## ECONSTOR

Make Your Publications Visible.

## Working Paper

The socio political demography of happiness

New Working Paper Series, No. 331

## Provided in Cooperation with:

George J. Stigler Center for the Study of the Economy and the State, The University of Chicago Booth School of Business

Suggested Citation: Peltzman, Sam (2023) : The socio political demography of happiness, New Working Paper Series, No. 331, University of Chicago Booth School of Business, Stigler Center for the Study of the Economy and the State, Chicago, IL

This Version is available at:
https://hdl.handle.net/10419/274143

## Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

## Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

# The Socio Political Demography of Happiness 

Sam Peltzman<br>University of Chicago, Booth School of Business

July 2023
New Working Paper Series No. \#331


#### Abstract

: Since 1972 the General Social Survey (GSS) has asked a representative sample of US adults "... [are] you...very happy, pretty happy, or not too happy?" Overall, the population is reasonably happy even after a mild recent decline. I focus on differences along standard socio demographic dimensions: age, race, gender, education, marital status income and geography. I also explore political and social differences. Being married is the most important differentiator with a 30percentage point happy-unhappy gap over the unmarried. Income is also important, but Easterlin's (1974) paradox applies: the rich are much happier than the poor at any moment, but income growth doesn't matter. Education and racial differences are also consequential, though the black-white gap has narrowed substantially. Geographic, gender and age differences have been relatively unimportant, though old-age unhappiness may be emerging. Conservatives are distinctly happier than liberals as are people who trust others or the Federal government. All above differences survive control for other differences.


> Stigler Center for the Study of the Economy and the State University of Chicago Booth School of Business 5807 S Woodlawn Ave Chicago, IL 60637

# The Socio Political Demography of Happiness 

Sam Peltzman*

University of Chicago, Booth School of Business

[^0]
#### Abstract

Since 1972 the General Social Survey (GSS) has asked a representative sample of US adults "... [are] you ...very happy, pretty happy, or not too happy?" Overall, the population is reasonably happy even after a mild recent decline. I focus on differences along standard socio demographic dimensions: age, race, gender, education, marital status income and geography. I also explore political and social differences. Being married is the most important differentiator with a 30-percentage point happy-unhappy gap over the unmarried. Income is also important, but Easterlin's (1974) paradox applies: the rich are much happier than the poor at any moment, but income growth doesn't matter. Education and racial differences are also consequential, though the black-white gap has narrowed substantially. Geographic, gender and age differences have been relatively unimportant, though old-age unhappiness may be emerging. Conservatives are distinctly happier than liberals as are people who trust others or the Federal government. All above differences survive control for other differences.

Keywords: happiness, demographics, family, Easterlin paradox, education, income, social capital, political ideology


JEL Classification: D10, D60, E01, I31, J10, J12, J18, Z13

## 1. Introduction

Since 1972 the General Social Survey (GSS) ${ }^{1}$ has asked a representative sample of US adults:
"Taken all together, how would you say things are these days--would you say that you are very happy, pretty happy, or not too happy?

This paper is about the answers to this question. So it is one in a long line of "happiness research" whose common topic is self-reported happiness, either in the GSS or in similar surveys around the world. This line of research cuts across the social sciences and now has its own Journal of Happiness

## Studies.

Economists' contributions to happiness research echo throughout this paper, though I will not try to summarize them. One motive for economists' interest in the topic is their search for the everelusive social welfare function in policy analysis (Frey and Stutzer, 2002) ${ }^{2}$. Another is the perennial "can money buy happiness" question. The most well cited contribution by an economist, Easterlin (1974), asks this question. His answer is the "Easterlin Paradox:" across individuals within a society the answer is clearly "yes," but over time or across countries the income-happiness relation is much flatter. Indeed a more recent worry has been declining happiness over time. Economists have also studied differences in happiness and differential trends across e.g., racial and gender groups. Blanchflower and Oswald (2019) survey this strand and Stevenson, and Wolfers $(2008,2009,2012)$ emphasize racial and gender

[^1]differences and their trends. The broad patterns here are narrowing advantages for whites and females. ${ }^{3}$

This paper also describes differences and trends in happiness across familiar socio-demographic groupings. Then I explore the role of political and social differences, specifically political ideology and social trust. But I claim no originality here either. Most every aspect I discuss appears somewhere in the vast happiness literature. My main goal is to summarize in one place and on a common metric the broad patterns in happiness and thus show which differences are the more important.

The usual caveats about causal inference should be kept in mind All of them - mutual and reverse causality, omitted variables, selection, etc. - apply to most every comparison you will see. For example, married people are happier than unmarried. Is that because marriage produces happiness or because unhappy people tend to be difficult to live with or because they sort out of the marriage market and on and on or all of the above? I leave such questions to others but show that the marriage gap is large enough to merit asking them.

Answers to survey questions also warrant caution. The questions usually have no tradeoffs and the answers are low-stakes. Potential biases due to framing, scaling and so on lurk. For example, the three answers to the happiness question are, in order, "very" "pretty" and "not too." Over half the respondents invariably choose "pretty." How many choose this because it seems a reasonable middle ground? Other questions have only two answers (yes or no) or five (strongly $x$, mostly $x$, neutral, etc.). How many of the pretty happy would be more committal with more choices? How would they align on a yes/no question? ${ }^{4}$

[^2]The arbitrary scaling of survey answers raises interpretive problems. Consecutive numbers are assigned to the choices. So very (1), pretty (2) and not so happy (3) are each equidistant. It is common to label a change in the mean score as "more" or "less" happiness This is convenient shorthand, which I have already implicitly used. Bond and Lang (2019) surface some pitfalls. They assume that some continuous happiness function underlies your response, which depends on whether you are above or below some threshold. We do not know this function, where the thresholds are for an individual, how those compare across individuals, and more. They show how differently shaped happiness functions or thresholds can eliminate or even reverse some group differences widely discussed by economists. I would add a caveat about drawing strong policy implications ${ }^{5}$. So, be clear that the data I will describe are answers to survey questions conveniently labeled as happiness.

The next section summarizes patterns in overall happiness in the US population and within sub populations over the last half century. The presentation is mainly visual. The sub-populations are often related statistically (e.g., more education and higher income), so a following section takes up conditional means and compares these to the unconditional means. A summary concludes.

