The Urban-Rural Happiness Gradient Across Countries: City Unhappiness is Common (Despite What Economists Say)

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This study shows, for the first time, that city unhappiness is common across the World. In no developed country, people are happier in larger places than in smaller places. Without exception, in no developed country city is happier than smaller areas. The finding is important because there are economists manipulating data through cherry-picking (e.g., Glaeser 2011b, Glaeser et al. 2016, Burger et al. 2020) and claiming the opposite, that urban areas are happier. Such manipulation is arguably for ideological reasons. The axioms of economics are that the greater production, productivity, income, and consumption, the better. Urban areas produce most, and most income and consumption take place there. Economics' concept of utility is directly linked to consumption: the more consumption, the more utility. While utility cannot be measured, economists appear to try to show that happiness is greatest where economics axioms point to, in cities. Sociological, psychological, and neurological evidence is ignored . Present study is correlational, not experimental, and causality cannot be claimed.

We know that in many countries there is a so called "urban-rural happiness" gradient Berry and Okulicz-Kozaryn (2011), where happiness raises from lowest in largest cities to highest in smallest places. The gradient is non-linear, the very largest cities are markedly less happy than all other areas in a country: New York City (Okulicz-Kozaryn and Mazelis 2016, Senior 2006), London (Office for National Statistics 2011, Chatterji 2013) Helsinki (Morrison 2015), Bucharest (Lenzi and Perucca 2016), Sydney (cited in Morrison 2011). The goal of this paper is to test gradient across countries using one dataset with uniform variables. This study shows, for the first time, that city unhappiness is common across the World [1]

Intersection of Quality Of Life (QOL) or Subjective Wellbeing (SWB)[2] and Urban Studies is an exciting area. Academics, policymakers, administrators, and common people start to pay more attention to QOL/SWB, not just monetary measures such as GDP. We finally begin to realize, even some economists do (Stiglitz et al. 2009), that money is not everything and it is high time to look at human flourishing: QOL and SWB. But some economists manipulate data through cherry-picking (Glaeser 2011b, Glaeser et al. 2016, Burger et al. 2020) and try to claim the opposite, that cities are happier–the present study provides yet more evidence that economists' thesis of city happiness is false.

The world is experiencing massive urbanization–urbanization is arguably the most dramatic change to our way of life Wirth (1938), Hanson (2015), and what arguably matters most is human QOL/SWB. Hence, the question, how cities affect human condition?

Modern research on the effect of cities on human wellbeing should be founded on extensive classic urban sociological research (Tönnies [1887] 2002, Wirth 1938, Simmel 1903, Park 1915, Park et al. [1925] 1984), which argued negative effect of cities on humans. Quantitative research on the urban-rural happiness gradient dates back to (Gurin et al. 1960, Campbell et al. 1976), who also found negative effect of urbanicity on humans. And over past several decades, several dozen studies mostly found negative effect of urbanicity on human wellbeing as well `[blind for peer-review]`.

Yet most research in the area is about the US, Western Europe, and recently China and handful of other countries. Most studies are conducted in a single country. Hence, we offer the present study using a uniform dataset across countries.

First, we briefly define SWB and mechanisms that are likely to link size of a place to SWB.

[1] Most extant research about the urban-rural happiness gradient is about the US, Western Europe, recently China, and handful of other countries. Again, there were studies conducted in single countries, but not using a uniform dataset across countries. The three apparent exceptions (Berry and Okulicz-Kozaryn 2009, Burger et al. 2020, Easterlin et al. 2010a) are not exceptions. No study studies the gradient, all use binary urban-rural operationalizations and present simple mean differences for each country and aggregate results to groups of countries in regressions as elaborated later. Last but not least, Gallup data used by Burger et al. (2020) and Easterlin et al. (2010a) are highly problematic as elaborated later.

[2] The two, SWB and QOL overlap, but there are important differences, notably QOL is more of an index/aggregate of domains and more subjective, while SWB is subjective mostly evaluation of one's life as a whole–for discussion see Okulicz-Kozaryn and Valente (2019).

1 SWB

Subjective Wellbeing (SWB) is an umbrella term for various subjective measures of wellbeing, notably positive and negative affects, happiness, and life satisfaction. Most of the SWB research, including this study, uses life satisfaction measure, which is a global self evaluation of one's life as a whole. This measure is mostly cognitive and not affective–respondent evaluates her life as whole globally (everything, including professional, personal, family, community, etc). The measure captures everything that is going on in one's life–that's a major advantage of SWB measure over other social and economic indicators aiming at measuring human condition, progress, and development. SWB measure is simply the most comprehensive measure possible dwarfing earlier measures such as income, education, or life expectancy. For review see Diener (2009).

Following usual practice, for simplicity, we use these terms interchangeably: SWB, happiness, and life satisfaction, but specifically we mostly mean life satisfaction as defined above.

SWB measure is also at least adequately reliable and valid and considered good enough for public policy making and public administration (Diener 2009, Stiglitz et al. 2009). And it has been used multiple times in urban research (e.g., Moeinaddini et al. 2020, Mouratidis 2019, Wang et al. 2019, ano 2017, Ma et al. 2017, Wkeziak-Bialowolska 2016, Valente and Berry 2016, Chen et al. 2015).

There are cross-cultural comparability caveats, however, and SWB may not be adequately comparable across countries (Kahneman et al. 1999, Diener 2009). This limitation should be kept in mind when comparing results across countries in the present study. And more focus should be on within-country differences, and this is what this study is mostly about–the difference between smaller and larger places in terms of SWB within countries. We treat each country separately and do not pull the data together. In short, one should focus on within-country differences across urbanicity and exercise caution when comparing effects across countries.

2 Urban Definition, Theory, and Potential Causal Mechanism/Pathway

This is an observational study, not an experiment, and we don't test causality here, nevertheless it is important to discuss the potential mechanisms.

It is useful to start with the theory that would define urbanicity and predict how urbanness would affect SWB. We start with classic urban sociological theory of urban malaise (Tönnies [1887] 2002, Wirth 1938, Simmel 1903, Park 1915, Park et al. [1925] 1984): cities produce superficiality, transitoriness, withdrawal, impersonality, superficiality, deviance, shallowness, anomie, alienation, and cognitive overload.[3] Sociological theory is not clear at which point urban malaise arises, there is clearly no hard cutoff point, rather, the more urban, the more malaise. There may be a certain threshold though, at which malaise intensifies as hinted at by Fischer (1973): in the largest cities. In the classical urban sociology city is defined by large population size, density, and heterogeneity (Wirth 1938). To sum up, urbanicity has mostly negative effect on humans, and it is rather a continuum than binary, although a threshold at a population of several hundred thousand may exist where malaise intensifies.

Another indication of continuity in effect of size of a place on human condition comes from physics. There is physical city constant of 1.15: double area's population size and many phenomena (crime, GDP, income, patents) increase by 15% (Bliss 2014, Bettencourt et al. 2010, Bettencourt and West 2010, Bettencourt et al. 2007).

We would like to especially highlight biological/evolutionary mechanism. For over 95% of our evolutionary history[4] we have lived outside of the cities as hunter-gatherers usually in small bands of 50-80 people (Maryanski and Turner 1992). It only started to slowly change in about 10,000 BC with domestication of animals and agriculture. The first large cities (larger than several hundred thousand) only started to emerge after 500 BC and there were just handful of them. It wasn't really until after industrialization that large cities started to house noticeable proportion of the population, and only 20th century saw urbanization explosion–in 1800 a mere 1.7% of the world population lived in cities larger than 100k, it slowly increased to 2.3% in 1850, by another 50 years doubled to 5.5% in 1900, and then it doubled again to 13% in 1950 (Davis 1955).

The larger the place, the more the environment differs from the habitat in which we have evolved: dense and crowded,[5] airport, subway or rapid transit, tall buildings in downtown, etc. And again, while clearly urbanness is a continuum, there is likely a threshold, around several hundred thousand people, when the built environment changes significantly. The are at least several significantly different stages of urbanness on the urbanness continuum. There is wilderness, open country, villages, small towns, large towns, cities, large cities, and very large cities. Surely, it is difficult to capture urbanness in its entirety–most dataset only allow few stages, including

[3] Classics argued poor social ties in cities, but see later arguments by Fischer and his subcultural theory (Fischer 1995, 1975, 1972).

[4] Per human species evolutionary history, for instance, see encyclopedia Britannica `http://www.britannica.com/EBchecked/topic/277071/hunting-and-gathering-culture`. For post-medieval history see White and White (1977).

[5] There are striking examples of crowding in largest cities. To be sure, majority of urban population does not live in such extreme crowding, the trend however is in that direction as cities are becoming larger and less affordable. And, again, even without extreme crowding, usual population density is related to crime (Bettencourt and West 2010). There is also evidence that density relates to negative consequences: interestingly there is evidence that density impacts pathology more than crowding (Levy and Herzog 1974). Yet, it is not only density and crowding, other factors such as social support matter as well (Cassel 2017). Some studies didn't find negative effects of density or crowding and results were mixed (Collette and Webb 1976). While it seems to be reasonable to assume that density and crowding are positively related, some studies do not find this to be the case (Webb 1975, Rodgers 1982) . Crowding probably has become more common in recent years as cities are becoming less affordable. Misra (2015), Florida and Schneider (2018), Weinberg (2011), Solari (2019), Schuetz (2019), Kotkin (2013)

For a nice discussion and overview of density, crowding and human behavior see Boots (1979), Choldin (1978).

the data used here. But the point is that treating urbanness as an urban-rural dichotomy (Glaeser 2011b, Burger et al. 2020) is an oversimplification without much theory to support it.

The biological/evolutionary perspective can be complemented by recent neurological evidence. Urban living is unhealthy to human brain (Lederbogen et al. 2011) and urban living contributes to the development of psychosis (Abrahamyan Empson et al. 2020).

3 The Problem With Economics

There are economists serious about studying happiness, Richard Easterlin and Andrew Oswald among them. But sometimes, economists' interest in happiness is more of a hindrance than help.

Economics is a discipline crippled by its "axioms" (the self evident truths) or "laws." No other social science boasts laws or axioms for a good reason–they do not exist in social world, and so they should not appear in social science. See Feynman (1981) for elaboration.

The bizarre economic axioms that have little to do with reality (Davies 2018), do arguably bias many economic investigations–many economists appear to try hard to force the data to support their axioms, intentionally or unintentionally, but at the end, misleading and flawed research is produced. To economists, by definition (it's the law or the axiom), the more money (income or consumption), the greater the utility (e.g., Autor 2010):

$$money = utility \approx happiness \tag{1}$$

Since utility cannot be measured, it appears then that economists who try to study happiness, think of it as utility, and follow their axiom in their happiness investigations.

For instance, Easterlin (2015, 2010b) (and many others) found that over time in the long run at country level income is unrelated to happiness: this is the so called Easterlin Paradox. It clearly runs against the sacred economic axiom, and so two economists Stevenson and Wolfers (2013) in the flagship journal of the American Economic Association, the American Economic Review, challenge Easterlin Paradox and present "evidence" to the contrary. Except, that they don't, they study something different–use data at household level or across countries at one point in time and log transform the data.

Again, we know that cities tend to be less happy than smaller areas. But economists try to argue to the contrary. Why? Again, arguably due to their axioms: money is centered in cities[6], and so by economic axioms, cities have greater utility, and so they must be happier.

Unfortunately, economists manipulate the sample, or cherry-pick the cases, in order to argue their point. Glaeser (2011b) cherry picked only poor countries for his urbanicity-happiness analysis, and then tries to argue that the relationship holds in general. Glaeser's trick is to say that he finds positive relationship and that the effect is "driven primarily by poorer countries"–which leaves impression as if overall relationship is positive for all countries and stronger for poorer countries. But almost the opposite is true: for most countries the relationship is negative and it is only positive in few cases, typically the the very poorest countries. Glaeser et al. (2016) is an analysis across US counties, where he cherry picks again: retains cities only and drops all other areas.

Then comes (Burger et al. 2020), who appears to piggy back on Glaeser: "In line with earlier research, we found that urban populations are, on average, happier than rural populations in that they return higher levels of happiness."–like Glaeser, Burger et al. (2020) builds his case by focusing on exceptional outliers, mostly poor African countries.

To summarize, many economists appear to be misguided by their unrealistic axioms, and some end up producing misleading and flawed research, notably: Stevenson and Wolfers (2013), Glaeser (2011b), Glaeser et al. (2016), and Burger et al. (2020).

Curiously, some economists who do happiness research are skeptical about it at the same time, and do not consider happiness worthy investigation (e.g., Deaton 2013, Glaeser et al. 2014, 2016). Economists in general tend to consider other social sciences as inferior (Economist 2016, 2014, Naim 2016, Fourcade et al. 2015).

4 What We Know So Far: The Literature

Most research on the urbanness-happiness relationship points to the urban-rural happiness gradient, where happiness raises from its lowest level in largest cities to the highest level in smallest rural areas (e.g., Campbell et al. 1976, Berry and Okulicz-Kozaryn 2011, Office for National Statistics 2011, Morrison 2011, Okulicz-Kozaryn and Mazelis 2016, Senior 2006, Chatterji 2013, Morrison 2015, Lenzi and Perucca 2016, Okulicz-Kozaryn and Valente 2020). `[blind for peer review]`

Yet, most research has been conducted in the US or Western Europe, and there are only three cross-country investigations using common dataset: Berry and Okulicz-Kozaryn (2009), Easterlin et al. (2010a), Burger et al. (2020).

Easterlin et al. (2010a) focuses on effect of economic growth by urban-rural and only a small part of the study is about urban-rural differences in SWB, and their results are much like Berry and Okulicz-Kozaryn (2009), who find that in developed countries people are less happy in cities.

[6] Production, productivity, income, and consumption increase with population size Glaeser (2011a, 2007), Glaeser et al. (2001), Rosenthal and Strange (2002, 2003, 2008).

