.54)
3.wrkstst	-0.0588*** (-3.44)	-0.0577** (-2.53)	-0.0556** (-2.43)	-0.0486 (-1.56)
4.wrkstst	-0.205*** (-14.87)	-0.228*** (-12.21)	-0.227*** (-12.13)	-0.211*** (-8.28)
5.wrkstst	-0.0208** (-2.02)	-0.0332** (-2.42)	-0.0310** (-2.25)	-0.0109 (-0.58)
6.wrkstst	0.0611*** (3.90)	0.0747*** (3.69)	0.0719*** (3.56)	0.0877*** (3.13)
7.wrkstst	-0.00810	-0.0152	-0.0160	-0.00832

	(-1.00)	(-1.45)	(-1.53)	(-0.58)
8.wrkstst	-0.167*** (-9.12)	-0.184*** (-7.71)	-0.184*** (-7.70)	-0.227*** (-7.04)
age	-0.00892*** (-9.16)	-0.0114*** (-8.92)	-0.0113*** (-8.85)	-0.0127*** (-7.34)
age_sq	0.000105*** (10.53)	0.000128*** (9.76)	0.000124*** (9.44)	0.000134*** (7.55)
1bn.marital
2.marital	-0.270*** (-25.72)	-0.285*** (-20.80)	-0.282*** (-20.56)	-0.233*** (-12.57)
3.marital	-0.259*** (-33.14)	-0.278*** (-27.14)	-0.275*** (-26.77)	-0.226*** (-16.47)
4.marital	-0.320*** (-22.71)	-0.345*** (-18.88)	-0.344*** (-18.82)	-0.304*** (-12.45)
5.marital	-0.223*** (-26.76)	-0.252*** (-22.96)	-0.249*** (-22.61)	-0.228*** (-15.36)
income	0.0176*** (15.46)	0.0171*** (11.52)	0.0169*** (11.42)	0.0183*** (9.02)
sibs	0.000105 (0.12)	-0.000130 (-0.12)	-0.0000897 (-0.08)	0.000138 (0.09)
educ	0.00940*** (5.45)	0.00571** (2.54)	0.00512** (2.27)	0.00512* (1.66)
1.degree	0.00939 (0.99)	0.00577 (0.47)	0.00354 (0.29)	0.00765 (0.46)
2.degree	0.0209 (1.38)	0.00710 (0.36)	0.00495 (0.25)	0.0147 (0.56)
3.degree	0.0494*** (3.21)	0.0373* (1.86)	0.0309 (1.54)	0.0327 (1.20)
4.degree	0.0468** (2.43)	0.0259 (1.02)	0.0237 (0.93)	0.00364 (0.11)
1.childs	-0.0314*** (-3.71)	-0.0351*** (-3.17)	-0.0348*** (-3.14)	-0.0245 (-1.64)
2.childs	-0.0199** (-2.48)	-0.0272*** (-2.59)	-0.0256** (-2.43)	-0.0280* (-1.96)
3.childs	-0.0272*** (-2.98)	-0.0350*** (-2.93)	-0.0345*** (-2.89)	-0.0452*** (-2.80)
4.childs	-0.0227** (-2.04)	-0.0225 (-1.55)	-0.0202 (-1.39)	0.00712 (0.36)
5.childs	-0.0318** (-2.12)	-0.0202 (-1.03)	-0.0176 (-0.90)	-0.0249 (-0.94)

6.childs	0.000830 (0.04)	-0.00860 (-0.33)	-0.00930 (-0.35)	-0.00291 (-0.08)
7.childs	-0.0367 (-1.37)	-0.0705** (-2.07)	-0.0665* (-1.95)	-0.133*** (-2.89)
8.childs	0.0345 (1.46)	0.0489 (1.59)	0.0500 (1.62)	0.0861** (2.05)
2.relig	-0.0210*** (-3.27)	-0.0203** (-2.43)	-0.0136 (-1.62)	-0.0196* (-1.72)
3.relig	-0.0687*** (-3.68)	-0.0727*** (-2.95)	-0.0581** (-2.35)	-0.0630* (-1.92)
4.relig	-0.0786*** (-9.88)	-0.0664*** (-6.25)	-0.0510*** (-4.74)	-0.0599*** (-4.13)
5.relig	-0.0789*** (-4.12)	-0.0761*** (-3.15)	-0.0634*** (-2.62)	-0.0852** (-2.56)
6.relig	-0.0369 (-0.92)	-0.0446 (-0.80)	-0.0261 (-0.46)	-0.0786 (-0.99)
7.relig	-0.00144 (-0.03)	-0.0873 (-1.13)	-0.0600 (-0.77)	-0.0214 (-0.20)
8.relig	-0.0441 (-0.46)	-0.201 (-1.49)	-0.178 (-1.31)	-0.341* (-1.73)
9.relig	0.0291 (0.58)	0.00879 (0.13)	0.00434 (0.06)	-0.0863 (-0.99)
10.relig	-0.0363 (-0.70)	0.0174 (0.21)	0.0477 (0.56)	-0.0161 (-0.13)
11.relig	-0.0246 (-1.12)	-0.0551* (-1.85)	-0.0504* (-1.69)	-0.0369 (-0.92)
12.relig	-0.224** (-2.12)	-0.261* (-1.82)	-0.249* (-1.74)	-0.392** (-2.39)
13.relig	-0.0198 (-0.39)	0.0381 (0.52)	0.0339 (0.46)	0.0500 (0.49)
2.race	-0.0817*** (-9.97)	-0.0786*** (-7.24)	-0.0703*** (-6.24)	-0.0429*** (-2.87)
3.race	-0.000496 (-0.04)	0.000423 (0.03)	0.00740 (0.49)	0.0333 (1.64)
lnsizeplace	-0.00595*** (-4.62)	-0.00447*** (-2.67)	-0.00413** (-2.47)	-0.00462** (-2.04)
1974.year	0.0166 (0.72)			
1975.year	-0.0267 (-1.16)	-0.0184 (-0.79)	-0.0150 (-0.64)	.
1976.year	0.000121 (0.01)	0.00492 (0.21)	0.00761 (0.33)	.