## 2. Happiness Means and Trends: 1972-2018

Figures 1 and 1A show mean happiness in the US population 25 and older ${ }^{6}$. This and subsequent figures are smoothed estimates of the mean and its 95 percent confidence interval over the

[^3]various GSS surveys since 1972, excluding $2021 .{ }^{7}$ I rescaled the survey answers to -100 for "not too happy" ("Sad" hereafter), 0 for pretty happy ("Neither" hereafter) and +100 for very happy ("Happy" hereafter). This scaling yields results that are like election returns. For example mean happiness across all surveys is a bit over +22 (the horizontal line in Figure 1). This means that per 100 respondents on average 22 more people were Happy than Sad over the last 50 years. In electoral terms this is a landslide - a 22 point plurality of Happy over Sad in a three-way contest. The landslide looms larger when we recall that around half of survey respondents choose Neither. If we think of these as nonvoters in a two-way contest (and, numerically, 50 percent not voting isn't unrealistic for US elections), the happiness landslide would double. That is, of every 50 who "vote" around 36 vote Happy and 14 Sad. This is already a notable result: the US population has been decidedly happy - by a 70-30 landslide among happiness voters - over the last 50 years.

Figure 1 shows that happiness was trendless up to the new millennium, then declined for the next decade or so followed by a bottoming in recent surveys. This post-2000 downturn has elicited concern in the literature I have cited. However, the decline is modest: around 4 points (from around 23 to 19). I discuss subsequently some substantial level and trend differences within the population. I also note that the post-2000 decline is significant statistically: the 95 per cent confidence. In these data,

[^4]Figure 1. Happiness. 1972-2018


Source: General Social Survey. Population 25 and over, "happy" variable. Scale: +100=very happy, 0=pretty happy, $-100=$ not very happy. Sample mean (22.34) shown as horizontal line. Graph shows smoothed mean and $95 \%$ confidence interval for each year.

Figure 1A. Distribution of Happiness by Response. 1972-2018


Vertical axis shows percent of respondents answering GSS happiness question as indicated
even within subgroups, magnitudes of, say, 5 points or more are usually sufficient to reject the null. I point this out here to save time subsequently by focusing almost entirely on magnitudes rather than tests against zero.

Figure 1A, shows trends of the constituents of overall happiness. There is convergence toward the middle prior to 2000: Happy and Sad were both declining and the Neither group was growing. After 2000, when mean happiness turned down, Happy kept declining, but Sad turned up and Neither peaked and then declined. So one way to understand the post-2000 decline is that more of those on the Neither/ Sad margin chose the latter. Overall, the Sad share today is around where it was in 1972, the Happy share has declined and the Neither share has increased. The modest magnitudes notwithstanding ${ }^{8}$, I will often distinguish the trendless pre-2000 period from the post-2000 period of declining happiness.

The next group of figures shows trends across several familiar socio-demographic groups: gender, marital status, age, race, education and income. I then show some of the geography of happiness followed by a tentative probe into its political sociology. To help comparisons I use similar scales on the $y$-axes and include the sample mean (horizontal line) for reference. All of the figures show unconditional differences. These reflect a bundle of forces. For example, high-income people also tend to be better educated, older, whiter, etc. than low-income people. So the following section summarizes conditional means (e.g., income differences net of the other forces)

## A. Gender

Figure 2 shows happiness by gender, and provides the basis for recent concern about declining female happiness: this decline actually began in the 1970s and has continued more or less steadily since then. The total decline is around 7 points (from 26 to 19 on my scale). Male happiness is slightly

[^5]Figure 2. Happiness by Gender. 1972-2018


See note to Figure 1 for sources and definitions.
increasing until 2000, after which it declines sharply. Males were less happy than females in the 1970s, caught up by 2000, then joined in the post-2000 decline. For the post-2000 years males and females have been about equally happy. My interpretation of this history is that gender is not an especially important category for studying happiness differences today. By around 1990 the male and female confidence intervals in Figure 2 had generously overlapped and stayed that way thereafter. The interesting questions are historical: for example, why did the earlier gender happiness differences emerge and then disappear? Why has female happiness declined steadily, while male happiness has only recently declined?

## B. Marital Status

Marital status is and has been a very important marker for happiness. A glance at Figure 3 shows this: the married population is over 30 points happier than the unmarried, and that number has hardly changed since the 1970s. It is the same (not shown) for men and women. ${ }^{9}$ Mean happiness for the non-married hovers near zero (as many Sad as Happy) throughout the sample period. So the happiness landslide comes entirely from the married. Low happiness characterizes all types of nonmarried. ${ }^{10}$ No subsequent population categorization will yield so large a difference in happiness across so many people (around one third of the sample is unmarried).

The trendlessness in either category in Figure 3 contrasts to the downturn in overall happiness since 2000. The connection between these trends comes from recent decline in marriage. Arithmetically, most of the overall downturn - around 3 of the 4 points - is attributable to decline in

[^6]Figure 3. Happiness by Marital Status. 1972-2018


See note to Figure 1
marriage post-2000. ${ }^{11}$ To be sure, the decline of marriage was well under way prior to $2000 .{ }^{12}$

Nevertheless, the relevant magnitudes are great enough to suggest that marriage and happiness share some common sources.

## C. Age

Figure 4 shows happiness trends for those younger and older than 45. It is unclear what a reasonable prior about age differences should be. ${ }^{13}$ Some of the literature claims to find a U-shaped pattern with a nadir around age 50. But this U-shape seems fragile (Frijters and Beatton, 2012), and it does not show up in my sample. Instead, (not shown) there is a backward L: happiness is flat until the late 50 s, increases until the late 70 s and then falls part way back. Overall, happiness is higher for the over 45 group for most of the period, but the two groups converge after 2000. ${ }^{14}$ Most of the post-2000 overall decline in happiness is coming from the older population ${ }^{15}$ However, like gender, age is not an empirically important marker for happiness in these data. (Section 4 has an important qualification.)

## D. Race

Racial differences are much studied in economics and elsewhere. They are often consequential, which is the case here as shown in Figure 5. Currently whites are around 15 points happier than blacks.

[^7]Figure 4. Happiness by Age. 1972-2018
A. Age 25-44

B. Age 45 \& Over


Figure 5. Happiness by Race. 1972-2018


See note to Figure 1

But the gap has been narrowing steadily - from around 25 points In the early $1970{ }^{16}$ Figure 5 shows that the narrowing is coming from a declining white trend converging on a rising black trend. The post2000 decline in happiness is limited to the white population.

This racial convergence has occurred without convergence in other important correlates of happiness. For example, the difference between white and black marriage rates widened by nine percentage points between the 1970s and 2010s. ${ }^{17}$ Income (discussed below) is also important for happiness, but the changes here are too small to be relevant. ${ }^{18}$

## E. Education

The literature on education and happiness is inconclusive or dismissive. For example, one recent estimate (Helliwell et al, 2017) is that a college degree is worth less than a tenth of being "partnered" or escaping poverty. ${ }^{19}$ Another survey (Veenhoven, 2010) finds no consistent connection. Other work shows more discernible effects (Nikolaev, 2016). Change over time seems largely ignored. ${ }^{20}$

Figures 6 A and 6 B suggest a more important role for education. In Figure 6A happiness jumps 8
or 9 points upon graduation from either high school or a four-year college. So, the difference between a high school dropout and college graduates is around 18 points - or a few points more than recent racial

[^8]Figure 6A. Happiness by Education. Means, 1972-2018


[^9]Figure 6B. Happiness and Education. 1972-2018


See note to Figure 1
differences and around 60 per cent of the marriage differential. There is no meaningful gain in happiness for those going on to college for less than four years.