All three studies so far are limited. The present study is the first one to study the urban-rural happiness gradient across countries. First, there is no gradient in none of the above studies–they all use binary (or three category) operationalizations, urban v rural. They also mostly present simple mean differences for each country and aggregate results to groups of countries in regressions. They fail to control for necessary predictors of SWB. In addition, there are critically serious problems with Gallup data used by Easterlin et al. (2010a), Burger et al. (2020).

Easterlin et al. (2010a) is a serious academic peer-reviewed research, and does acknowledge Gallup's limitations and attempts to address them. Burger et al. (2020), on the other hand, appears to be a mere for-profit/consulting advertisement for Gallup. As Davies (2015) put it, it's not happiness research, it's "happiness industry."

There are multiple problems with Gallup data. First, it is not meant for research but for commerce–Gallup charges $30,000 for access (per one year!).[7] Second, urbanicity classification is twofold less precise than in WVS: 4 v 8 categories. Third, while WVS uses precise population size numeric cutoffs, Gallup uses fuzzy concepts such as "rural area", "small town or village", "large city". Fourth, (and this compounds third problem) Gallup uses self-reports of urbanicity, which is highly subjective and problematic in this case–many, if not most people, would likely classify themselves completely arbitrarily into "rural area" v "village" and so forth. WVS uses interviewer's information about the place. Fifth, apparently much of data are missing–Easterlin et al. (2010a) notes that in 14 countries "rural area" responses were exceptionally low. Also, about half of the world population is urban, but Burger et al. (2020) reports that in their dataset only about quarter of respondents report rural residence.

Urbanness or urbanicity is a degree, not dichotomy. Strikingly, Burger et al. (2020) say that there is a uniform way to measure urbanicity, which is a mere 3 categories: 1) Cities, 2) Towns and semi-dense areas and 3) Rural areas; but they don't even use that in the body of the paper and stick with dichotomy.

5 Data And Model

We use `www.worldvaluessurvey.org`, which is representative of about 90% of the world population,[8] and as elaborated in previous section, is much better suited for the study than an inadequate and poorly designed Gallup data. The variables are listed in table 1. Country codes and descriptive statistics are in SOM (Supplementary Online Material).

SWB question reads "All things considered, how satisfied are you with your life as a whole these days? Using this card on which 1 means you are "completely dissatisfied" and 10 means you are "completely satisfied" where would you put your satisfaction with your life as a whole?"

Urbanicity is operationalized with WVS variable `X049`–note that it is objective and recorded by reviewer, not respondent. There are eight categories ranging from '$< 2k$' to '$> 500k$.' This is important advantage, because as elaborated earlier, urbanicity or urbanness is a continuum, not a binary urban v rural. We conduct the analysis using a set of dummy variables for all eight categories (leaving out the base case) in the SOM. However, for simplicity and ease of exposition we present simplified results in the body of the paper using three categories only. In other words, this study will use 8 categories of urbanicity, and summarize results for ease of presentation with 3 categories.

Because in many countries, there are either no observations or few observations in the first two bottom categories `-2k` and `2-5k`, we combine them together for the analyses in the main body of the paper. These two categories together proxy free of city natural environment most closely resembling human natural habitat where we have evolved, and it includes: wilderness, open country, and small villages. The other critical category that must be measured based on earlier review of theory is large cities, again, there is likely to be a threshold at several hundred thousand, hence we use the top category on WVS variable `X049` '`>500k`' to proxy large cities. Such places, are the least resembling of human natural habitat and are mostly consisting of man made objects such as asphalt, concrete, glass, etc, and as per theory as reviewed earlier, are likely to be least happy. The third category in our main analyses are places in between, `5-500k`. The cutoffs for the two extremes are important and must be driven by the theory, it cannot be, say, everything upto 20k (100k, etc) v more than 20k (100k, etc) as in some other research. A place never changes abruptly from rural to urban at some cutoff, it is a continuum, it can be simplified to carefully chosen extreme categories, but one must always start with the continuum. And because this aggregation or simplification into 3 categories is still somewhat arbitrary, we present alternative specifications in SOM in addition to the full 8-step urbanness gradient.

Table 1 lists control variables used in the body of the paper.

[7] Gallup charges $30,000 per year for use of these happiness data (author's email inquiry)–private corporations are making fortune from tax dollars and students tuition–scholars should resist corporatization of academia (Mills 2012a, Cox 2013, Mills 2012b, Catropa and Andrews 2020, Schmidlin 2015), and corporatization of happiness research (Davies 2015).

[8] While WVS is conducted in about 100 countries that represent about 90% of the world population, due to missing data for the particular variables of interest, the present's study coverage is slightly smaller, about 70 countries (depending on the model and specification).

Table 1: Variable definitions.

name	description
happiness	"All things considered, how satisfied are you with your life as a whole these days?" 1="dissatisfied" to 10="satisfied"; WVS
place size	"OBSERVATIONS BY THE INTERVIEWER; Code size of town where interview was conducted"
Year survey	year of survey
age	age
age2	age squared
male	male
married or living together as married	married or living together as married
divorced/separated/widowed	divorced/separated/widowed
education	"Highest educational level attained"
income	"Scale of incomes"
class	"Social class (subjective)"
health	"State of health (subjective)"
postmaterialist	"Post materialist index "
god important	"How important is God in your life? Please use this scale to indicate- 10 means very important and 1 means not at all important."
religion important	"WVS2000: For each of the following aspects, indicate how important it is in your life. Would you say it is: EVS1999: Please say, for each of the following, how important it is in your life. Religion"
autonomy	"Autonomy index"
freedom	"Some people feel they have completely free choice and control over their lives, while other people feel that what they do has no real effect on what happens to them. Please use this scale where 1 means 'none at all' and 10 means 'a great deal' to indicate how much freedom of choice and control you feel you have over the way your life turns out."
trust	"Most people can be trusted"

In choice of controls we generally follow (Okulicz-Kozaryn and Valente 2020). There are specific controls worth discussing. Young, single and childless persons and young men with tertiary education are relatively more satisfied with urban areas as place of residence (Carlsen and Leknes 2019). Income, class, and education are important controls–not only predict greater SWB, but are also confounded and higher in cities.[9]

One great advantage of city living that is often forgotten is freedom "City air makes men free (Stadt Luft macht frei)" Park et al. ([1925] 1984, p. 12)[10], hence we control for freedom.

Likewise, trust is important, it predicts SWB, and it is lower in cities (Milgram 1970).

Health is a key predictor of SWB, and also note that subjective health measure used here is a reasonable measure of actual health (Subramanian et al. 2009).

We use a standard OLS regression with robust standard errors. We treat the 10-step happiness variable as continuous. Ordinal happiness can be treated as a continuous variable (Ferrer-i-Carbonell and Frijters 2004). OLS has become the default method in happiness research (Blanchflower and Oswald 2011). Theoretically, while there is still debate about the cardinality of SWB, there are strong arguments to treat it as a cardinal variable (Ng 1996, 1997).

6 Results

There is a considerable tradeoff in this study between ease of presentation and elaboration as there are dozens of countries and presenting different specifications would result in unwieldy presentation–additional specification are in SOM. Here we just present one model that is full including all necessary and some additional controls (yet not over saturated where too many variables result in too many missing obs)–we use here model with controls listed in table 1 also the model presented here uses just 3 categories, -5 (base), 5-500, and 500-. Results are set in table 39. We are interested in comparison between -5 v 500- because this is according to theory: evolution/ingroup v most unnatural (as this data allows).

[9] where i discuss controls in data and to literature where i slam burger and indeed as shown later comparing unadjusted means results in cities being happier notably due to confounding of higher income education and class–see appendix for tables with and without controls

[10] It originated in the Middle Ages, and it meant freedom from feudalism, non-feudal islands in a sea of feudalism (Harvey 2012).

	5-500k	500k-	N
ALB	-0.4*	0.4+	1,582
ARG	-0.2	-0.0	855
AUS	-0.0	-0.1	3,728
AZE	-0.1	0.3	964
BFA	0.3	0.0	567
BGD	0.0	0.7*	2,104
BGR	-0.0	-0.5*	1,229
BLR	-0.1	-0.1	2,815
BRA	-0.2	-0.4*	3,576
CAN	-0.1+	-0.3*	3,177
CHL	-0.7*	-0.7*	3,527
CHN	0.0	-0.4*	2,005
COL	0.0	-0.1	1,376
DEU	-0.1	0.0	4,795
DZA	-0.4*	-0.6	1,596
ECU	-0.9*	-0.7*	1,182
EGY	-0.4*	-1.1*	3,428
ESP	-0.1	-0.1	1,487
ETH	0.3	0.4	1,017
GEO	0.1	0.1	2,401
GHA	0.3*	-0.0	2,572
HUN	0.0	-0.4*	887
IDN	0.1	-0.0	2,056
IND	-0.0	0.3*	5,857
IRN	-0.3*	-0.0	2,119
IRQ	-0.1	-0.0	1,123
ITA	-0.1	0.2	585
JOR	0.1	-0.2	2,089
KAZ	-0.0	-0.3*	1,497
KGZ	-0.1	-0.3*	2,293
LBN	0.1	0.2	731
LTU	0.3	0.3	750
LVA	-0.1	-0.6*	963
MAR	0.0	-0.2	845
MDA	0.2*	0.2	2,478
MEX	-0.1	-0.2+	3,544
MKD	-0.2	-0.1	1,385
MYS	0.1	-0.4*	1,541
NGA	-0.1	-0.1	4,488
NZL	-0.1		417
PAK	0.4+	0.3	900
PER	0.3*	-0.5	1,026
PHL	0.4	0.5	2,294
POL	-0.1	-0.1	1,533
ROU	-0.2*	0.3*	3,568
RUS	0.2*	0.2*	3,253
RWA	-0.7*	-0.4+	2,398
SRB	0.1	-0.4*	2,539
SVN	0.2+	-0.2	1,620
SWE	0.2	0.2	1,769
THA	0.1	0.1	2,178
TUN	0.1		826
UKR	0.0	-0.1	2,985
URY	0.2	0.1	2,017
USA	-0.1	-0.2*	3,372
UZB	0.0	-0.3*	1,247
VEN	-1.7*	-1.2*	1,034
VNM	0.1	-1.5*	2,039
ZAF	0.2*	0.0	5,330
ZWE	0.1	0.2	1,487

* p<0.05, + p<0.1; robust std err

Table 2: OLS regressions of SWB on place size for each country separately including year dummies (not shown).

Results in table 39 show that out of countries with significant happiness differences across urbanicity, in 80% of countries, people are less happy in cities than in smaller areas. The only exceptions are East European Post Soviet ALB, ROU, RUS, and South-Asian BGD and IND. Notably, these are all poor or developing countries. In no developed country, people are happier in larger places than in smaller places Without exception, in no developed country city is happier than smaller areas. The conclusion is that in all developed countries studied here, AUS, CAN, DEU, ESP, ITA, NLD,[11] NZL, SWE, USA, largest areas are less happy than smaller areas [12].

The urban-rural gradient is greatest in EGY, VEN,[13] and VNM have effect sizes larger than one, while effect sizes for most other places are small to moderate around .3-.5 (on 1-10 SWB scale). Yet, as indicated earlier, because of the limited cross-cultural comparability of SWB measure, when interpreting results, the focus should be on within country SWB differences across urbanicity, and not on comparing cross-country effect sizes.

It is worth noting that in first column, also majority of the results are negative with only 5 countries positive: GHA, MDA, PER, RUS, and ZAF–again, what is remarkable that none of these countries is a developed country.

[11] results only in appendix for NLD

[12] At least in less elaborate specifications shown in appendix, but even in most elaborate specifications, even if coefficient on larger places is insignificant, it is still negative.

[13] Note: result for VEN should be interpreted with caution this is the main difference with table **??** and probably has to do with the fact that there are only 60 obs on the base case category. Other results are similar between the two tables.

7 Conclusion And Discussion

Throughout most of our evolutionary history, humans have lived in small homogeneous groups with low density. As hunters gatherers humans lived in small bands of 50 to 80 people, later on in simple horticultural society in groups of 100 to 150 people, and in more advanced society these groups reached five to six thousand people (Maryanski and Turner 1992). Hence, unlike other species like ants and bees,[14] living in heterogeneous, dense, and large settlements (city living) is simply unnatural to human beings. And it is not city problems but city itself that results in lower wellbeing (Okulicz-Kozaryn and Mazelis 2016)–the mechanism is important how and why would urbanness affect human wellbeing? As discussed throughout, contrary to economics, classic urban sociological theory, biological/evolutionary mechanism, neurological evidence point to lower human wellbeing in cities.

In vast majority of countries effect in negative, only positive in these: East European Post Soviet ALB, ROU, RUS, and South-Asian BGD and IND. East European Post Soviet countries are still quite centralized where power, opportunity, and resources are located in large cities. India and Bangladesh are curious outliers. `[blind for peer-review]`

Also note that in about a third or even half of the countries (depending on the model), there is no SWB difference across urbanicity. This is also a finding worth reporting as it runs counter to common pro-urbanism and city triumphalism (e.g., Glaeser 2011b). One would think cities are the best places to live as people flock there in doves So finding of no difference for many cases is already surprising.

Even as coefficient estimates are small to moderate, the practical significance of the results is very strong because of the sheer size of urbanization. Say, even a minuscule negative effect of .1 (on scale 1-10) on larger place v smaller place for a small country of 10m translates into an effect equivalent to making 100k people from most miserable to most happy on SWB scale 1-10 if everyone lived in smaller v larger place. Globally, for billions of people living in cities, there is a massive amount of human misery produced.

Why in developed world people are less happy in large cities, but in some developing countries they are happier? There is at least one reason. In many developing countries life is simply unbearable outside of the city lacking necessities such as shelter, foot, water, sanitation, and healthcare. In developed countries, even smallest places have reasonable access to necessities, and they do not suffer from urban disamenities.