1977.year	0.00156 (0.07)			
1978.year	0.0178 (0.78)	0.0289 (1.25)	0.0293 (1.26)	0.0469** (2.08)
1980.year	-0.0376 (-1.62)	-0.0312 (-1.32)	-0.0265 (-1.12)	
1982.year	-0.0439** (-1.99)			
1983.year	-0.0644*** (-2.83)	-0.0463 (-1.64)	-0.0462 (-1.64)	-0.0301 (-1.09)
1984.year	-0.0259 (-1.10)	-0.0200 (-0.83)	-0.0200 (-0.84)	
1985.year	-0.0774*** (-3.35)			
1986.year	-0.0286 (-1.22)	-0.00913 (-0.38)	-0.0122 (-0.51)	0.00112 (0.05)
1987.year	-0.0636*** (-2.85)	-0.0457** (-2.00)	-0.0491** (-2.15)	-0.0446** (-1.98)
1988.year	0.00287 (0.12)	0.0321 (1.21)	0.0276 (1.04)	0.0188 (0.58)
1989.year	-0.0330 (-1.41)	0.0119 (0.45)	0.00624 (0.24)	0.0245 (0.74)
1990.year	-0.00525 (-0.22)	0.0584** (2.11)	0.0530* (1.91)	0.0784** (2.25)
1991.year	-0.0563** (-2.41)	-0.0402 (-1.51)	-0.0475* (-1.78)	-0.0145 (-0.45)
1993.year	-0.0618*** (-2.68)	-0.0219 (-0.83)	-0.0247 (-0.93)	-0.00134 (-0.04)
1994.year	-0.0931*** (-4.53)	-0.0610*** (-2.68)	-0.0625*** (-2.73)	-0.0215 (-0.79)
1996.year	-0.0655*** (-3.15)	-0.0505** (-2.18)	-0.0523** (-2.25)	-0.0370 (-1.34)
1998.year	-0.0619*** (-2.97)	-0.0339 (-1.52)	-0.0344 (-1.55)	-0.0180 (-0.72)
2000.year	-0.0358* (-1.71)	-0.00845 (-0.36)	-0.0113 (-0.48)	0.0166 (0.59)
2002.year	-0.150*** (-7.15)	-0.0622** (-2.23)	-0.0662** (-2.37)	-0.0388 (-1.10)
2004.year	-0.171*** (-8.20)	-0.0637** (-2.25)	-0.0689** (-2.44)	-0.0546 (-1.55)
2006.year	-0.0725*** (-3.49)	-0.0471** (-2.12)	-0.0510** (-2.29)	-0.0107 (-0.43)

2008.year	-0.117*** (-5.24)	-0.113*** (-4.51)	-0.118*** (-4.68)	-0.0558* (-1.78)
2010.year	-0.130*** (-5.87)	-0.113*** (-4.52)	-0.115*** (-4.56)	-0.0525* (-1.75)
2012.year	-0.0693*** (-3.11)	-0.0501** (-1.99)	-0.0519** (-2.05)	-0.0309 (-1.00)
2014.year	-0.0647*** (-3.05)	-0.0347 (-1.46)	-0.0335 (-1.40)	-0.00438 (-0.15)
2016.year	-0.106*** (-5.11)	-0.0911*** (-3.94)	-0.0907*** (-3.91)	-0.0495* (-1.75)
2018.year	-0.0869*** (-4.04)	-0.0716*** (-2.95)	-0.0748*** (-3.08)	-0.0177 (-0.58)
2021.year	-0.301*** (-14.84)			
2022.year	-0.264*** (-11.20)	-0.226*** (-6.79)	-0.227*** (-6.82)	-0.177*** (-4.08)
trust_new		0.0588*** (16.12)	0.0587*** (16.09)	0.0433*** (8.68)
1.partyid			-0.0356*** (-3.24)	-0.0356** (-2.42)
2.partyid			-0.0701*** (-5.62)	-0.0652*** (-3.89)
3.partyid			-0.0383*** (-3.15)	-0.0472*** (-2.88)
4.partyid			-0.0229* (-1.66)	-0.0293 (-1.59)
5.partyid			0.0101 (0.83)	0.00906 (0.56)
6.partyid			0.0705*** (5.10)	0.0533*** (2.86)
7.partyid			-0.0628** (-2.36)	-0.0622 (-1.61)
2.news				-0.0278** (-2.27)
3.news				-0.0206 (-1.42)
4.news				-0.0585*** (-3.78)
5.news				-0.0468*** (-2.89)
_cons	2.280***	2.283***	2.309***	2.344***