The trends in Figure 6B reinforce the importance of college graduation. This is the only group that has not suffered meaningfully declining happiness over any time period. Accordingly, by the 2010s the gap between college graduates and high school dropouts had widened to around 25 points (from 15 points in the 1970s). College graduates are also far more common in the 2010s: their sample share more than doubled to around one third of those over 25 . So arithmetically - a higher weight on a happier group - education has been a positive force for happiness. Simple counterfactuals suggest a contribution of 3 to 5 points from increased education attainment. ${ }^{21}$

This set of facts is hinting at a causal role for education in the sense that the increase in college graduation is coming from parts of the population who would not have gone beyond high school earlier: a selection or reverse causality story would imply that these marginal college graduates would drag down the college happiness premium. However, another important fact about the history is the widening college-high school income advantage, which raises questions about the relative role of income and education that I address later.

Overall, the data imply a more important, less ambiguous role for education than some past work suggests.
F. Income

Economists are understandably interested in the connection between income and happiness. The two parts of Figure 7 show the level and trend of that relationship, which is based on respondent

[^10]Figure 7A. Happiness by Income Percentile. Means, 1972-2018


See note to Figure 1.

Figure 7B. Happiness by Income Percentile Groups. 1972-2018


See note to Figure 1
household's position in the income distribution for a survey year. Figure 7A shows a precisely estimated, nearly linear relationship between happiness and the household's income percentile ${ }^{22}$. The magnitudes are substantial: for example the happiness difference between the $75^{\text {th }}$ and $25^{\text {th }}$ income percentiles exceeds 20 points. Moreover these differences have been widening. Figure 7B shows trends for the bottom, middle three and top quintiles. The difference between the top (panel C) in and bottom (panel A.) quintiles was around 28 in the early 1970s. Since then happiness has declined steadily at the bottom and remained flat at the top so that the top-bottom differential had widened to around 43 by the late 2010s. The Easterlin paradox - the positive relation between income and happiness within a typical year and a flatter relation across time - shows up in sharp focus here: even the top quintile, which has benefitted from both rising per capita national income and an increased share of that income, is no happier today than in the 1970s. ${ }^{23}$ "Paradox" seems mild for such a disjunction.

## G. Geography

Figures 8 and 9 explore geographic dimensions of happiness, specifically region and type of place. Regional differences (Figure 8) were never very large but seem to have persisted until around 2000. Until then the Northeast was the least happy region, but the gap was narrowing. Since 2000 regional differences seem to have again widened. Overall, the Northeast has averaged slightly (around 3 points) less happy than the rest. ${ }^{24}$

[^11]Figure 8. Happiness by Region. 1972-2018


Smoothed means by Census Region groups: Northeast=New England \& Mid Atlantic; Midwest=East North Central \& West North Central; South=South Atlantic, East South Central \& West South Central; West=Mountain, Pacific, Alaska \& Hawaii. See also note to Figure 1

Figure 9. Happiness by Place of Residence. 1972-2018


See note to Figure 1

Differences by place seem more consequential. Figure 9 shows trends for residents of the central cities of the 100 largest metro areas, the suburbs of those SMAs and everywhere else - a catchall including smaller urban and rural areas which contain around half the population. Within the large SMAs around 55 percent are suburban. Again the year 2000 seems to be a turning point. Until then large cities were notably - over 10 points - unhappier than anywhere else. Since then the difference has halved. Cities remain the least happy places, but they have entirely escaped the post 2000 national decline in happiness ${ }^{25}$.

## 3. Some Socio Political Aspects

The recent decline in happiness coincides with concerns about the social fabric. As discussed below, there has also been a decline in how much trust people have in each other and in some government institutions. Political divisions also seem deeper. Are these socio political trends reflected in individual happiness? I provide a few tentative answers here.

## A. Political Ideology

The GSS has long asked respondents to self-classify themselves on a 7 point left-right scale ${ }^{26}$, which I summarize as liberal, moderate or conservative. In contrast to the polarization in electoral politics these self-classifications have changed little. The US polity is center-right with a large moderate core. For the whole sample 25.8 per cent are liberal, 38.6 moderate and 35.6 conservative; these numbers are essentially trendless. (In Peltzman, 2018 I show that, within this stable self-classification, there is some polarization on issues - conservatives have leaned more conservative and liberals more

[^12]liberal.) There isn't much basis here for a prior on any connection between left-right self-classification and self-reported happiness.

But there is one. Figure 10 has standard color coding - red for conservatives, liberals in blue and the whole sample in purple. Moderates are in gray. To capture any trends I show means for subperiods before and after 2000. The consistent pattern is increased happiness from left to right. Conservatives are around 9 points happier than liberals and 7 points happier than moderates overall and in each sub-period. These are not close to the marriage premium or income differential, but they are non-trivial. For perspective, they are double the peak gender difference in Figure 2, about half the contemporary racial difference in Figure 5 and roughly the same as the difference between college and high school graduates in Figure 6A. This ideological gap has attracted scholarly notice and attempted explanation. These cover a wide range from: it isn't true, because conservatives tend toward "self enhancement" but smile less than liberals (Wojcik et al, 2015) to conservatives are happier because they are inured to inequality (Napier and Jost, 2008) to conservatives are better adjusted and have better mental health than liberals (Schlenker et al, 2012; Burton et al, 2015).
B. Trust
(1) In general

Another widely studied GSS question asks: "Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?" The permissible answers are 1. Can trust, 2. Can't be too careful and 3. Depends. Most all answers are 1 (or +100 on my scale) or 2 , and 2 has been ascendant. In the early 1970 s the answers were almost evenly split (a mean of -6.2 ). By the 2010 s the mean had declined to -29 , i.e. nearly a 2 to 1 majority against trusting others. This decline in generalized trust has led to concern about a broader erosion of "social capital" as in Putnam (2000).

Figure 10. Happiness and Political Ideology. Means, 1972-2018 and Sub-Periods


ALL = sample average. Lib= liberals. Mod= moderates. Con= conservatives; from answers to GSS question "polviews". See also note to Table 1.

Common declining trends of trust and happiness raise the question of whether more trusting
individuals are happier (or vice versa). They are. Figure 11 shows that trusting people are happier by a large margin that averages 18 points over the whole sample period and has widened by 4 points from pre to post-2000.