As per Maslow's pyramid of needs (Maslow [1954] 1987), survival and opportunity come first, and this arguably can explain much of the paradox found in this paper–despite the city being biologically, neurologically, and socially negative development for humans, cities can be helpful for human wellbeing at an early stage of development.

We would like to finish by raising an important issue that is related to the topic. An alarming trend in higher education, and in research in general is corporatization of higher education and research (Mills 2012a, Cox 2013, Mills 2012b, Catropa and Andrews 2020, Schmidlin 2015). This includes happiness research (Davies 2015). "World Happiness Report" (Helliwell et al. 2020) and its chapter about urban-rural gap in happiness (Burger et al. 2020) uses data from a private corporation. Indeed, the report is largely an advertisement for Gallup. Gallup then sells the happiness data at $30,000 (per year!)[15]–arguably this is not meant for research (most researchers cannot afford it). The goal here appears not to produce knowledge, but to make money–after all the sole responsibility of a business is profit (Friedman 1970).

8 Takeaway for Practice

Humans are worse off in cities (in terms of happiness). But not always what makes us happy is the right thing to do (Linden 2011, Haybron 2008, Nussbaum 2005). Notably, climate change is more important than human happiness, and cities are most environmentally friendly type of settle mt (Meyer 2013). and there are some limited things that can be done to make cities less miserable–we know what makes city happy (Ballas 2013).

Perhaps the clearest takeaway for practice is that we suffer from overpopulation. Again, we only need cities because of overpopulation and climate change (Pachauri et al. 2014), not because of production or productivity or consumption premium of cities. In fact, we have too much consumption and we need less consumption Dittmar et al. (2014), Kasser (2003), Leonard (2010). In fact we arguably also need less production and less economic growth Kallis et al. (2012), Kallis (2011), Van den Bergh (2011). While again cities are most environmentally friendly way to squeeze human overpopulation (MEYER) to deal better with climate change, cities directly cause climate change by being centers of production and consumption that drives climate change.

but we would need cities less if we had fewer people–contraception, sterilization etc; once there are fewer people, then we can have a meaningful discussion about right city size as we used to have couple decades ago `[blind for peer review]` –it is remarkable that there is no discussion about it! how could we have gone so wrong to think that the bigger the better and that there is no limit–cities are ballooning–Tokyo has about 40m people, and there are many 20m cities; The greatest and largest cities of antiquity, the Ancient Athens were 140k and Rome was 450k.

[14] Human nature is unlike that of bees: by one estimate we're 90% chimp and only 10% bee (Haidt 2012).

[15] Author's inquiry with Gallup to use their data.

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9 SOM: ONLINE APPENDIX (THIS WILL NOT BE A PART OF THE PAPER

9.1 Country Codes

note for ease of presentation numbers rounded to full digits

Table 3: .

cc	s c	ls	town	
1	ALB	Albania	5	3.400
2	ARG	Argentina	7.300	6.900
3	AUS	Australia	7.500	5.900
4	AZE	Azerbaijan	5.800	4.500
5	BFA	BurkinaFaso	5.600	4.500
6	BGD	Bangladesh	6.500	3.300
7	BGR	Bulgaria	4.900	4.400
8	BLR	Belarus	5.100	5.100
9	BOL	Bolivia	7.500	5.400
10	BRA	Brazil	7.500	6.400
11	CAN	Canada	7.800	4.500
12	CHL	Chile	7.200	7
13	CHN	China	7	6.200
14	COL	Colombia	8.300	6.400
15	DEU	Germany	7.200	4.700
16	DZA	Algeria	6	5.100
17	ECU	Ecuador	7.900	6.200
18	EGY	Egypt	5.500	4.800
19	ESP	Spain	7	5.300
20	ETH	Ethiopia	5.300	5.400
21	FRA	France	6.900	5
22	GEO	Georgia	5	4.300
23	GHA	Ghana	6.300	3.400
24	GRC	Greece	6.200	5.100
25	GTM	Guatemala	7.700	5.800
26	HRV	Croatia	6.200	4
27	HUN	Hungary	6.400	4.800
28	IDN	Indonesia	7.300	4.100
29	IND	India	6.200	3.700
30	IRN	Iran	6.400	5.700
31	IRQ	Iraq	4.900	5.900
32	ITA	Italy	6.900	4.500
33	JOR	Jordan	6.600	4.800
34	KAZ	Kazakhstan	7.100	5.100
35	KGZ	Kyrgyzstan	7.300	3.600
36	KWT	Kuwait	7.200	6.200
37	LBN	Lebanon	6.600	4.600
38	LTU	Lithuania	5	4.500
39	LVA	Latvia	4.900	4.700
40	MAR	Morocco	5.700	5.600
41	MDA	Moldova	4.600	3.400
42	MEX	Mexico	8	5.200
43	MKD	NorthMacedonia	5.400	4.300
44	MYS	Malaysia	7	4.600
45	NGA	Nigeria	6.400	5.400
46	NLD	Netherlands	7.600	5.800
47	NOR	Norway	7.800	4.100
48	NZL	NewZealand	7.700	4.900
49	PAK	Pakistan	6.600	4.900
50	PER	Peru	6.900	5
51	PHL	Philippines	7	5.400
52	POL	Poland	6.800	4.100
53	ROU	Romania	6.100	4.300
54	RUS	Russia	5.700	5.400
55	RWA	Rwanda	5.700	5.800
56	SRB	Serbia	5.900	4.600
57	SVN	Slovenia	7	2.700
58	SWE	Sweden	7.700	6.200
59	THA	Thailand	7.100	2.100
60	TJK	Tajikistan	7.900	3.100
61	TUN	Tunisia	5.600	3.900
62	TUR	Turkey	6.500	6.400
63	UKR	Ukraine	4.900	4.700
64	URY	Uruguay	7.400	6.100
65	USA	UnitedStates	7.500	5.400
66	UZB	Uzbekistan	7.900	3.300
67	VEN	Venezuela	7.100	6.500
68	VNM	Vietnam	7.200	4.400
69	ZAF	SouthAfrica	6.600	3
70	ZWE	Zimbabwe	5.100	3.900

+———————————+

* p<0.05, + p<0.1; robust std err

Table 4: lctry

these were dropped as data were missing on major categories if there less than 30 obs on both collectively 2 smallest categories or on top category: enumerate here: **TODO**

note for ease of presentation numbers rounded to full digits **TODO** discuss in depth interesting differences lol

Table 5: .

cc		T 1	T 2	T 3	T 4	T 5	T 6	T 7	T 8	
1		ALB	743	235	198	74	187	195	201	134
2		ARG	261	120	80	140	142	160	254	2880
3		AUS	404	420	440	469	698	621	779	2681
4		AZE	164	232	65	46	61	82	80	272
5		BFA	60	124	271	331	342	128	30	169
6		BGD	437	1498	781	371	397	223	289	156
7		BGR	500	246	103	133	178	247	348	318
8		BLR	917	111	61	252	251	160	1063	812
9		BOL	423	30	101	71	254	109	378	701
10		BRA	72	301	340	539	835	852	1740	2814
11		CAN	1321	490	537	372	410	762	693	1145
12		CHL	141	43	9	23	110	702	3466	2206
13		CHN	237	274	126	373	1812	1999	2139	2568
14		COL	16	48	225	358	1053	910	1476	1940
15		DEU	784	825	645	1279	1373	601	1147	996
16		DZA	190	7	364	278	456	544	549	92
17		ECU	50	132	127	144	179	301	916	553
18		EGY	119	362	1464	1143	1149	504	313	1072
19		ESP	307	328	365	451	433	362	946	729
20		ETH	98	108	360	291	207	691	904	71
21		FRA	246	82	39	48	47	85	67	387
22		GEO	742	442	138	151	189	49	309	682
23		GHA	159	1541	238	242	374	139	156	237
24		GRC	290	30	50	50	150	140	50	440
25		GTM	263	121	92	77	321	151	201	977
26		HRV	375	181	4	141	8	104	127	215
27		HUN	153	320	73	189	216	171	223	312
28		IDN	801	1204	1270	796	426	211	304	1203
29		IND	2965	2368	1421	1234	987	834	1171	1238
30		IRN	439	384	295	140	261	176	542	1737
31		IRQ	84	467	73	182	184	85	449	1117
32		ITA	70	148	135	176	131	124	100	128
33		JOR	310	489	459	356	676	286	299	754
34		KAZ	293	449	173	225	193	95	702	646
35		KGZ	983	958	373	194	168	141	231	695
36		KWT	114	61	19	70	23	6	297	462
37		LBN	80	265	336	336	529	275	153	191
38		LTU	324	12	48	114	66	30	252	163
39		LVA	373	24	57	81	101	108	57	399
40		MAR	44	270	292	474	100	51	293	921
41		MDA	700	906	370	202	214	20	261	365
42		MEX	1196	1129	749	653	697	566	1686	2764
43		MKD	475	253	163	60	326	343	48	382
44		MYS	300	503	269	282	314	276	735	241
45		NGA	318	804	669	658	1044	1123	1774	1428
46		NZL	308	0	270	182	152	190	516	187
47		PAK	529	1124	566	251	62	10	251	1935
48		PER	590	137	60	108	175	339	1070	131
49		PHL	350	295	210	105	590	430	1000	620
50		POL	1097	173	111	168	318	277	629	343
51		ROU	819	1203	568	411	487	482	1326	468
52		RUS	1166	600	541	417	784	461	1810	2532
53		RWA	15	76	92	128	419	1620	634	50
54		SRB	691	508	580	316	606	758	544	732
55		SVN	1520	475	240	149	226	78	278	118
56		SWE	123	56	91	166	377	545	762	766
57		THA	2450	613	389	164	190	93	45	153
58		TJK	360	370	80	70	90	90	30	110
59		TUN	73	468	669	429	251	252	191	80
60		TUR	96	12	84	48	264	230	1273	408
61		UKR	962	527	178	327	294	305	806	912
62		URY	99	129	118	229	493	328	1	1336
63		USA	410	352	357	636	960	746	972	1168
64		UZB	500	440	40	40	60	20	260	140
65		VEN	20	40	172	192	242	242	484	1008
66		VNM	63	708	736	784	190	94	966	154
67		ZAF	3912	218	194	258	269	238	390	987
68		ZWE	470	687	317	86	183	422	323	227

* p<0.05, + p<0.1; robust std err

Table 6: lcount

10 descriptive stats

like in eb paper maybe also like min and max and everything in app but order somehow anyway but yeah can see diff in mean across categories from bivariate but still median and sd by cat would be useful!

10.1 Limitations

We do not use Gallup data. Some may argue it is a limitation becuase these data cover more countries than WVS. However, apparently Gallup data cost tens of thousands of dollars and we cannot afford it. In fact we'd discourage scientists from paying from tax money to private corporations to do research. Therefore we actually consider it our advantage not to use Gallup data.

Many world countries are missing, using more WVS data in the future as they become available.

right there are limitations, many countries dropped out as they dont habe many people in smallest or biggest areas

Cross cultural comparbility is a caveat, we run separate for each country and ont pool data but still, it should be kept in mind that happiness can mean soemtig different in different countries. likewise world cities are very different, bradth of the study is accomanied by oversimplifcation.

"There is research in this area which claims that urban-rural differentials might be country-specific and not be generalisable at all (Rees, Tonon, Mikkelsen, & Rodriguez de la Vega, 2017)."

Again we would like to have more gradation at the top of the distruibution, but 500k is a reasonable and adequate cutoff to disinguish a large city from other places. there are no other data better suited for this purpose and we do best we can. And results are conservative–had we have cutoff at 750k or 1m they'd be stronger MY BOOK AND CITIES WHEN CITY IS TOOO BIG.

10.2 Cities can be actually useful for human wellbeing at early stage of developmebt

The graphs below elaborate the Maslow's pyramid mentioned in the body of the paper. At first one need to focus on necessities such as survival and cities do help; again, it is remarkable that in all developed countries studied here, cities are less happy!

Figure 1: Place Pyramid, (Florida 2008, p 294).

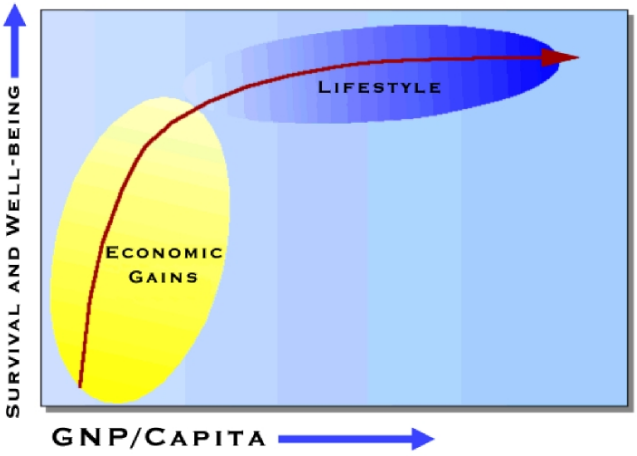

Figure 2: Well-being and income, (Inglehart 1997).

10.3 Urbanicity Definition and results by different definition and sequentail elaboration

we have 3 different operationalizatios of urbanicity: origianl 8 cat, collapse one way and collapse the other way; and 3 sets of models: bivariate (iwth yr dummies), esentially mean diff betwenn cat; basic set of controls; necessary/important ones; full//extened (one in the body); and there is 4th one over saturated but has most missing obs and hence postponed to the next section.

where i dicuss controls in data and to literature where i slam burger and indeed as shown later comparing unadjusted means results in cities being happier notably due to confounding of higher income education and class

Table 7: .