	(68.23)	(55.02)	(53.97)	(40.98)
N	58198	35055	34936	18383
R-sq	0.095	0.105	0.108	0.097
adj. R-sq	0.094	0.103	0.106	0.092
AIC	104827.9	64217.5	63859.6	32787.2
BIC	105509.7	64827.0	64528.0	33404.9

t statistics in parentheses. * p<0.10, ** p<0.05, *** p<0.01

Descriptive Statistics

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. sum happy_new trust_new income sibs educ size age
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Variable	Obs	Mean	Std. dev.	Min	Max
happy	72,390	2.151886	.623097	1	3
trust	42,670	1.782423	.9516668	1	3
income (cat)	63,439	10.19635	2.788442	1	12
sibs	70,605	3.84164	3.146775	0	68
educ	72,127	13.03463	3.182372	0	20
size	72,390	377.6258	1264.244	0	8175
age	71,621	46.55598	17.60042	18	89

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. tab partyid
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political party affiliation	Freq.	Percent	Cum.
strong democrat	11,795	16.40	16.40
not very strong democrat	14,286	19.87	36.27
independent, close to democrat	8,663	12.05	48.32
independent (neither, no response)	11,540	16.05	64.37
independent, close to republican	6,378	8.87	73.24
not very strong republican	10,678	14.85	88.09
strong republican	7,273	10.11	98.20
other party	1,292	1.80	100.00
Total	71,905	100.00	

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. tab news
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how often does r read newspaper	Freq.	Percent	Cum.
every day	19,175	41.80	41.80
a few times a week	8,986	19.59	61.39
once a week	5,693	12.41	73.81
less than once a week	5,171	11.27	85.08
never	6,844	14.92	100.00
Total	45,869	100.00	

. tab wrkstat

labor force status	Freq.	Percent	Cum.
working full time	35,267	48.74	48.74
working part time	7,430	10.27	59.01
with a job, but not at work because of	1,556	2.15	61.16
unemployed, laid off, looking for work	2,621	3.62	64.78
retired	10,886	15.05	79.83
in school	2,187	3.02	82.85
keeping house	10,764	14.88	97.73
other	1,643	2.27	100.00
Total	72,354	100.00	

. tab marital

marital status	Freq.	Percent	Cum.
married	37,590	51.96	51.96
widowed	6,756	9.34	61.30
divorced	9,642	13.33	74.63
separated	2,441	3.37	78.01
never married	15,910	21.99	100.00
Total	72,339	100.00	

. tab degree

r's highest degree	Freq.	Percent	Cum.
less than high school	14,192	19.66	19.66
high school	36,446	50.48	70.14
associate/junior college	4,355	6.03	76.17
bachelor's	11,248	15.58	91.75
graduate	5,953	8.25	100.00
Total	72,194	100.00	

. tab childs

number of children	Freq.	Percent	Cum.
0	20,162	28.65	28.65
1	11,108	15.79	44.44
2	17,391	24.72	69.16
3	10,752	15.28	84.44
4	5,523	7.85	92.29
5	2,483	3.53	95.81
6	1,289	1.83	97.65
7	694	0.99	98.63
8 or more	961	1.37	100.00
9	1	0.00	100.00
Total	70,364	100.00	

. tab relig

r's religious preference	Freq.	Percent	Cum.
protestant	40,125	55.77	55.77
catholic	17,242	23.96	79.73
jewish	1,421	1.97	81.70
none	9,895	13.75	95.46
other	1,224	1.70	97.16
buddhism	272	0.38	97.53
hinduism	158	0.22	97.75
other eastern religions	44	0.06	97.82
muslim/islam	201	0.28	98.09
orthodox-christian	176	0.24	98.34
christian	1,000	1.39	99.73
native american	36	0.05	99.78
inter-nondenominational	159	0.22	100.00
Total	71,953	100.00	

. tab race

race of respondent	Freq.	Percent	Cum.
white	57,657	79.77	79.77
black	10,215	14.13	93.90
other	4,411	6.10	100.00
Total	72,283	100.00	

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