## (2) In government

Similar to interpersonal trust, trust in government has been declining substantially. The GSS has asked how much confidence respondents have in people running various institutions, such as business, the military, education, etc ${ }^{27}$. There is no common trend across these institutions, ${ }^{28}$ but confidence in the executive and legislative branches of the federal government has eroded. ${ }^{29}$ As with general trust, confidence in the federal government ${ }^{30}$ was almost break even in the early 1970s (a mean of -4 points). By the 2010s, this had declined to - 37 (and -44 for the US Congress specifically). In recent years only one in eight respondents have been fully confident in the federal government. This decline has cut across all political ideologies. ${ }^{31}$

The overlap between people who lack trust generally and those lacking confidence in government is small. ${ }^{32}$ Nevertheless, those more confident in government are also happier. To save

[^13]Figure 11. Happiness and General Trust. Means, 1972-2018 and Sub-Periods


ALL=sample average. Subsamples from answers to GSS "trust" question. Yes= most people can be trusted. No= can't be too careful. (Depends, not shown). See also note to Figure 1.
space Figure 12 shows the mean answers to the happiness question according to confidence in the executive and legislative branches. ${ }^{33}$ Those most confident in government are distinctly happier around 17 points overall - than the not confident. The Some confidence group is consistently around half way between the Yes and No. Results (not shown) are similar for the Executive and US Congress considered separately. ${ }^{34}$ There is slightly less happiness in the more recent period for the dwindling group that remains confident in government ${ }^{35}$. So, arithmetically, the overall decline in happiness (the ALL columns in Figure 12) can be apportioned to fewer people with confidence in government and to some less happiness within that (and the other) groups.

In sum, more trusting people are happier. This suggests that the recent shrinkage of both has some common roots.

## 4. Conditional Differences

This section discusses differences within particular groups holding other differences constant.

Table 1 shows these conditional differences for demographic groups and includes the unconditional differences in column 1 for comparison. Column 2 shows the conditional differences for all years, while pre and post 2000 data are in Columns 3 and 4. The change between these periods is in column 5 with unconditional changes in column 6 for comparison. The conditional differences in columns 2-4 are coefficients from a regression of the form

$$
\text { (1) } \text { Happiness }_{i, t}=a+\sum_{i} b_{i} * X_{i, t}+\text { fixed effects }+ \text { residual } l_{i, t}
$$

[^14]Figure 12. Happiness and Confidence in Federal Government. Means, 1972 and Sub-Periods


ALL=sample average. Subsamples from answers to GSS questions "confed" and "conlegis" about confidence in executive branch of federal government (confed) and US Congress (conlegis); Yes=a great deal, No=hardly any. Bar height is average answer for confed and conlegis in the indicated period. See also text and Note to Figure 1

## Table 1. Conditional Mean Differences in Happiness. 1972-2018 and Sub-Periods

| Unconditional <br> Difference: 1972-2018 | Characteristic and Difference |  | Sub-period |  | Change: After 2000-Before | Unconditional Change: After 2000-Before |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1972-2018 | 1972-2000 | 2001-2018 |  |  |
| (1) |  | (2) | (3) | (4) | (5) $=(4) \cdot(3)$ | (6) |
| 2.65 | AGE: Over - Under45 | 2.86 | 5.53 | -2.97 | -8.18 | -3.854 |
| 0.72 * | SEX: Female - Male | 4.04 | 4.42 | 2.87 | -1.21* | -0.199 * |
| 31.53 | MARRIED?: Yes - No | 23.82 | 22.86 | 25.66 | 2.25 * | 4.210 |
| -21.22 | RACE: Black - White | -10.79 | -14.21 | -3.88 | 9.24 | 9.560 |
|  | EDUCATION (v HS Grads): |  |  |  |  |  |
| -9.32 | Less than HS Grad | -3.12 | -3.60 | -4.58 | -2.04* | -1.390 * |
| 1.63 | Some College | 1.87 | 1.35 * | 2.68 | 1.13* | 3.298 |
| 10.5 | College Grads \& + | 5.87 | 5.40 | 5.91 | -0.15 * | 6.546 |
| 0.463 | INCOME: \%ile (continuous) | . 246 | . 221 | . 300 | . 069 | 0.041 |
| -9.45 | PLACE: Large City-Other | -2.87 | -3.98 | -0.79 * | 3.26 | 5.792 |
|  |  |  |  |  |  |  |
|  | Baseline Mean | 2.45 | 3.44 | 2.09 * | -1.06 * |  |
|  | R^2 (adj) | 0.080 | 0.075 | . 094 |  |  |
|  | Standard Error of Estimate | 60.6 | 60.4 | 60.7 |  |  |
|  | N | 48768 | 32814 | 15954 |  |  |

Regressions include time, region fixed effects.
Unconditional means (cols 1, 6) shown for comparison are net of time, region fixed effects.
Coefficients in cols 2-4 show mean differences between the indicated groups conditional on all the other differences in the table.

Income percentile shows the slope of happiness on income percentile (1 to 100). For example, the . 246 in column 2 means that moving up 50 percentiles (from, say 25th to 75 th) is associated with 50*.246=12.3 more points on the happiness measure
*=not significantly different from zero at p<. 05
Baseline mean is for a white male, hs grad, under45, outside large central city, at 50th income percentile, residing in New England.
where Happiness is my scaling of a year t respondent's answer to the happiness question and the X 's are mainly dummies for a specific characteristic (i) as indicated in the Table. For example for $\mathrm{i}=\mathrm{sex}$, $X(\operatorname{sex})=+1$ for female respondents and the coefficient $b(s e x)=$ difference between female and male respondents conditional on all the other differences. X (income) is a continuous measure - the income percentile of the respondent's household. So $b$ (income) shows the conditional effect of a 1 percentile increase. The regression includes fixed effects for survey year and region (not shown).

For simplicity the regression is purely additive, with no interactions. For example, the first line in column (2) shows that $\mathrm{b}(\mathrm{age})=2.86$. This means that 2.86 per cent more of the older than younger respondents were happy than sad over the sample period, holding constant differences in marital status, gender, race, etc. Of course, this age difference might be smaller or larger than 2.86 for, say, females than males. However, such interactions go beyond my present purpose.

The Baseline Mean below each regression shows mean happiness for an individual with all baseline characteristics (male, white, etc. per the Note to the Table). The coefficients tell us how much the baseline would change if one of these characteristics changed without change in the others. I do not show conventional tests of significance against the null, because there is enough power in the data to reject the null in most cases; the * denotes exceptions.

Table 1 shows that meaningful unconditional differences also tend to be important ceteris paribus. Specifically, in column 1 the largest unconditional differences come from marital status and income percentile (based on a 50 point difference) followed by race and education. Conditional differences (column 2) rank similarly. However, they are consistently smaller than the unconditional differences. For marriage, the unconditional difference is over 30 points $v$ low 20 s with all other differences held constant. Conditional differences are around half the unconditional for race (11 v 21 points) and income ( 12 v 23 more points for a 50 more income percentile points). For education the
conditional difference between college graduates and high school dropouts (around 9 points) is also around half the unconditional difference.