	-10	10-50k	50-500k	500k-	N
ALB	0.0	0.1	0.2*	0.4*	1960
ARG	0.0	0.2+	-0.0	-0.1	4010
AUS	0.0	-0.0	-0.0	-0.0	6466
AZE	0.0	-0.2	-0.3	0.4*	1002
BFA	0.0	-0.3*	0.6*	-0.0	1421
BGD	0.0	-0.2*	0.4*	1.5*	4106
BGR	0.0	0.6*	0.7*	0.8*	2014
BLR	0.0	0.5*	0.4*	0.5*	3603
BOL	0.0	-0.1	-0.0	0.1	2058
BRA	0.0	-0.0	-0.3*	-0.3*	7462
CAN	0.0	-0.1	-0.1*	-0.5*	5720
CHL	0.0	0.3	-0.2	-0.2	6657
CHN	0.0	0.2	0.4*	0.2+	9407
COL	0.0	-0.0	-0.0	-0.1	6025
DEU	0.0	-0.1*	0.0	-0.0	7625
DZA	0.0	0.3+	0.1	0.4	2433
ECU	0.0	-0.2	-0.1	0.0	2400
EGY	0.0	-0.2+	-0.1	-0.5*	6120
ESP	0.0	-0.0	-0.1	-0.2+	3898
ETH	0.0	-0.5*	0.1	0.1	2719
FRA	0.0	0.0	0.3+	0.1	1000
GEO	0.0	0.0	0.5*	0.5*	2676
GHA	0.0	0.7*	0.7*	0.5*	3080
GRC	0.0	0.0	0.2	-0.4*	1200
GTM	0.0	0.6*	0.8*	0.3*	2202
HRV	0.0	0.1	-0.1	0.3	1152
HUN	0.0	0.0	0.1	0.1	1649
IDN	0.0	0.2*	0.4*	0.3*	6092
IND	0.0	0.6*	0.1+	0.5*	11971
IRN	0.0	0.2	-0.3*	0.0	3973
IRQ	0.0	0.1	-0.1	0.2+	2631
ITA	0.0	-0.0	-0.1	0.1	1006
JOR	0.0	0.2*	-0.0	0.1	3622
KAZ	0.0	0.1	0.1	-0.0	2761
KGZ	0.0	-0.2	0.2	-0.7*	3731
KWT	0.0	-0.6*	0.4+	0.1	1034
LBN	0.0	0.0	-0.1	-0.1	2159
LTU	0.0	0.5+	0.6*	0.6*	996
LVA	0.0	-0.0	-0.2	-0.4*	1190
MAR	0.0	0.2+	0.7*	0.2	2442
MDA	0.0	0.3*	0.9*	0.7*	3000
MEX	0.0	0.1	0.0	-0.0	9329
MKD	0.0	-0.1	0.2	0.4*	2031
MYS	0.0	0.1	0.0	-0.1	2919
NGA	0.0	-0.0	0.1	0.5*	7807
NZL	0.0	-0.1	-0.2+	0.1	1770
PAK	0.0	0.6*	0.1	0.4*	3677
PER	0.0	0.3+	0.6*	0.5*	2602
PHL	0.0	0.6*	0.4+	0.7*	3600
POL	0.0	0.1	0.2*	0.0	3093
ROU	0.0	0.1	0.4*	0.4*	5618
RUS	0.0	0.2*	0.1	0.4*	8187
RWA	0.0	-0.0	-0.2	-0.3	3030
SRB	0.0	0.2*	0.4*	0.2+	4654
SVN	0.0	0.3*	0.4*	0.1	3065
SWE	0.0	0.2	0.3*	0.2	2882
THA	0.0	0.2	-0.1	-0.7*	4086
TJK	0.0	-0.1	-0.2	-0.1	1200
TUN	0.0	0.1	0.0	-0.8*	2405
TUR	0.0	0.7*	0.9*	1.0*	2405
UKR	0.0	0.2+	0.0	0.0	4169
URY	0.0	0.1	-0.0	0.1	2717
USA	0.0	-0.0	-0.2*	-0.3*	5586
UZB	0.0	-0.2	-0.2+	-0.4*	1493
VEN	0.0	-0.2	-0.2	0.1	2385
VNM	0.0	0.4*	0.5	0.0	3674
ZAF	0.0	0.9*	1.2*	1.1*	6448
ZWE	0.0	0.2	0.2	0.2	2714

* p<0.05, + p<0.1; robust std err

Table 8: exT4-1

Table 9: .

	-5	5-500k	500k-	N
ALB	0.0	0.1	0.4*	1960
ARG	0.0	0.1	-0.1	4010
AUS	0.0	-0.1	-0.1	6466
AZE	0.0	-0.4*	0.3	1002
BFA	0.0	-0.1	-0.0	1421
BGD	0.0	0.1+	1.5*	4106
BGR	0.0	0.7*	0.9*	2014
BLR	0.0	0.4*	0.5*	3603
BOL	0.0	-0.1	0.1	2058
BRA	0.0	0.1	-0.0	7462
CAN	0.0	-0.1*	-0.5*	5720
CHL	0.0	-0.1	-0.1	6657
CHN	0.0	0.5*	0.3*	9407
COL	0.0	0.1	0.1	6025
DEU	0.0	-0.0	-0.0	7625
DZA	0.0	0.2	0.4	2433
ECU	0.0	-0.1	0.0	2400
EGY	0.0	-0.6*	-1.0*	6120
ESP	0.0	-0.1	-0.2*	3898
ETH	0.0	0.2	0.3	2719
FRA	0.0	0.0	0.0	1000
GEO	0.0	0.3*	0.5*	2676
GHA	0.0	0.7*	0.5*	3080
GRC	0.0	0.2	-0.4*	1200
GTM	0.0	0.6*	0.3*	2202
HRV	0.0	0.0	0.3+	1152
HUN	0.0	-0.0	-0.0	1649
IDN	0.0	0.2*	0.3*	6092
IND	0.0	0.2*	0.4*	11971
IRN	0.0	-0.1	-0.0	3973
IRQ	0.0	0.0	0.2+	2631
ITA	0.0	-0.0	0.1	1006
JOR	0.0	0.1	0.1	3622
KAZ	0.0	0.1	-0.0	2761
KGZ	0.0	-0.1	-0.7*	3731
KWT	0.0	0.1	0.1	1034
LBN	0.0	-0.1	-0.2	2159
LTU	0.0	0.6*	0.7*	996
LVA	0.0	-0.0	-0.4*	1190
MAR	0.0	0.4*	0.3	2442
MDA	0.0	0.5*	0.8*	3000
MEX	0.0	0.0	-0.0	9329
MKD	0.0	0.0	0.3*	2031
MYS	0.0	0.1	-0.1	2919
NGA	0.0	-0.2*	0.2*	7807
NZL	0.0	-0.3*	0.0	1770
PAK	0.0	0.2*	0.4*	3677
PER	0.0	0.5*	0.5*	2602
PHL	0.0	0.3*	0.6*	3600
POL	0.0	0.2*	0.1	3093
ROU	0.0	0.3*	0.4*	5618
RUS	0.0	0.3*	0.5*	8187
RWA	0.0	-0.6*	-0.7*	3030
SRB	0.0	0.3*	0.2*	4654
SVN	0.0	0.4*	0.1	3065
SWE	0.0	0.4*	0.3*	2882
THA	0.0	0.1	-0.7*	4086
TJK	0.0	-0.2	-0.1	1200
TUN	0.0	0.1	-0.7*	2405
TUR	0.0	1.2*	1.4*	2405
UKR	0.0	0.1	0.0	4169
URY	0.0	0.1	0.1	2717
USA	0.0	-0.1	-0.3*	5586
UZB	0.0	-0.1	-0.4*	1493
VEN	0.0	-1.8*	-1.5*	2385
VNM	0.0	0.2*	-0.3+	3674
ZAF	0.0	1.0*	1.1*	6448
ZWE	0.0	0.3*	0.3+	2714

* p<0.05, + p<0.1; robust std err

Table 10: exT3-1

Table 11: .

	-2k	2-5k	5-10k	10-20k	20-50k	50-100k	100-500k	500k-	N
ALB	0.0	0.3+	-0.0	0.0	0.2	0.1	0.5*	0.5*	1960
ARG	0.0	0.5*	0.2	0.4*	0.4*	0.6*	-0.2	0.0	4010
AUS	0.0	0.1	-0.1	0.1	-0.1	0.0	-0.1	-0.0	6466
AZE	0.0	-0.1	-0.8*	-0.5	-0.2	-0.3	-0.6*	0.2	1002
BFA	0.0	-0.8*	-0.4+	-1.0*	-0.6*	0.2	-0.1	-0.5*	1421
BGD	0.0	-0.4*	-0.1	-0.6*	-0.3*	0.1	0.1	1.2*	4106
BGR	0.0	0.5*	0.6*	0.7*	0.8*	0.9*	1.0*	1.0*	2014
BLR	0.0	0.7*	0.1	0.8*	0.3+	0.7*	0.5*	0.6*	3603
BOL	0.0	-0.0	-0.1	-0.1	-0.1	0.2	-0.1	0.1	2058
BRA	0.0	0.1	0.7*	0.3	0.4	0.3	0.0	0.1	7462
CAN	0.0	0.1	-0.1	-0.1	-0.0	-0.1	-0.2+	-0.5*	5720
CHL	0.0	0.6+	0.8	0.4	0.5+	0.1	-0.1	0.0	6657
CHN	0.0	-0.1	0.6*	0.7*	0.2	0.5*	0.6*	0.3+	9407
COL	0.0	-0.9+	-0.5	-0.7+	-0.5	-0.5	-0.6	-0.6+	6025
DEU	0.0	0.1	0.1	-0.0	-0.1	0.1	0.0	0.0	7625
DZA	0.0	1.9*	0.1	0.2	0.5*	0.2	0.3	0.5	2433
ECU	0.0	-0.2	-0.2	-0.1	-0.6+	-0.3	-0.2	-0.1	2400
EGY	0.0	0.6*	-0.2	-0.1	-0.2	0.0	-0.4	-0.5+	6120
ESP	0.0	-0.2	-0.2	-0.3+	-0.1	-0.1	-0.3*	-0.3*	3898
ETH	0.0	0.8+	0.9*	0.2	0.3	0.8*	1.1*	1.0*	2719
FRA	0.0	-0.3	-0.8*	-0.3	0.1	0.3	0.0	-0.1	1000
GEO	0.0	0.1	0.4*	0.1	0.1	1.0*	0.5*	0.6*	2676
GHA	0.0	0.3	0.9*	1.0*	1.0*	1.1*	0.8*	0.7*	3080
GRC	0.0	0.2	0.4	-0.1	0.2	0.5*	-0.3	-0.3*	1200
GTM	0.0	-0.2	0.1	0.9*	0.5*	1.0*	0.7*	0.3+	2202
HRV	0.0	-0.3	2.0*	0.1	0.4	-0.7*	0.3	0.2	1152
HUN	0.0	0.3	-0.2	-0.1	0.4+	-0.2	0.7*	0.2	1649
IDN	0.0	0.1	0.2+	0.1	0.8*	0.6*	0.4*	0.4*	6092
IND	0.0	0.4*	0.0	0.7*	0.8*	0.1	0.4*	0.6*	11971
IRN	0.0	-0.2	-0.2	0.3	-0.0	-0.6*	-0.3+	-0.1	3973
IRQ	0.0	-0.5+	-0.4	-0.5	-0.1	-0.3	-0.6+	-0.3	2631
ITA	0.0	-0.4	-0.2	-0.2	-0.3	-0.4	-0.3	-0.1	1006
JOR	0.0	0.0	-0.0	0.3	0.2	-0.1	0.1	0.1	3622
KAZ	0.0	-0.1	-0.1	-0.3+	0.4*	0.4	-0.0	-0.1	2761
KGZ	0.0	-0.1	-0.2	-0.4*	-0.2	-0.5*	0.4*	-0.8*	3731
KWT	0.0	1.5*	0.4	-0.0	-0.2	0.4	0.9*	0.6*	1034
LBN	0.0	-0.0	-0.2	-0.1	-0.0	-0.2	-0.2	-0.2	2159
LTU	0.0	0.4	0.2	0.5	0.6+	-0.0	0.8*	0.7*	996
LVA	0.0	-0.0	0.4	0.1	-0.0	-0.0	-0.5	-0.4*	1190
MAR	0.0	-0.2	-0.0	0.1	-0.0	0.5	0.6*	0.1	2442
MDA	0.0	0.2*	0.4*	0.3+	0.7*	-2.0*	1.3*	0.9*	3000
MEX	0.0	0.1	0.1	-0.0	0.2*	0.1	0.1	0.0	9329
MKD	0.0	0.8*	0.0	0.3	0.1	0.3+	1.4*	0.6*	2031
MYS	0.0	0.4*	0.4*	0.4*	0.4*	0.2	0.3*	0.2	2919
NGA	0.0	-0.3+	-0.8*	-0.7*	-0.4*	-0.4*	-0.3+	0.0	7807
NZL	0.0		-0.3	-0.2	-0.3	-0.2	-0.4*	0.0	1770
PAK	0.0	0.1	0.2+	1.9*	0.4	2.3*	0.2	0.5*	3677
PER	0.0	0.1	-0.1	0.3	0.3	0.4*	0.7*	0.5*	2602
PHL	0.0	0.3	0.1	0.5+	0.8*	0.4+	0.7*	1.0*	3600
POL	0.0	0.2	0.3	0.4*	0.0	0.2	0.3*	0.1	3093
ROU	0.0	0.3*	0.2+	0.1	0.5*	0.2	0.8*	0.6*	5618
RUS	0.0	0.6*	0.6*	0.4*	0.6*	0.4*	0.4*	0.7*	8187
RWA	0.0	-0.7+	-1.5*	-1.3*	-1.0*	-1.3*	-1.0*	-1.3*	3030
SRB	0.0	0.3*	0.2	0.2	0.4*	0.7*	0.3*	0.3*	4654
SVN	0.0	0.3*	0.3*	0.7*	0.2+	0.4+	0.5*	0.2	3065
SWE	0.0	0.2	0.4	0.3	0.4*	0.4*	0.5*	0.4*	2882
THA	0.0	0.2+	0.2+	0.3+	0.1	-0.1	-0.0	-0.7*	4086
TJK	0.0	-0.1	-0.2	-0.7*	0.2	-0.2	-0.5*	-0.2	1200
TUN	0.0	-0.6	-0.4	-0.6+	0.2	-0.4	-0.2	-1.1*	2405
TUR	0.0	-3.2*	0.6*	0.2	0.9*	0.8*	0.9*	1.0*	2405
UKR	0.0	0.4*	0.1	0.5*	0.1	0.1	0.1	0.2	4169
URY	0.0	0.1	0.2	0.2	0.3	0.1	1.6*	0.2	2717
USA	0.0	-0.3*	-0.2	-0.1	-0.2*	-0.4*	-0.3*	-0.5*	5586
UZB	0.0	0.3*	0.5+	0.1	-0.2	-1.0*	-0.0	-0.3+	1493
VEN	0.0	1.5	-1.1	-0.9	-0.6	-0.8	-0.8	-0.5	2385
VNM	0.0	0.5*	0.4+	1.0*	0.3	1.2*	1.0*	0.5	3674
ZAF	0.0	-0.1	0.4*	0.9*	1.1*	1.2*	1.2*	1.2*	6448
ZWE	0.0	0.1	0.4+	0.1	0.5*	0.1	0.6*	0.4+	2714

* p<0.05, + p<0.1; robust std err

Table 12: exT-1

Table 13: .

	-10	10-50k	50-500k	500k-	N
ALB	0.0	-0.3*	-0.1	-0.0	1864
ARG	0.0	0.2	-0.2	0.1	955
AUS	0.0	0.1	-0.1	-0.1	3895
AZE	0.0	0.1	-0.2	0.2	995
BFA	0.0	-0.2	0.3	-0.4	636
BGD	0.0	-0.2	0.1	0.9*	2562
BGR	0.0	0.0	0.1	-0.1	1637
BLR	0.0	0.0	-0.0	0.0	3394
BRA	0.0	-0.2	-0.5*	-0.5*	3780
CAN	0.0	-0.1	-0.2*	-0.5*	3320
CHL	0.0	0.5	-0.7*	-0.6*	3823
CHN	0.0	0.2	0.3*	0.1	4371
COL	0.0	0.2	0.1	-0.0	4376
DEU	0.0	-0.2*	-0.0	0.0	5137
DZA	0.0	0.3+	0.0	-0.1	1806
ECU	0.0	-0.5	-0.6*	-0.5+	1187
EGY	0.0	-0.2	-0.0	-0.8*	3466
ESP	0.0	0.1	-0.0	-0.2+	1652
ETH	0.0	-1.8*	-0.2	-0.4	1246
GEO	0.0	-0.0	0.0	0.1	2602
GHA	0.0	0.3*	0.1	-0.2	2602
HUN	0.0	-0.1	-0.0	-0.6*	952
IDN	0.0	0.2+	0.1	0.1	2459
IND	0.0	0.5*	-0.4*	0.5*	6931
IRN	0.0	0.3	-0.5*	0.1	2208
IRQ	0.0	0.2	-0.4*	-0.2	1233
ITA	0.0	-0.3*	-0.5*	0.0	639
JOR	0.0	0.2*	0.1	-0.1	2137
KAZ	0.0	0.4*	-0.0	-0.3*	1497
KGZ	0.0	-0.3	0.3*	-0.5*	2427
KWT	0.0	-0.4	0.5*	0.1	953
LBN	0.0	0.1	0.1	-0.2	898
LTU	0.0	0.2	0.3	0.5+	889
LVA	0.0	-0.2	-0.5*	-0.7*	1119
MAR	0.0	0.2	0.2	-0.2	888
MDA	0.0	0.1	0.1	0.2	2740
MEX	0.0	0.0	-0.1	-0.3*	3782
MKD	0.0	-0.3+	0.1	-0.2	1600
MYS	0.0	0.3+	0.1	-0.2	1559
NGA	0.0	0.1	0.1	0.1	4628
NZL	0.0	0.2	-0.2		625
PAK	0.0		0.3	0.4*	1131
PER	0.0	0.2	0.7*	-0.3	1122
PHL	0.0	0.2	-0.1	0.1	2343
POL	0.0	-0.2	-0.0	-0.3+	2683
ROU	0.0	-0.3*	-0.1	0.3*	3966
RUS	0.0	0.2+	0.1	0.2*	3999
RWA	0.0	-0.1	-0.3*	0.3	2432
SRB	0.0	-0.1	0.3*	-0.5*	3128
SVN	0.0	0.2+	0.1	-0.3	1896
SWE	0.0	0.2	0.1	0.1	1888
THA	0.0	-0.2	0.1	0.0	2387
TUN	0.0	-0.1			901
UKR	0.0	0.0	-0.2*	-0.2*	3593
URY	0.0	0.3*	0.2	0.1	2511
USA	0.0	0.0	-0.2*	-0.2*	3493
UZB	0.0	-0.0	0.0	-0.3*	1407
VEN	0.0	-0.5	-0.8*	-0.1	1111
VNM	0.0	0.3*	-0.0	-0.5	2330
ZAF	0.0	0.3*	0.3*	0.1	5575
ZWE	0.0	-0.1	0.1	-0.0	1492

* p<0.05, + p<0.1; robust std err

Table 14: exT4-2

Table 15: .

	-5	5-500k	500k-	N
ALB	0.0	-0.2*	-0.1	1864
ARG	0.0	-0.2	-0.0	955
AUS	0.0	-0.1	-0.2*	3895
AZE	0.0	-0.2	0.1	995
BFA	0.0	0.3	-0.0	636
BGD	0.0	0.1	0.9*	2562
BGR	0.0	0.0	-0.1	1637
BLR	0.0	-0.0	-0.0	3394
BRA	0.0	0.1	-0.1	3780
CAN	0.0	-0.2*	-0.5*	3320
CHL	0.0	-0.5	-0.5	3823
CHN	0.0	0.4*	0.2+	4371
COL		0.0	-0.1	4376
DEU	0.0	-0.1	0.0	5137
DZA	0.0	-0.4+	-0.6	1806
ECU	0.0	-1.0*	-0.8*	1187
EGY	0.0	-0.4*	-1.1*	3466
ESP	0.0	-0.0	-0.3+	1652
ETH	0.0	0.0	-0.2	1246
GEO	0.0	0.1	0.1	2602
GHA	0.0	0.3*	-0.1	2602
HUN	0.0	-0.1	-0.6*	952
IDN	0.0	0.1	0.1	2459
IND	0.0	-0.0	0.4*	6931
IRN	0.0	-0.4*	-0.0	2208
IRQ	0.0	-0.2	-0.2	1233
ITA	0.0	-0.2	0.1	639
JOR	0.0	0.1	-0.1	2137
KAZ	0.0	0.1	-0.3*	1497
KGZ	0.0	-0.1	-0.5*	2427
KWT	0.0	0.3	0.2	953
LBN	0.0	-0.0	-0.3	898
LTU	0.0	0.2	0.5+	889
LVA	0.0	-0.3+	-0.7*	1119
MAR	0.0	0.0	-0.3	888
MDA	0.0	0.2+	0.2+	2740
MEX	0.0	-0.0	-0.3*	3782
MKD	0.0	-0.2+	-0.3	1600
MYS	0.0	0.1	-0.3	1559
NGA	0.0	-0.2+	-0.2	4628
NZL	0.0	0.0		625
PAK	0.0	0.5*	0.5*	1131
PER	0.0	0.5*	-0.3	1122
PHL	0.0	-0.0	0.1	2343
POL	0.0	-0.1	-0.3+	2683
ROU	0.0	-0.1+	0.3*	3966
RUS	0.0	0.3*	0.3*	3999
RWA	0.0	-0.8*	-0.3	2432
SRB	0.0	0.1	-0.6*	3128
SVN	0.0	0.2*	-0.3	1896
SWE	0.0	0.2	0.2	1888
THA	0.0	0.1	0.1	2387
TUN	0.0	0.1		901
UKR	0.0	-0.1	-0.2*	3593
URY	0.0	0.3*	0.1	2511
USA	0.0	-0.1	-0.2*	3493
UZB	0.0	0.1	-0.3+	1407
VEN	0.0	-2.2*	-1.6*	1111
VNM	0.0	0.1	-0.5+	2330
ZAF	0.0	0.3*	0.2	5575
ZWE	0.0	0.2	0.1	1492

* p<0.05, + p<0.1; robust std err

Table 16: exT3-2

Table 17: .

	-2k	2-5k	5-10k	10-20k	20-50k	50-100k	100-500k	500k-	N
ALB	0.0	0.3*	-0.3+	-0.6*	-0.2	-0.3	0.1	-0.0	1864
ARG	0.0	0.9*	-0.3	0.1	0.4	0.0	-0.4	0.1	955
AUS	0.0	0.0	-0.3	0.1	0.0	-0.1	-0.1	-0.2	3895
AZE	0.0	-0.0	-0.4	-0.2	0.1	-0.1	-0.4	0.1	995
BFA	0.0	0.1	0.6+	-0.2	0.3	0.6+	0.7	-0.0	636
BGD	0.0	-0.4*	-0.2	-0.4*	-0.5*	-0.1	-0.3	0.5*	2562
BGR	0.0	0.5*	0.1	0.2	0.2	0.0	0.4*	0.1	1637
BLR	0.0	0.3	-0.2	0.2	-0.1	0.1	-0.0	0.0	3394
BRA	0.0	-0.3	0.4	-0.1	-0.1	-0.2	-0.5	-0.4	3780
CAN	0.0	-0.0	-0.2	-0.2	-0.2+	-0.3*	-0.2*	-0.5*	3320
CHL	0.0	0.5	1.0	-0.1	1.2*	-0.2	-0.3	-0.2	3823
CHN	0.0	0.0	0.5*	0.8*	0.1	0.2	0.6*	0.4+	4371
COL			0.0	0.0	0.2	0.1	0.0	-0.0	4376
DEU	0.0	-0.1	-0.0	-0.2*	-0.2*	-0.0	-0.0	-0.0	5137
DZA	0.0	1.7*	-0.5*	-0.1	-0.1	-0.5+	-0.3	-0.5	1806
ECU	0.0	0.1	-1.2	-1.0*	-0.7*	-1.1*	-0.9*	-0.8*	1187
EGY	0.0	0.6+	0.0	-0.1	-0.1	0.3	-0.3	-0.7*	3466
ESP	0.0	-0.2	-0.2	-0.2	0.1	-0.0	-0.2	-0.4+	1652
ETH	0.0	0.7	2.2*	0.0	-2.0*	-0.2	0.5	0.1	1246
GEO	0.0	0.2+	0.3+	0.2	0.0	1.1*	-0.0	0.2+	2602
GHA	0.0	0.3+	0.8*	0.7*	0.6*	0.5+	0.3	0.1	2602
HUN	0.0	0.1	-0.3	-0.3	0.1	0.1	-0.0	-0.5+	952
IDN	0.0	-0.0	0.0	-0.2	1.0*	0.5+	-0.0	0.1	2459
IND	0.0	0.2*	-0.2*	0.6*	0.4*	-0.5*	-0.3*	0.4*	6931
IRN	0.0	-0.5*	-0.7*	-0.2	0.1	-1.0+	-0.7*	-0.2+	2208
IRQ	0.0	-0.6+	-0.6	-0.7	-0.3	-0.8+	-1.0*	-0.7*	1233
ITA	0.0	-0.5+	-0.0	-0.4+	-0.7*	-0.6*	-0.9*	-0.3	639
JOR	0.0	-0.1	-0.2	0.2	0.0	-0.2	0.1	-0.2	2137
KAZ	0.0	-0.5*	-0.4	-0.0	0.1	-0.6+	-0.3+	-0.6*	1497
KGZ	0.0	-0.2+	-0.6*	-0.5*	-0.3	-0.1	0.3+	-0.6*	2427
KWT	0.0	1.7*	0.5	0.2	0.1	1.3*	1.2*	0.8*	953
LBN	0.0	-0.6+	-0.6+	-0.5+	-0.3	-0.4	-0.4	-0.7+	898
LTU	0.0	1.0	0.1	0.2	0.2	-0.4	0.4+	0.5+	889
LVA	0.0	-0.0	0.2	-0.2	-0.2	-0.3	-0.7*	-0.7*	1119
MAR	0.0	-0.2	-0.4	-0.1	-0.2	-0.2	-0.0	-0.4	888
MDA	0.0	0.3*	0.4*	0.3+	0.5*	-3.0*	0.5*	0.4*	2740
MEX	0.0	0.2+	0.1	0.1	0.2	0.1	0.1	-0.1	3782
MKD	0.0	0.9*	-0.1	-0.2	-0.1	0.1	1.4*	-0.0	1600
MYS	0.0	0.1	-0.0	0.2	0.4	-0.2	0.2	-0.2	1559
NGA	0.0	-0.0	-0.6	-0.2	-0.2	-0.4	-0.1	-0.3	4628
NZL	0.0		0.2	0.4	0.0	-0.1	-0.1		625
PAK	0.0	0.0	0.5+				0.4	0.5*	1131
PER	0.0	-0.1	-0.4	0.1	0.2	0.3	0.6*	-0.3	1122
PHL		0.0		-0.5	0.2	-0.2	-0.0	0.1	2343
POL	0.0	-0.1	0.0	0.2	-0.4*	-0.0	-0.1	-0.3+	2683
ROU	0.0	0.0	0.0	-0.5*	-0.1	-0.4*	0.0	0.3*	3966
RUS	0.0	0.5*	0.5*	0.5*	0.5*	0.3*	0.5*	0.5*	3999
RWA	0.0	-0.3	-1.3*	-1.0+	-0.8	-1.2*	-0.8	-0.5	2432
SRB	0.0	0.2	0.0	0.1	-0.0	0.4*	0.2	-0.5*	3128
SVN	0.0	0.1	0.3*	0.4*	0.2	0.2	0.1	-0.3	1896
SWE	0.0	-0.7*	-0.0	0.2	0.0	0.0	0.0	-0.0	1888
THA	0.0	0.2*	0.3*	0.0	-0.2	0.0	0.7*	0.1	2387
TUN	0.0	-0.7	-0.5	-0.7	-0.4				901
UKR	0.0	0.4*	0.1	0.3*	0.0	-0.2	-0.0	-0.1	3593
URY	0.0	0.2	0.2	0.4+	0.5*	0.3	2.1*	0.2	2511
USA	0.0	-0.2	-0.1	-0.1	-0.1	-0.4*	-0.3+	-0.4*	3493
UZB	0.0	0.3*	0.5+	0.4	-0.1	-0.3	0.2	-0.1	1407
VEN	0.0	1.3	-1.6	-1.2	-1.0	-1.2	-1.6+	-0.7	1111
VNM	0.0	0.2	0.1	0.6*	-0.1	1.1*	0.0	-0.3	2330
ZAF	0.0	-0.3+	0.3+	0.2	0.4*	0.2	0.4*	0.1	5575
ZWE	0.0	-0.0	0.4	-0.3	0.1	0.1	0.3	0.1	1492

* p<0.05, + p<0.1; robust std err

Table 18: exT-2

Table 19: .