The changes in unconditional (column 6) and conditional (column 5) differences from the pre to the post 2000 period also all go in the same direction. But there is no consistent pattern in magnitudes. The conditional change is larger for age, and income, about the same for race and smaller for education.

The two kinds of changes surface some issues meriting further study:

- The relative decline of happiness at older ages.

This is visible in the unconditional data in Figure 4 or Table 1, column 6, but these understate the pure age effect, which has reversed from a significant age premium to a meaningful discount. Up to now, favorable relative changes in marriage, income and education have obscured this reversal. ${ }^{36}$ These three changes in favor of the older group account for the entire substantial gap ( 4.65 points) between the conditional and unconditional changes. ${ }^{37}$ These mitigating factors are likely to wane going forward, which would imply a meaningfully wider old-young happiness gap in the future. ${ }^{38}$

- The role of relative v money income.

[^15]The conditional happiness-income percentile gradient has become steeper: moving up 50 percentiles in the income distribution buys 15 extra happiness points after 2000 v 11 before. The distribution of money income has widened over time, so moving up 50 percentiles implies a wider gap in money income in the later period. ${ }^{39}$ This extra money income is arguably driving the steeper gradient with respective to relative income: when I replaced income percentile with the log of money income in the regressions the difference between the coefficients in the two periods was no longer significant statistically. ${ }^{40}$ This apparently more stable relation of happiness to money than to relative income cannot tell us whether either money or rank is "buying" happiness, but it does suggest that the monetary aspect, not just rank, is meaningful.

- The education gap in happiness is not getting wider.

Unconditional education differences (Figures 6A and 6B) have widened over time. Only college graduates have avoided a long-term decline in happiness. By contrast, conditional education differences have remained stable. All else the same, college grads have been 9 or 10 points happier than high school dropouts and 5 or 6 points happier than high school grads since the 1970s. Marriage differences - marriage rates declined less among the educated - contributed to the apparent widening of the education-happiness gradient. ${ }^{41}$ The stable conditional gradient is notable in light of the great change in the relative size of education groups. ${ }^{42}$

[^16]In sum, changes in particular conditional differences and changes in specific population characteristics can have substantial effects on happiness. However, over the last 50 years these factors have pulled in different directions with a slight negative net effect in the last two decades. ${ }^{43}$ The main message of the preceding tour through socio demography is that trends, or lack thereof, in aggregate happiness mask important variety within the population.

## A. Conditional Differences in Political Ideology and Trust

We saw that self-identified conservatives and people who express trust in others or confidence in the Federal government are notably happier than liberals or less trusting people. Table 2 shows that those differences also hold up after controlling for other socio demographic differences. Table 2 is structured like Table 1. Columns 2 through 4 show results when I add the ideological and trust differences to the other $\mathrm{X}^{\prime}$ s in equation (1). ${ }^{44}$ As in Table 1, all the conditional and unconditional differences (columns 1 and 2) go in the same direction. Also similar to Table 1, ideology and general trust conditional differences are roughly half the the unconditional differences. However, the conditional differences for those trusting the government is essentially the same as the unconditional differences - i.e., quite substantial. The rest of Table 2 (columns 3-6) explores changes after 2000 with unremarkable results. Perhaps moderates have become closer to conservatives, and the dwindling band

[^17]
## Table 2. Conditional Mean Differences in Happiness by Ideology and Trust. 1972-2018 and Sub-Periods

| Unconditional <br> Difference: <br> 1972-2018 | Characteristic and Difference |  | Sub-period |  | Change: After 2000-Before | Unconditional Change: After 2000-Before |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1972-2018 | 1972-2000 | 2001-2018 |  |  |
| (1) |  | (2) | (3) | (4) | (5) $=(4) \cdot(3)$ | (6) |
|  | A. Political Ideology |  |  |  |  |  |
| 1.74 | Moderates - Liberals | 1.27 | 0.08 * | 3.04 | 2.96 * | 0.65 * |
| 8.58 | Conservatives - Liberals | 3.95 | 4.19 | 3.61 | -0.58* | 1.16 * |
|  | B. Trust |  |  |  |  |  |
| 18.20 | General: Can trust - Cannot | 10.05 | 9.48 | 10.69 | 1.20 * | 3.17 |
|  | Confidence in Government: |  |  |  |  |  |
| 8.52 | a) Some-Low | 6.92 | 7.91 | 4.54 | -2.97* | -4.36 |
| 16.50 | b) High-Low | 16.87 | 16.51 | 17.57 | 1.06 * | -0.01 * |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

See note to Table 1. Regressions include all variables in Table 1 regressions plus those shown here. Coefficients are differences from the baseline category (liberals for ideology and Low or Cannot for trust variables). See notes to Figures 11 and 12 for definitions.

Government Confidence is my summary classification of answers to the two questions about confidence in the executive branch of the federal government and the US Congress. Low=respondent has little confidence in both; Some=respondent has some confidence in both or a great deal of confidence only in one; High= respondent has a great deal of confidence in both.

Baselines and regression summary stats not shown to save space.
of those highly confident in government has become more sharply delineated from everyone else. But such hints come with substantial risk of error as shown by the uniform inability to reject the null in column 5.

The main conclusion from Table 2 seems to be that there are durable and meaningful differences in happiness aligned with different social and political attitudes within the population that are not fully captured by differences in the main observables.

## 5. Summary

I have explored some differences in self-reported happiness within the US population over the last half-century. These self-reports are "yes, no or maybe" answers to an "are you happy?" survey question that has been asked of a random sample of the population since 1972. The answers are a staple of a large literature.

I converted survey answers to a scale that gives the net percentage of yes minus no answers within any group. The scaling has a theoretical range of +100 to -100 and a useful range about half that (since roughly half of most groups answer maybe). The actual differences in my data peak at around 30 points. Anything over 5 points or so can be considered meaningful.