	-10	10-50k	50-500k	500k-	N
ALB	0.0	-0.4*	-0.2	0.5*	1582
ARG	0.0	0.1	-0.3	-0.0	855
AUS	0.0	0.1	0.0	-0.0	3728
AZE	0.0	0.1	-0.0	0.3*	964
BFA	0.0	-0.0	0.3	-0.2	567
BGD	0.0	-0.2*	0.1	0.6*	2104
BGR	0.0	-0.0	-0.1	-0.5*	1229
BLR	0.0	0.0	-0.1	-0.1	2815
BRA	0.0	-0.3*	-0.5*	-0.6*	3576
CAN	0.0	-0.1	-0.1+	-0.3*	3177
CHL	0.0	0.6+	-0.7*	-0.7*	3527
CHN	0.0	-0.3	-0.4	-0.7	2005
COL	0.0	0.1	0.0	-0.1	1376
DEU	0.0	-0.2*	-0.0	0.0	4795
DZA	0.0	0.3+	0.0	-0.0	1596
ECU	0.0	-0.7*	-0.7*	-0.5+	1182
EGY	0.0	-0.2	0.1	-0.8*	3428
ESP	0.0	-0.1	-0.0	-0.1	1487
ETH	0.0	-1.4+	0.1	0.1	1017
GEO	0.0	-0.0	0.1	0.0	2401
GHA	0.0	0.2+	0.1	-0.1	2572
HUN	0.0	0.0	-0.1	-0.4*	887
IDN	0.0	0.3*	0.2	0.1	2056
IND	0.0	0.5*	-0.4*	0.4*	5857
IRN	0.0	0.3	-0.5*	0.0	2119
IRQ	0.0	0.3+	-0.3*	-0.0	1123
ITA	0.0	-0.2	-0.3+	0.0	585
JOR	0.0	0.2*	-0.0	-0.2	2089
KAZ	0.0	0.2	-0.1	-0.3*	1497
KGZ	0.0	-0.1	0.2	-0.3*	2293
LBN	0.0	0.3+	0.1	0.2	731
LTU	0.0	0.3	0.3	0.2	750
LVA	0.0	-0.1	-0.4*	-0.7*	963
MAR	0.0	0.1	0.2	-0.1	845
MDA	0.0	0.2+	0.2	0.1	2478
MEX	0.0	-0.0	-0.1	-0.2+	3544
MKD	0.0	-0.3+	0.1	0.0	1385
MYS	0.0	0.2	0.0	-0.4*	1541
NGA	0.0	0.2	0.2+	0.1	4488
NZL	0.0	0.0	-0.1		417
PAK	0.0		0.2	0.2	900
PER	0.0	0.1	0.5*	-0.5	1026
PHL	0.0	0.4	0.4	0.5	2294
POL	0.0	-0.2	-0.1	-0.2	1533
ROU	0.0	-0.3*	-0.2*	0.3*	3568
RUS	0.0	0.1	0.1	0.2+	3253
RWA	0.0	-0.1	-0.2*	0.1	2398
SRB	0.0	0.0	0.2*	-0.4*	2539
SVN	0.0	0.3*	-0.1	-0.3	1620
SWE	0.0	0.2	0.1	0.1	1769
THA	0.0	-0.1	0.2	0.0	2178
TUN	0.0	-0.1			826
UKR	0.0	0.1	0.0	-0.1	2985
URY	0.0	0.3*	0.1	0.1	2017
USA	0.0	0.0	-0.1	-0.2*	3372
UZB	0.0	-0.1	0.0	-0.3*	1247
VEN	0.0	-0.2	-0.7+	0.1	1034
VNM	0.0	0.3*	0.2	-1.4*	2039
ZAF	0.0	0.2+	0.1	-0.0	5330
ZWE	0.0	-0.2	0.1	0.0	1487

* p<0.05, + p<0.1; robust std err

Table 20: exT4-3

Table 21: .

	-5	5-500k	500k-	N
ALB	0.0	-0.4*	0.4+	1582
ARG	0.0	-0.2	-0.0	855
AUS	0.0	-0.0	-0.1	3728
AZE	0.0	-0.1	0.3	964
BFA	0.0	0.3	0.0	567
BGD	0.0	0.0	0.7*	2104
BGR	0.0	-0.0	-0.5*	1229
BLR	0.0	-0.1	-0.1	2815
BRA	0.0	-0.2	-0.4*	3576
CAN	0.0	-0.1+	-0.3*	3177
CHL	0.0	-0.7*	-0.7*	3527
CHN		0.0	-0.4*	2005
COL		0.0	-0.1	1376
DEU	0.0	-0.1	0.0	4795
DZA	0.0	-0.4*	-0.6	1596
ECU	0.0	-0.9*	-0.7*	1182
EGY	0.0	-0.4*	-1.1*	3428
ESP	0.0	-0.1	-0.1	1487
ETH	0.0	0.3	0.4	1017
GEO	0.0	0.1	0.1	2401
GHA	0.0	0.3*	-0.0	2572
HUN	0.0	0.0	-0.4*	887
IDN	0.0	0.1	-0.0	2056
IND	0.0	-0.0	0.3*	5857
IRN	0.0	-0.3*	-0.0	2119
IRQ	0.0	-0.1	-0.0	1123
ITA	0.0	-0.1	0.2	585
JOR	0.0	0.1	-0.2	2089
KAZ	0.0	-0.0	-0.3*	1497
KGZ	0.0	-0.1	-0.3*	2293
LBN	0.0	0.1	0.2	731
LTU	0.0	0.3	0.3	750
LVA	0.0	-0.1	-0.6*	963
MAR	0.0	0.0	-0.2	845
MDA	0.0	0.2*	0.2	2478
MEX	0.0	-0.1	-0.2+	3544
MKD	0.0	-0.2	-0.1	1385
MYS	0.0	0.1	-0.4*	1541
NGA	0.0	-0.1	-0.1	4488
NZL	0.0	-0.1		417
PAK	0.0	0.4+	0.3	900
PER	0.0	0.3*	-0.5	1026
PHL	0.0	0.4	0.5	2294
POL	0.0	-0.1	-0.1	1533
ROU	0.0	-0.2*	0.3*	3568
RUS	0.0	0.2*	0.2*	3253
RWA	0.0	-0.7*	-0.4+	2398
SRB	0.0	0.1	-0.4*	2539
SVN	0.0	0.2+	-0.2	1620
SWE	0.0	0.2	0.2	1769
THA	0.0	0.1	0.1	2178
TUN	0.0	0.1		826
UKR	0.0	0.0	-0.1	2985
URY	0.0	0.2	0.1	2017
USA	0.0	-0.1	-0.2*	3372
UZB	0.0	0.0	-0.3*	1247
VEN	0.0	-1.7*	-1.2*	1034
VNM	0.0	0.1	-1.5*	2039
ZAF	0.0	0.2*	0.0	5330
ZWE	0.0	0.1	0.2	1487

* p<0.05, + p<0.1; robust std err

Table 22: exT3-3

Table 23: .

	-2k	2-5k	5-10k	10-20k	20-50k	50-100k	100-500k	500k-	N
ALB	0.0	0.2	-0.5*	-0.6*	-0.4*	-0.5*	0.0	0.4*	1582
ARG	0.0	0.6+	-0.0	0.0	0.3	-0.1	-0.3	0.1	855
AUS	0.0	0.0	-0.2	0.1	0.0	-0.1	-0.0	-0.1	3728
AZE	0.0	0.0	-0.5	-0.2	0.3	-0.0	-0.1	0.3	964
BFA	0.0	0.3	0.7+	0.1	0.6+	0.8+	0.8	0.2	567
BGD	0.0	-0.8*	-0.6*	-1.0*	-0.8*	-0.5*	-0.6*	-0.0	2104
BGR	0.0	0.4*	0.3	0.3	0.1	-0.1	0.2	-0.3+	1229
BLR	0.0	0.5*	-0.3	0.1	-0.0	0.1	-0.1	-0.0	2815
BRA	0.0	-0.6+	-0.2	-0.6+	-0.6*	-0.7*	-0.9*	-0.9*	3576
CAN	0.0	-0.1	-0.1	-0.1	-0.2	-0.3*	-0.1	-0.4*	3177
CHL	0.0	0.8+	0.3	0.8	1.1*	-0.2	-0.3	-0.3	3527
CHN			0.0	0.1	-0.4	-0.4	-0.3	-0.7	2005
COL			0.0	0.5	-0.0	0.2	-0.1	-0.1	1376
DEU	0.0	-0.0	-0.0	-0.2+	-0.2*	-0.1	-0.1	-0.0	4795
DZA	0.0	1.6*	-0.6*	-0.2	-0.1	-0.4	-0.4+	-0.5	1596
ECU	0.0	-0.0	-1.0	-1.3*	-0.8*	-1.0*	-0.9*	-0.8*	1182
EGY	0.0	0.4	-0.1	-0.2	-0.2	0.3	-0.4	-0.8*	3428
ESP	0.0	-0.4+	-0.4	-0.4*	-0.2	-0.2	-0.3+	-0.3+	1487
ETH	0.0	-0.3	2.3*	0.2	-2.0*	-0.2	0.4	0.2	1017
GEO	0.0	0.1	0.2	0.1	-0.0	0.8*	0.0	0.1	2401
GHA	0.0	0.4*	0.8*	0.6*	0.6*	0.5+	0.3	0.2	2572
HUN	0.0	0.1	0.2	-0.1	0.2	-0.1	0.0	-0.4	887
IDN	0.0	-0.2	-0.3	-0.1	0.4	0.2	-0.1	-0.1	2056
IND	0.0	0.1	-0.2*	0.5*	0.4*	-0.5*	-0.4*	0.3*	5857
IRN	0.0	-0.4*	-0.5*	-0.1	0.2	-0.9	-0.7*	-0.2	2119
IRQ	0.0	-0.0	-1.0	-0.4	0.3	-0.2	-0.4	-0.1	1123
ITA	0.0	-0.5+	-0.0	-0.4	-0.5+	-0.5	-0.7*	-0.2	585
JOR	0.0	-0.0	-0.1	0.2	0.2	-0.2	0.0	-0.2	2089
KAZ	0.0	-0.5*	-0.6*	-0.3	-0.1	-0.5+	-0.4*	-0.7*	1497
KGZ	0.0	0.0	-0.3	-0.2	-0.2	0.2	0.2	-0.3*	2293
LBN	0.0	-0.5	-0.5	-0.3	0.1	-0.4	-0.2	-0.2	731
LTU	0.0	0.6	0.3	0.4	0.3	-0.4	0.4+	0.3	750
LVA	0.0	-0.2	0.3	-0.1	-0.1	-0.3	-0.5+	-0.7*	963
MAR	0.0	-0.1	-0.2	0.0	-0.0	-0.0	0.0	-0.2	845
MDA	0.0	0.4*	0.5*	0.5*	0.6*	-2.9*	0.7*	0.4*	2478
MEX	0.0	0.1	0.0	0.0	-0.0	-0.1	-0.0	-0.1	3544
MKD	0.0	0.5+	-0.3	-0.6+	-0.1	0.1	1.3*	0.1	1385
MYS	0.0	0.1	0.1	0.2	0.3	-0.1	0.1	-0.4+	1541
NGA	0.0	0.5	-0.0	0.3	0.3	0.2	0.4	0.3	4488
NZL	0.0		-0.2	0.0	-0.1	-0.0	-0.2		417
PAK	0.0	0.1	0.5				0.3	0.3	900
PER	0.0	-0.2	-0.5	0.0	0.1	0.4	0.4*	-0.6	1026
PHL		0.0		-0.2	0.5	0.3	0.4	0.5	2294
POL	0.0	-0.1	0.1	-0.1	-0.2	0.0	-0.1	-0.2	1533
ROU	0.0	-0.1	-0.2	-0.7*	-0.2	-0.5*	-0.2	0.2	3568
RUS	0.0	0.5*	0.4*	0.3	0.4*	0.3+	0.4*	0.4*	3253
RWA	0.0	-0.7	-1.6*	-1.2*	-1.1*	-1.4*	-1.1*	-1.0*	2398
SRB	0.0	0.2	-0.0	0.2	0.1	0.3+	0.3+	-0.3*	2539
SVN	0.0	-0.0	0.2	0.6*	0.2	-0.0	-0.0	-0.3	1620
SWE	0.0	-0.8*	-0.1	0.1	-0.0	-0.1	-0.1	-0.1	1769
THA	0.0	0.3*	0.3*	0.2	-0.2	0.0	1.0*	0.1	2178
TUN	0.0	-0.4	-0.2	-0.4	-0.1				826
UKR	0.0	0.4*	0.2	0.4*	0.0	0.2	0.1	0.1	2985
URY	0.0	-0.5+	-0.3	-0.1	0.0	-0.3	1.2*	-0.3	2017
USA	0.0	-0.2	-0.2	-0.1	-0.1	-0.3*	-0.3+	-0.4*	3372
UZB	0.0	0.3*	0.3	0.3	-0.1	-0.5	0.2	-0.2	1247
VEN	0.0	1.6	-0.9	-0.2	-0.4	-0.6	-0.9	-0.1	1034
VNM	0.0	0.1	-0.0	0.4+	-0.1	1.0*	0.1	-1.4*	2039
ZAF	0.0	-0.5*	0.3	0.2	0.3+	-0.0	0.3+	-0.0	5330
ZWE	0.0	0.1	0.4+	-0.3	0.2	0.2	0.3+	0.2	1487

* p<0.05, + p<0.1; robust std err

Table 24: exT-3

this one should be in appendix: 2 out of 10 again, but not rporting this this is oversaturated and missing most countries

Table 25: .