I reviewed differences along standard socio demographic dimensions - specifically: gender, age, race, marital status, education and geography - with tentative exploration of some socio-political differences - in trust and political ideology. I have tried to indicate which differences matter the most and whether they have changed over time. I also compared unconditional and conditional differences,

In summary:

1. The US adult population is mainly happy. The average score since 1972 is in the low +20s on my scale.
2. Happiness has declined modestly since 2000 - around 5 points from the pre 2000 peak to the post-2000 trough.
3. Differences within standard socio-demographic groups vary widely but fall into three distinct categories - important, consequential and small. Think of 30, 20 and 10 points or less as marking off boundaries.
4. Marital status and income are important. Race and education are consequential. The rest - age, gender and geography - are comparatively unimportant.
5. Specifically, married individuals are over 30 points happier than unmarried. This difference is stable over time. It is about the same whether the unmarried state is due to divorce, separation, death of spouse or never having married. The recent decline in the married share of adults can explain (statistically) most of the recent decline in overall happiness.
6. In any snapshot of the population money matters a great deal. The middle of the richest half of the population is over 20 points happier than the middle of the bottom half. However, the Easterlin (1974) paradox lives on: the top income quintile is no happier today than in the 1970s in spite of substantial income growth.
7. Blacks have averaged around 20 points less happy than whites over the whole sample period, but the difference has been narrowing meaningfully - by over half since the early 1970s to around 15 points recently.
8. College graduates are happier than other adults and growing more so. The long-term difference is almost 10 points more than high school graduates (the modal group) and almost 20 points more than the dwindling group with less than 12 years of education. Recent differences between college and high school graduates average around 15 points, and college graduation is becoming more common. So
(again, statistically and with an important caveat noted later) growing educational attainment has contributed to overall happiness.
9. Geographic differences - region and city v country - are fading over time. The Northeast has been consistently less happy than the rest of the country. More recently, the West has been happier than the rest. But the differences are small, with peaks in the 5 to 10 point range. Residents living within large cities have been around 10 points unhappier than suburban or rural dwellers for most of the last half century. That has shrunk by half recently, driven by declining happiness outside the cities.
10. Adults over 45 have tended to be slightly happier than younger adults, but the gap has disappeared recently.
11. There is no discernible difference between male and female happiness nor any clear long run trend. Females were a few points happier in the 1970s; by 2000 males had a similar advantage; the sexes have converged since.
12. Politics and social trust also matter. Conservatives have been 8 to 10 points happier than liberals (and only a bit less when compared to moderates). People who trust others or the Federal government are distinctly (around 20 points) happier than the more wary; However, trust, especially in the government, has declined substantially over time.
13. Ceteris paribus differences mainly follow the same pattern as the unconditional differences. That is, all else the same, marriage and income are most important followed by race and education and lastly by place, age and gender. The trust and political ideology differences also remain visible after controlling for the other characteristics. However these conditional differences are typically around half the cross-tab differences. And two changes in the conditional differences are notable: an apparent increase of education differences is eliminated, while the tilt of age differences toward the young increases. (Marriage differences may be a primary confounder in both cases.)

One conclusion I draw from this menu of results is that magnitudes are important. For example, any general analysis of happiness that ignores marital status is unlikely to be satisfactory. Conversely, research on, say, gender differences can be interesting in its own right but is unlikely to say much about significant trends or divisions within a society. So how much has empirical relevance shaped happiness research on these differences? One answer is in Table 3, which counts articles in the Journal of Happiness Studies from its inception (2000) to early 2023. The table lists the differences in order of empirical importance (as explained in the note). I then searched for articles in the Journal mentioning the listed key words. The last column shows the number of resulting hits. The rank correlation is actually negative: age gets the most hits though it is the least important factor empirically; the weighty trust variables are the least studied. The pattern in the table is perhaps understandable - the most common demographics in other socio-economic analysis, such as earnings equations in labor economics - e.g., age, sex, and education - tend to get the most attention in happiness studies as well. ${ }^{45}$ And article counts measure research effort crudely. But the exercise does perhaps suggest some potentially fruitful paths for future research.

[^18]
## Table 3. Articles in Journal of Happiness Studies Mentioning Key Words

| Variable in <br> Regressions and <br> Graphs | Words Searched | Number <br> of <br> Articles |
| :--- | :--- | ---: |
| Marital Status | marital , divorce | 709 |
| income | income, rich, poor | 1271 |
| Race | race, racial, black, white | 604 |
| Trust in Government | trust \& (government, politics) | 183 |
| Education | education, schooling, college | 1545 |
| Trust in General | trust - (government, politics) | 223 |
| Political Ideology | ideology, liberal, conservative | 279 |
| Place | city, suburb, urban, rural | 580 |
| Gender | gender, sex, male, female | 1506 |
| Age | age, old, young | 1665 |

Source: Journal of happiness studies website https://link.springer.com/journal/10902/volumes-and-issues
Results of a Boolean search on the indicated words. ( , indicates OR). Articles include editorials, book reviews, corrections for all issues published up to May 2023.

First column lists variables in order of my estimate of their empirical importance: I ranked the 1972-2018 differences in columns 1 and 2 of Table 2 (using the interquartile range for income). Then I averaged the two ranks to get the ordering shown here.

## References

Blanchflower, David G. and Andrew J. Oswald (2019) "Unhappiness and pain in modern America: a review essay and further Evidence, on Carol Graham's Happiness for All?." Jourrnal of Economic Literature 57(2):385-402.

Bond, Timothy N and Kevin Lang (2019). "The Sad truth about happiness scales." Journal of Political Economy 127(4):1629-40.

Burton, Caitlin M., Jason E. Plaks, and Jordan B. Peterson (2015). "Why do conservatives report being happier than liberals? The contribution of neuroticism." Journal of Social and Political Psychology 3(1): 89-102.

Easterlin, Richard (1974). "Does Economic Growth Improve the Human Lot? Some Empirical Evidence," in Nations and Households in Economic Growth, Paul A. David and Melvin W. Reder (eds.). New York: Academic Press.

Frey, Bruno and Alois Stutzer (2002). "What can economists learn from happiness research?" Journal of Economic Literature, 40(2): 420-435.

Frijters, Paul, and Tony Beatton (2012), "The mystery of the U-shaped relationship between happiness and age." Journal of Economic Behavior \& Organization 82(2-3): 525-542.

Helliwell, John, Richard Layard and Jeffrey Sachs, eds. (2017). World happiness report, 2017. New York: Sustainable Development Solutions.

Napier, Jaime L., and John T. Jost (2008). "Why are conservatives happier than liberals?." Psychological Science 19(6): 565-572.

Nikolaev, Boris (2018). "Does higher education increase hedonic and eudaimonic happiness?." Journal of happiness Studies 19(2): 483-504

Oaxaca, Ronald L., and Michael R. Ransom (1994). "On discrimination and the decomposition of wage differentials." Journal of econometrics 61 (1): 5-21.

Peltzman, Sam (2018), "Polarizing currents within purple America" (August 20, 2018). Available at SSRN: https://ssrn.com/abstract=3235867 or http://dx.doi.org/10.2139/ssrn. 3235867

Putnam, Robert D (2000). Bowling alone: The collapse and revival of American community. New York: Simon and Schuster,

Schlenker, Barry R., John R. Chambers, and Bonnie M. Le (2012). "Conservatives are happier than liberals, but why? Political ideology, personality, and life satisfaction." Journal of Research in Personality 46(2): 127-146.

Stevenson, Betsey and Justin Wolfers (2008). "Happiness Inequality in the United States." Journal of Legal Studies 37(S2):S33-S79.