	-5	5-500k	500k-	N
ARG	0.0	-0.0	0.1	845
AUS	0.0	0.0	-0.1	925
AZE	0.0	0.1	0.4*	958
BLR	0.0	-0.3*	-0.0	1254
BRA	0.0	-0.1	-0.4+	1154
CHL	0.0	-0.6*	-0.6*	797
CHN		0.0	-0.2*	1175
COL		0.0	0.0	1353
DEU	0.0	-0.2*	-0.2	1832
DZA	0.0	-0.4+		732
ECU	0.0	-0.9*	-0.8*	1182
GEO	0.0	0.2	0.4*	1157
GHA	0.0	0.2+		1434
IND	0.0	0.0	-0.4	2507
IRQ	0.0	-0.1	-0.2	947
JOR	0.0	-0.1		1124
KAZ	0.0	-0.0	-0.3*	1443
KGZ	0.0	-0.1	-0.0	1225
LBN	0.0	0.1	0.2	692
MEX	0.0	-0.1	-0.2+	1811
MYS	0.0	-0.5	-1.4*	390
NGA	0.0	-0.1	0.0	1576
NLD	0.0	-0.7*	-0.5+	1448
NZL	0.0	-0.0		408
PER	0.0	0.3+	-0.7	1018
PHL	0.0	0.6	0.5	1142
POL	0.0	0.0	-0.2	793
ROU	0.0	-0.2	0.0	1323
RUS	0.0	-0.1	0.0	1665
RWA	0.0	-0.6*	-0.4	1251
SVN	0.0	0.2+	-0.4	807
SWE	0.0	0.0	0.1	981
THA	0.0	-0.3*		922
TUN	0.0	0.1		822
UKR	0.0	-0.3*	-0.1	1308
URY	0.0	0.1	0.1	465
UZB	0.0	0.1	-0.1	1179
ZAF	0.0	0.3*		3058
ZWE	0.0	0.2	0.2	1478

* p<0.05, + p<0.1; robust std err

Table 26: exT3-4

so i think start with exT4-2 clean and easy and simple; then exT-3 to show detail and robustness

TODO meh yeah i guess drop this first table!!! note that all developed countres are less happy in cities, AUS (insiginifacnt but sig in next table (**todo**check!)

Table 27: .

	-10	10-50k	50-500k	500k-	N
ALB	0.0	-0.3*	-0.1	-0.0	1864
ARG	0.0	0.2	-0.2	0.1	955
AUS	0.0	0.1	-0.1	-0.1	3895
AZE	0.0	0.1	-0.2	0.2	995
BFA	0.0	-0.2	0.3	-0.4	636
BGD	0.0	-0.2	0.1	0.9*	2562
BGR	0.0	0.0	0.1	-0.1	1637
BLR	0.0	0.0	-0.0	0.0	3394
BRA	0.0	-0.2	-0.5*	-0.5*	3780
CAN	0.0	-0.1	-0.2*	-0.5*	3320
CHL	0.0	0.5	-0.7*	-0.6*	3823
CHN	0.0	0.2	0.3*	0.1	4371
COL	0.0	0.2	0.1	-0.0	4376
DEU	0.0	-0.2*	-0.0	0.0	5137
DZA	0.0	0.3+	0.0	-0.1	1806
ECU	0.0	-0.5	-0.6*	-0.5+	1187
EGY	0.0	-0.2	-0.0	-0.8*	3466
ESP	0.0	0.1	-0.0	-0.2+	1652
ETH	0.0	-1.8*	-0.2	-0.4	1246
GEO	0.0	-0.0	0.0	0.1	2602
GHA	0.0	0.3*	0.1	-0.2	2602
HUN	0.0	-0.1	-0.0	-0.6*	952
IDN	0.0	0.2+	0.1	0.1	2459
IND	0.0	0.5*	-0.4*	0.5*	6931
IRN	0.0	0.3	-0.5*	0.1	2208
IRQ	0.0	0.2	-0.4*	-0.2	1233
ITA	0.0	-0.3*	-0.5*	0.0	639
JOR	0.0	0.2*	0.1	-0.1	2137
KAZ	0.0	0.4*	-0.0	-0.3*	1497
KGZ	0.0	-0.3	0.3*	-0.5*	2427
KWT	0.0	-0.4	0.5*	0.1	953
LBN	0.0	0.1	0.1	-0.2	898
LTU	0.0	0.2	0.3	0.5+	889
LVA	0.0	-0.2	-0.5*	-0.7*	1119
MAR	0.0	0.2	0.2	-0.2	888
MDA	0.0	0.1	0.1	0.2	2740
MEX	0.0	0.0	-0.1	-0.3*	3782
MKD	0.0	-0.3+	0.1	-0.2	1600
MYS	0.0	0.3+	0.1	-0.2	1559
NGA	0.0	0.1	0.1	0.1	4628
NZL	0.0	0.2	-0.2		625
PAK	0.0		0.3	0.4*	1131
PER	0.0	0.2	0.7*	-0.3	1122
PHL	0.0	0.2	-0.1	0.1	2343
POL	0.0	-0.2	-0.0	-0.3+	2683
ROU	0.0	-0.3*	-0.1	0.3*	3966
RUS	0.0	0.2+	0.1	0.2*	3999
RWA	0.0	-0.1	-0.3*	0.3	2432
SRB	0.0	-0.1	0.3*	-0.5*	3128
SVN	0.0	0.2+	0.1	-0.3	1896
SWE	0.0	0.2	0.1	0.1	1888
THA	0.0	-0.2	0.1	0.0	2387
TUN	0.0	-0.1			901
UKR	0.0	0.0	-0.2*	-0.2*	3593
URY	0.0	0.3*	0.2	0.1	2511
USA	0.0	0.0	-0.2*	-0.2*	3493
UZB	0.0	-0.0	0.0	-0.3*	1407
VEN	0.0	-0.5	-0.8*	-0.1	1111
VNM	0.0	0.3*	-0.0	-0.5	2330
ZAF	0.0	0.3*	0.3*	0.1	5575
ZWE	0.0	-0.1	0.1	-0.0	1492

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1; robust std err

Table 28: exT4-2 OLS regressions of `swb` on `place size`, controls (not shown) are: enumerate

in atble **??** several appear happier like BGD, IND, LTU, PAK, ROU, and RUS, when adding more controls and full town cat that disappers except for 4 ctrioes

Results in table **??** are remarkable. In most countries large cities are less happy than small settlements. Remarkably, without exception, in no developed country city is happier than smallest areas. The only four countries where people ar ehappier in large cities are:

Table 29: .

	-2k	2-5k	5-10k	10-20k	20-50k	50-100k	100-500k	500k-	N
ALB	0.0	0.2	-0.5*	-0.6*	-0.4*	-0.5*	0.0	0.4*	1582
ARG	0.0	0.6+	-0.0	0.0	0.3	-0.1	-0.3	0.1	855
AUS	0.0	0.0	-0.2	0.1	0.0	-0.1	-0.0	-0.1	3728
AZE	0.0	0.0	-0.5	-0.2	0.3	-0.0	-0.1	0.3	964
BFA	0.0	0.3	0.7+	0.1	0.6+	0.8+	0.8	0.2	567
BGD	0.0	-0.8*	-0.6*	-1.0*	-0.8*	-0.5*	-0.6*	-0.0	2104
BGR	0.0	0.4*	0.3	0.3	0.1	-0.1	0.2	-0.3+	1229
BLR	0.0	0.5*	-0.3	0.1	-0.0	0.1	-0.1	-0.0	2815
BRA	0.0	-0.6+	-0.2	-0.6+	-0.6*	-0.7*	-0.9*	-0.9*	3576
CAN	0.0	-0.1	-0.1	-0.1	-0.2	-0.3*	-0.1	-0.4*	3177
CHL	0.0	0.8+	0.3	0.8	1.1*	-0.2	-0.3	-0.3	3527
CHN			0.0	0.1	-0.4	-0.4	-0.3	-0.7	2005
COL			0.0	0.5	-0.0	0.2	-0.1	-0.1	1376
DEU	0.0	-0.0	-0.0	-0.2+	-0.2*	-0.1	-0.1	-0.0	4795
DZA	0.0	1.6*	-0.6*	-0.2	-0.1	-0.4	-0.4+	-0.5	1596
ECU	0.0	-0.0	-1.0	-1.3*	-0.8*	-1.0*	-0.9*	-0.8*	1182
EGY	0.0	0.4	-0.1	-0.2	-0.2	0.3	-0.4	-0.8*	3428
ESP	0.0	-0.4+	-0.4	-0.4*	-0.2	-0.2	-0.3+	-0.3+	1487
ETH	0.0	-0.3	2.3*	0.2	-2.0*	-0.2	0.4	0.2	1017
GEO	0.0	0.1	0.2	0.1	-0.0	0.8*	0.0	0.1	2401
GHA	0.0	0.4*	0.8*	0.6*	0.6*	0.5+	0.3	0.2	2572
HUN	0.0	0.1	0.2	-0.1	0.2	-0.1	0.0	-0.4	887
IDN	0.0	-0.2	-0.3	-0.1	0.4	0.2	-0.1	-0.1	2056
IND	0.0	0.1	-0.2*	0.5*	0.4*	-0.5*	-0.4*	0.3*	5857
IRN	0.0	-0.4*	-0.5*	-0.1	0.2	-0.9	-0.7*	-0.2	2119
IRQ	0.0	-0.0	-1.0	-0.4	0.3	-0.2	-0.4	-0.1	1123
ITA	0.0	-0.5+	-0.0	-0.4	-0.5+	-0.5	-0.7*	-0.2	585
JOR	0.0	-0.0	-0.1	0.2	0.2	-0.2	0.0	-0.2	2089
KAZ	0.0	-0.5*	-0.6*	-0.3	-0.1	-0.5+	-0.4*	-0.7*	1497
KGZ	0.0	0.0	-0.3	-0.2	-0.2	0.2	0.2	-0.3*	2293
LBN	0.0	-0.5	-0.5	-0.3	0.1	-0.4	-0.2	-0.2	731
LTU	0.0	0.6	0.3	0.4	0.3	-0.4	0.4+	0.3	750
LVA	0.0	-0.2	0.3	-0.1	-0.1	-0.3	-0.5+	-0.7*	963
MAR	0.0	-0.1	-0.2	0.0	-0.0	-0.0	0.0	-0.2	845
MDA	0.0	0.4*	0.5*	0.5*	0.6*	-2.9*	0.7*	0.4*	2478
MEX	0.0	0.1	0.0	0.0	-0.0	-0.1	-0.0	-0.1	3544
MKD	0.0	0.5+	-0.3	-0.6+	-0.1	0.1	1.3*	0.1	1385
MYS	0.0	0.1	0.1	0.2	0.3	-0.1	0.1	-0.4+	1541
NGA	0.0	0.5	-0.0	0.3	0.3	0.2	0.4	0.3	4488
NZL	0.0		-0.2	0.0	-0.1	-0.0	-0.2		417
PAK	0.0	0.1	0.5				0.3	0.3	900
PER	0.0	-0.2	-0.5	0.0	0.1	0.4	0.4*	-0.6	1026
PHL		0.0		-0.2	0.5	0.3	0.4	0.5	2294
POL	0.0	-0.1	0.1	-0.1	-0.2	0.0	-0.1	-0.2	1533
ROU	0.0	-0.1	-0.2	-0.7*	-0.2	-0.5*	-0.2	0.2	3568
RUS	0.0	0.5*	0.4*	0.3	0.4*	0.3+	0.4*	0.4*	3253
RWA	0.0	-0.7	-1.6*	-1.2*	-1.1*	-1.4*	-1.1*	-1.0*	2398
SRB	0.0	0.2	-0.0	0.2	0.1	0.3+	0.3+	-0.3*	2539
SVN	0.0	-0.0	0.2	0.6*	0.2	-0.0	-0.0	-0.3	1620
SWE	0.0	-0.8*	-0.1	0.1	-0.0	-0.1	-0.1	-0.1	1769
THA	0.0	0.3*	0.3*	0.2	-0.2	0.0	1.0*	0.1	2178
TUN	0.0	-0.4	-0.2	-0.4	-0.1				826
UKR	0.0	0.4*	0.2	0.4*	0.0	0.2	0.1	0.1	2985
URY	0.0	-0.5+	-0.3	-0.1	0.0	-0.3	1.2*	-0.3	2017
USA	0.0	-0.2	-0.2	-0.1	-0.1	-0.3*	-0.3+	-0.4*	3372
UZB	0.0	0.3*	0.3	0.3	-0.1	-0.5	0.2	-0.2	1247
VEN	0.0	1.6	-0.9	-0.2	-0.4	-0.6	-0.9	-0.1	1034
VNM	0.0	0.1	-0.0	0.4+	-0.1	1.0*	0.1	-1.4*	2039
ZAF	0.0	-0.5*	0.3	0.2	0.3+	-0.0	0.3+	-0.0	5330
ZWE	0.0	0.1	0.4+	-0.3	0.2	0.2	0.3+	0.2	1487

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1; robust std err

Table 30: exT-3; note robustness chech results are in SOM.

and tehre is even one more elaborate model#4 in app with satfin and crime like about **todo count lol** 20/70 neg of all and nly 4/18 of sig are pos about 80 perc are neg :) or 5/21 in exT4-3

and the point is that the only ones that are sig and positive are wiers small poor and most miserable countries except india which is a big puzzle

TODO repreat it multiple times! TODO add NOR NLD so the conclusion is that in all develped countries AUS, CAN, DEU, ESP, ITA, NZL, SWE, USA, cities are less happy [16] in vast majority of countries effect in ngeative, only positive in these 4: russia, moldova and albania are all post soviet countries, they are likely to still be very centralized where power opportunity and resources are located in large cities; india is clearly an outlier here and we dont have a good explanation `[blind for peer review]`

//————————————-OLD

The limitation of `X049` is not only a low top bin for largest cities (500k+), but also about a thrird of values missing. Future research can focus on specific countries using other data or WVS data using `X049CS` variable, which has country specific sizes of places, which

[16] at least in less elaborate specs, but even in most elaborate even if insig, still neg

however are not directly or easily comparable–bins differ across countries and in some cases place is names "major city", "Farm / Mountain / Fishing village," etc).

show distributuion of place size by country!