Stevenson, Betsey and Justin Wolfers (2009). "The paradox of declining female happiness." American Economic Journal: Economic Policy, 1(2), 190-225.

Stevenson, Betsey and Justin Wolfers (2012). "Subjective and objective indicators of racial progress." The Journal of Legal Studies, 41(2), 459-493.

Veenhoven, Ruut 2010). "Capability and happiness: Conceptual difference and reality links." The Journal of Socio-Economics 39(3): 344-350.

Wojcik, Sean P., Arpine Hovasapian, Jesse Graham, Matt Motyl, and Peter H. Ditto (2015).
"Conservatives report, but liberals display, greater happiness." Science 347(6227): 1243-1246.


[^0]:    * Professor Emeritus of Economics. samp@uchicago.edu

[^1]:    ${ }^{1}$ The GSS has been asking a representative sample of the population about aspects of their current situation and attitudes since 1972. The survey was conducted mainly annually until 1990 and biennially since. The last survey was in 2020-21. I exclude it here, because of distortions from the COVID pandemic (which show up in key attitudinal questions discussed in the paper). The sample size varies between around 1500 and 3000 and over samples certain groups. All results reported here use the GSS provided weight (wtssall) to make them representative of the US population; any reported sample sizes are the sum of wtssall. More on the GSS can be found at https://gss.norc.org/About-The-GSS
    ${ }^{2}$ Answers to GSS-type questions do not settle debates about inter-personal comparisons, etc. However, it would be challenging to argue that a policy that significantly lowers an aggregate happiness score nevertheless improves social welfare.

[^2]:    ${ }^{3}$ Or a gender reversal, depending on the time period studied.
    ${ }^{4}$ For example, another well-studied GSS question (also considered later in this paper) is : Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people? 1. Can, 2. Can't be too careful 3. Depends.

[^3]:    Note that here the intermediate choice is listed last. Well under 10 percent of respondents choose it, i.e., this is de facto a yes or no question. Would this remain so with Depends as a second choice?
    ${ }^{5}$ For example, suppose measured happiness declines. This means that more people answered "not so happy" to the survey. It matters for policy whether the threshold crossed by these people is closer to suicidal depression or mild discomfort.
    ${ }^{6}$ I exclude 18 - 24 year olds, who are also in the GSS. So we have adults who have mainly completed their education and are in various stages of their career life cycles.

[^4]:    ${ }^{7}$ This survey occurs during the Covid pandemic and uses online responses rather than in-person interviews. The GSS website suggests the following disclaimer:
    To safeguard the health of staff and respondents during the COVID-19 pandemic, the 2021 GSS data collection used a mail-to-web methodology instead of its traditional in-person interviews. Research and interpretation done using the data should take extra care to ensure the analysis reflects actual changes in public opinion and is not unduly influenced by the change in data collection methods. For more information on the 2021 GSS methodology and its implications, please visit https://gss.norc.org/Get-The-Data

    There is a precipitous fall in happiness in the 2021 survey. For the first time the unhappy outnumbered the happy. How much of this decline is permanent bears scrutiny going forward. I exclude 2021 because simply accepting the decline in happiness at face value seems premature, and it is large enough to distort results.

    The smoothing here and later uses the Stata Ipoly command with a 0-order polynomial and a bandwidth of 3 years. This is similar to a 3-year moving average.

[^5]:    ${ }^{8}$ Note that the common y-axis range of 8 points in Figure 1A easily contains all the churning just discussed.

[^6]:    ${ }^{9}$ The average difference over the whole sample is 31.7 for men and 31.4 for women.
    ${ }^{10}$ The GSS distinguishes among widowed, divorced, separated and never married. All of these subgroups average under 5 on my scale over the sample period. The only notable pattern is that the separated are considerably less happy than the rest (mean of -12 ), and, in particular, less happy than the divorced (mean of +1 ).

[^7]:    ${ }^{11}$ More precisely, happiness averages 23.7 in the pre-2000 period and 19.7 thereafter. Now calculate expected post-2000 happiness using pre-2000 mean happiness for married and unmarried but with post-2000 population shares for the two categories as the weights. This yields 20.7, or 3 less than the pre 2000 mean; this decline reflects the 9.9 percentage point reduction in the share of the population that is married.
    ${ }^{12}$ Indeed, the decline has been going on over the entire sample period. The magnitude is cumulatively startling: in the early 1970s almost 80 per cent of the 25 and older population was married. By 2018 this figure had fallen to the mid-50s.
    ${ }^{13}$ If happiness is a lifetime utility proxy the young have the advantage of greater expected longevity. If resolution of career uncertainty is important, then older groups would be favored.
    ${ }^{14}$ Specifically post-2000 happiness is 6 points lower among the old and 2 points lower among the young
    ${ }^{15}$ An important caveat about age comparisons like these is that they inevitably mix cohort and age effects. For example those over 45 in 1972 began their careers around 1950. Those over 45 in 2018 began their careers around 2000. We don't know how much of the 6 point difference in happiness between the two groups is due to different age-related factors and how much to the different life experiences of the two cohorts.

[^8]:    ${ }^{16}$ These patterns are noted in Stevenson and Wolfers, 2012
    ${ }^{17}$ Across all survey years from 1972-1978, the white-black differential is 16.8 percentage points ( $81.1-64.3$ ). The same figure for 2010-2018 is 25.8 (60.9-35.1). In other words, the white marriage rate dropped around 20 points while the black rate declined around 30 . The marriage premium in happiness has been roughly the same - around 30 points - for both races. Taken together, a 30 point marital premium and a 10 point wider marriage gap implies a 3 point extra decline in happiness for blacks $v$ the 10 point convergence that actually occurred.
    ${ }^{18}$ The measure I use later is the respondent household income percentile for the survey year. Over the sample period whites rank 16 percentage points higher on this measure. This narrowed from 18 points to 15 points from the 1970s to the 2010s. This is too small to explain much of the narrowing happiness differential, and increased income inequality implies smaller or reversed differences in actual income.
    ${ }^{19}$ This is based on the (risky) assumption that the relevant partial correlations are causal.
    ${ }^{20}$ This seems odd given the growth of educational attainment. For example only 30 percent of the 1970 s over 25 population had gone beyond high school. By the 2010s this figure was nearly 60 percent. It seems important to ask whether these counterfactual newly educated evaluate their happiness differently from others with similar education in the past.

[^9]:    See note to Figure 1

[^10]:    ${ }^{21}$ If happiness across education groups had remained the same as in the 1970 the growing share of college graduates (and decline in high school dropouts) would have raised the population average by 3 points. If we counterfactually estimate 1970s happiness using the 2010s happiness distribution and 1970s education weights we get a 5 point lower estimate than actual 2010s happiness.

[^11]:    ${ }^{22}$ These are smoothed data, and I have used default bandwidths and intervals (approximately 2 percentage points) to construct Figure 7A. However, the raw data show a similar pattern. For example, When no income decile has a happiness mean above the next highest. The differences between adjacent deciles average 5 points with a range of around 2 to 10 points. The smoothing just tamps these numbers down a bit by averaging between as well as within deciles: the differences between decile mid-points in the smoothed data average 4 points with a range of 3 to 6 points.
    ${ }^{23}$ Indeed the top decile has joined the post-2000 decline in happiness that afflicts the other groups even as the top decile income share has continued to grow.
    ${ }^{24}$ It has also lost population share to the other regions, which seems consistent with people moving from less to more happy places. However, the Midwest has also lost population share and is not less happy than the rest.

[^12]:    ${ }^{25}$ As with regions, there is no obvious connection between happiness and migration. There is net migration from the less happy cities to their suburbs. But there is also net migration from similarly happy areas outside large cities to the suburbs.
    ${ }^{26}$ The left and right are divided into, e.g., extremely liberal, liberal, slightly liberal. I combined all of these into one.

[^13]:    ${ }^{27}$ Unlike the trust question, the confidence questions have a meaningful middle ground ("some confidence"). Around half the entire sample chooses this on the government confidence questions analyzed here. The other choices are "a great deal" and "hardly any."
    ${ }^{28}$ For example, confidence in the military has increased in the post-Vietnam era. Confidence in big business has been flat, but banks took a big hit after 2008.
    ${ }^{29}$ By contrast confidence in the third branch - the Supreme Court- has been mildly positive and trendless.
    ${ }^{30}$ I average responses for the Executive and US Congress here.
    ${ }^{31}$ There is a tendency for liberals (conservatives) to be less distrustful of Democrat (Republican) controlled governments. The overall correlation between ideology and confidence in the federal government, net of year effects, is near zero. However, there is some variety in the trends related to the politics. For example, confidence in the executive branch declined by 22 points overall from the 1970s to the 2010s but only 2 points among liberals. The relevant political reason for the softer decline among liberals is that Democrats were mainly in charge of the executive in the 2010s ( 80 per cent of sample observations) while Republicans were mainly in charge ( 70 percent of the sample) in the 1970s. Confidence in the US Congress declines substantially across all groups in the same period ( 40 points overall; 45 for liberals, 38 for conservatives and 34 for moderates)
    ${ }^{32}$ For example, the correlation (net of year effects) between general trust and confidence in the executive branch is .085 and .026 for the US Congress.

[^14]:    ${ }^{33}$ For example, the bar height in the Yes column for 1972-2018 is 32.6. This is the mean of average happiness for those who have confidence in the executive (33.00) + average happiness for those with confidence in the US Congress (32.26).
    ${ }^{34}$ See previous footnote for an example. The separate components of any of the means shown in Figure 13 are typically within a point or two of each other.
    ${ }^{35}$ The height of the bar in the Yes column is around 2 points lower in the post 2000 period than before.

[^15]:    ${ }^{36}$ From the pre to post 2000 periods the percent married among those under 45 declined around 5 points more than those over 45. The same comparison for position in the income distribution shows those over 45 moving up 6 points relative to those under 45. Pre-2000 the income differential favored the young. This reversed in the post 2000 period.

    Educational attainment also improved more for the old than the young, mainly because of the long decline in high school dropouts. In the pre- 2000 period 36 percent of the over 45 group were dropouts $v 16$ per cent of those under 45. This discrepancy disappeared as the under 45's of the pre-2000 period moved into the older group after 2000. In the post 2000 period the drop out percentages of the two age groups are almost the same (14 percent of the young v 15 per cent for the old). This same narrowing of differences also applies to post high school attainment with similarly favorable happiness implications. For example, college graduation rates nearly doubled for the over 45 s between the two periods (to over 30 percent) and this has closed most of the previous gap with their younger contemporaries (an 8 point gap narrowed to 3 points)..
    ${ }^{37}$ Specifically, given the coefficients in column 6, around 40 percent of the gap is attributable to income changes with marital status and education changes evenly splitting the remainder.
    ${ }^{38}$ The mitigating educational effects are almost surely over, since the high school dropout rate has hovered around 15 percent for several decades and college graduation rates are converging across ages. The marital gap will diminish as the current young get older unless there is substantial further erosion of marriage among the future young. The income gap should narrow, following the declining educational differences.

[^16]:    ${ }^{39}$ From the pre-2000 period the ratio of $75^{\text {th }}$ to $25^{\text {th }}$ percentile income rose from 4.6 to 5.8.
    ${ }^{40}$ However, positive difference in point estimates remained. The relevant coefficients (standard errors) were 6.75 (.45) in the pre-2000 period v 7.55 (.55) post-2000. With the usual fixed effects, these mean that, within the average post 2000 year, and extra 100 log basis points of real income is associated with 7.55 percentage points more happy respondents $v 6.75$ points more in the pre- 2000 period.
    ${ }^{41}$ The changes notably include the increased return to college education. A steep marriage-education gradient has also emerged. In the pre-2000 period this gradient was essentially flat; all education groups had marriage rates in the high 60s. College graduates are the only group to have mainly avoided the post-2000 decline in marriage (-3.2 percentage points). The marriage rate for high school graduates and dropouts has declined by double digits (14.6 and 16.5 percentage points respectively).
    ${ }^{42}$ The high school dropout share declined by half while the college graduate share has increased by half between the two periods.

[^17]:    ${ }^{43}$ Specifically, of the 4 percentage point decline in happiness between the periods, around 2 points can be accounted for by changes in population characteristics and changes in conditional differences with a roughly even split between the two. This comes from a Oaxaca (1994) style decomposition of the regressions in columns 3 and 4 of Table 1. The decomposition answers two counterfactuals: how much would happiness change if 1) population characteristics changed from pre to post-2000 but the weights on them remained unchanged, and 2) the characteristics didn't change but the weights did. To estimate the first component - the effect of changes in population characteristics, - I sum predicted change in happiness from weighting the post- 2000 changes in characteristics by pre 2000 (column 3) conditional differences. This gives a sum of -1.2 percentage points, with the decline of marriage (pulling down) and the increase in education attainment (pulling up) as the most important components. The net effect of changed conditional differences uses these changes (column 5) as weights on pre2000 characteristics. These sum to -1 percent with the widening age differences pulling down and the smaller racial differences and growing marriage premium partly offsetting this. The pure time effect - approximated by the change in baseline - is a bit larger than either counterfactual component. An important caveat is that we may be slicing an already small total too finely - all three components are too small to reject the null.
    ${ }^{44} \mathrm{I}$ also added trust and ideology variables separately. The results were essentially identical to those in Table2.

[^18]:    ${ }^{45}$ The glaring exception is race, which gets under half the hits of the other standard labor economics demographics