10.3.1 original 8 categories

10.3.2 0-5k v 500k+

yeah this is following berry, but better have 0-5 so that more obs lol

10.4 Crime and Cost of Living/financial satisfaction

missing obs but here as a robustness check

TO WHERE I HAVE WE NEED TO CONTROL FOR CRIME: Urban unhappiness is not only due to urban problems such as crime and poverty. Cities themselves, their core defining characteristics, size and density, are related to unhappiness (Okulicz-Kozaryn and Mazelis 2016).

yeh so one limitation is lack of crime; so bias on results cities wiuld be happier otherwhise

Table 31: .

	-10	10-50k	50-500k	500k-	N
ARG	0.0	0.2	-0.1	0.2	845
AUS	0.0	0.1	0.1	-0.1	925
AZE	0.0	0.3	0.2	0.4*	958
BLR	0.0	-0.2	-0.1	0.1	1254
BRA	0.0	-0.2	-0.2	-0.5*	1154
CHL	0.0	0.8*	-0.7*	-0.5*	797
CHN			0.0	-0.2*	1175
COL	0.0	0.1	0.1	0.1	1353
DEU	0.0	-0.2*	-0.0	-0.1	1832
DZA	0.0	0.2	0.1		732
ECU	0.0	-0.7*	-0.7*	-0.5*	1182
GEO	0.0	0.1	0.1	0.3*	1157
GHA	0.0	0.1	-0.2		1434
IND	0.0	0.2*	-0.3*	-0.4	2507
IRQ	0.0	0.1	-0.2+	-0.2	947
JOR	0.0	0.1	-0.2		1124
KAZ	0.0	0.2	-0.0	-0.2+	1443
KGZ	0.0	0.0	-0.1	0.0	1225
LBN	0.0	0.3+	-0.0	0.3	692
MEX	0.0	-0.1	-0.1	-0.2	1811
MYS	0.0	0.4	0.1	-0.8*	390
NGA	0.0	0.3+	0.0	0.3	1576
NLD	0.0	0.4	0.4	0.5	1448
NZL	0.0	0.1	0.0		408
PER	0.0	0.2	0.4*	-0.7	1018
PHL	0.0	0.4	0.6	0.5	1142
POL	0.0	0.0	0.0	-0.2	793
ROU	0.0	-0.1	-0.2	0.1	1323
RUS	0.0	-0.2	0.0	0.1	1665
RWA	0.0	-0.1	-0.1	0.2	1251
SVN	0.0	0.4*	-0.1	-0.5	807
SWE	0.0	0.1	0.0	0.1	981
THA	0.0	-0.5*	-0.3		922
TUN	0.0	0.0			822
UKR	0.0	-0.2	-0.3*	-0.1	1308
URY	0.0	0.2	-0.2	0.1	465
UZB	0.0	-0.0	0.1	-0.1	1179
ZAF	0.0	0.2	0.1		3058
ZWE	0.0	0.1	0.0	0.1	1478

* p<0.05, + p<0.1; robust std err

Table 32: exT4-4

Table 33: .

	-5	5-500k	500k-	N
ARG	0.0	-0.0	0.1	845
AUS	0.0	0.0	-0.1	925
AZE	0.0	0.1	0.4*	958
BLR	0.0	-0.3*	-0.0	1254
BRA	0.0	-0.1	-0.4+	1154
CHL	0.0	-0.6*	-0.6*	797
CHN		0.0	-0.2*	1175
COL		0.0	0.0	1353
DEU	0.0	-0.2*	-0.2	1832
DZA	0.0	-0.4+		732
ECU	0.0	-0.9*	-0.8*	1182
GEO	0.0	0.2	0.4*	1157
GHA	0.0	0.2+		1434
IND	0.0	0.0	-0.4	2507
IRQ	0.0	-0.1	-0.2	947
JOR	0.0	-0.1		1124
KAZ	0.0	-0.0	-0.3*	1443
KGZ	0.0	-0.1	-0.0	1225
LBN	0.0	0.1	0.2	692
MEX	0.0	-0.1	-0.2+	1811
MYS	0.0	-0.5	-1.4*	390
NGA	0.0	-0.1	0.0	1576
NLD	0.0	-0.7*	-0.5+	1448
NZL	0.0	-0.0		408
PER	0.0	0.3+	-0.7	1018
PHL	0.0	0.6	0.5	1142
POL	0.0	0.0	-0.2	793
ROU	0.0	-0.2	0.0	1323
RUS	0.0	-0.1	0.0	1665
RWA	0.0	-0.6*	-0.4	1251
SVN	0.0	0.2+	-0.4	807
SWE	0.0	0.0	0.1	981
THA	0.0	-0.3*		922
TUN	0.0	0.1		822
UKR	0.0	-0.3*	-0.1	1308
URY	0.0	0.1	0.1	465
UZB	0.0	0.1	-0.1	1179
ZAF	0.0	0.3*		3058
ZWE	0.0	0.2	0.2	1478

* p<0.05, + p<0.1; robust std err

Table 34: exT3-4

Table 35: .

	-2k	2-5k	5-10k	10-20k	20-50k	50-100k	100-500k	500k-	N
ARG	0.0	0.6	0.0	0.2	0.3	0.0	-0.1	0.2	845
AUS	0.0	0.0	-0.2	0.2	-0.0	0.0	0.1	-0.1	925
AZE	0.0	-0.1	-0.4	-0.3	0.5	0.3	-0.0	0.4+	958
BLR	0.0	-0.4	-1.2*	-0.2	-0.3+	-0.2	-0.2+	-0.0	1254
BRA	0.0	-0.5	-0.2	-0.4	-0.6+	-0.2	-0.7*	-0.8*	1154
CHL	0.0	0.8	-0.0	1.0+	1.1*	-0.5	-0.3	-0.2	797
CHN							0.0	-0.2*	1175
COL			0.0	0.3	-0.1	0.2	-0.0	0.0	1353
DEU	0.0	0.1	-0.1	-0.2	-0.3*	-0.2	0.0	-0.1	1832
DZA	0.0		-0.6*	-0.1	-0.3	-0.4	-0.2		732
ECU	0.0	-0.2	-1.0	-1.3*	-0.9*	-1.1*	-1.0*	-0.9*	1182
GEO	0.0	-0.1	0.3	0.4	-0.0	0.7	0.1	0.3*	1157
GHA	0.0	-0.1	0.2	0.1	0.2	-0.1	0.1		1434
IND	0.0	-0.2+	-0.2	0.2*	-0.6*	-0.5*	-0.2	-0.4	2507
IRQ		0.0			0.1	-0.3	-0.2	-0.2	947
JOR	0.0	0.1	-0.1	0.1	-0.0	-0.3			1124
KAZ	0.0	-0.5*	-0.5*	-0.1	-0.2	-0.5	-0.4*	-0.6*	1443
KGZ	0.0	-0.1	-0.2	-0.1	0.1		-0.2	-0.0	1225
LBN	0.0	-0.3	-0.4	-0.2	0.5	-0.3	-0.2	0.0	692
MEX	0.0	0.1	-0.1	0.0	-0.2	-0.1	-0.1	-0.2	1811
MYS	0.0	-0.8	-1.7+	-0.7	-0.9	-1.1	-1.1	-1.9*	390
NGA	0.0	0.4	-0.0	0.6+	0.3	0.1	0.2	0.4	1576
NLD		0.0	-1.2*	-0.6*	-0.6*	-0.7*	-0.6*	-0.5+	1448
NZL	0.0		-0.1	0.1	-0.1	0.0	-0.0		408
PER	0.0	-0.1	-0.5	0.1	0.1	0.3	0.4*	-0.7	1018
PHL		0.0		-1.2	0.4	0.7	0.6	0.5	1142
POL	0.0	-0.1	0.1	0.7+	-0.2	0.2	-0.0	-0.2	793
ROU	0.0	-0.6	-0.6	-0.9*	-0.4	-1.0*	-0.7+	-0.5	1323
RUS	0.0	0.5*	-0.0	-0.1	-0.1	0.3	0.1	0.2	1665
RWA		0.0	-0.9*	-0.6*	-0.5*	-0.7*	-0.5*	-0.3	1251
SVN	0.0	0.4*	0.3+	1.0*	0.4+	0.5	0.0	-0.4	807
SWE	0.0	-1.4*	-0.3	-0.0	-0.1	-0.2	-0.2	-0.2	981
THA	0.0	0.2	-0.1	-0.1	-0.6*	-0.2	-1.2*		922
TUN	0.0	0.4	0.4	0.4	0.4				822
UKR	0.0	0.2	-0.1	-0.3	-0.1	-0.3	-0.2	-0.0	1308
URY	0.0	-1.6*	-1.3*	-1.0+	-1.1+	-1.5*	-0.4	-1.2*	465
UZB	0.0	0.3*	0.2	0.3	-0.0	-0.5	0.3*	0.0	1179
ZAF	0.0	-0.3	0.5+	0.2	0.2	0.1			3058
ZWE	0.0	0.2	0.4+	-0.1	0.5*	0.2	0.2	0.3	1478

* p<0.05, + p<0.1; robust std err

Table 36: exT-4

11 !!!PLAYING DROP THIS LATER

Table 37: .

	-10	10-50k	50-500k	500k-	N
ALB	0.0	-0.3*	-0.1	0.0	1864
AND	0.0	-0.2			931
ARG	0.0	0.2	-0.2	0.1	955
ARM	0.0	-0.2	-0.2	0.5	1057
AUS	0.0	0.1	-0.0	-0.0	3895
AZE	0.0	0.1	-0.2	0.2	995
BFA	0.0	-0.2	0.3	-0.4	636
BGD	0.0	0.1	0.3*	0.8*	2562
BGR	0.0	0.0	0.1	-0.1	1637
BIH	0.0	-0.6*	0.2*		2190
BLR	0.0	0.2+	0.1	-0.1	3394
BRA	0.0	-0.2	-0.5*	-0.6*	3780
CAN	0.0	-0.2	-0.2*	-0.4*	3320
CHE	0.0	-0.2	-0.0		926
CHL	0.0	0.5	-0.7*	-0.6*	3823
CHN	0.0	0.3*	0.4*	0.2	4371
COL	0.0	0.2	0.1	0.0	4376
CYP	0.0	-0.1	-0.0	-0.7	1931
DEU	0.0	-0.1*	-0.0	0.1	5137
DOM	0.0	1.5+	0.9	0.4	321
DZA	0.0	0.1	-0.1	-0.4	1806
ECU	0.0	-0.5	-0.6*	-0.5+	1187
EGY	0.0	-0.3*	0.1	-0.9*	3466
ESP	0.0	0.1	-0.0	-0.3+	1652
EST	0.0	-0.3+	-0.5*		1428
ETH	0.0	-1.8*	-0.2	-0.4	1246
GEO	0.0	0.1	0.0	0.1	2602
GHA	0.0	0.3*	0.1	-0.1	2602
HTI	0.0	-0.0	0.0	0.7	1584
HUN	0.0	-0.1	-0.0	-0.6*	952
IDN	0.0	0.2+	0.1	0.1	2459
IND	0.0	0.6*	-0.2*	0.3*	6931
IRN	0.0	0.3	-0.5*	0.1	2208
IRQ	0.0	0.6*	-0.0	0.0	1233
ITA	0.0	-0.3*	-0.5*	0.0	639
JOR	0.0	0.3*	-0.2	-0.4*	2137
KAZ	0.0	0.4*	-0.0	-0.3*	1497
KGZ	0.0	-0.3	0.3*	-0.5*	2427
KWT	0.0	-0.4	0.5*	0.1	953
LBN	0.0	0.1	0.1	-0.2	898
LBY	0.0	-0.3*	-0.5*	1.2*	1880
LTU	0.0	0.2	0.3	0.5+	889
LVA	0.0	-0.2	-0.5*	-0.7*	1119
MAR	0.0	0.2	0.1	0.6*	888
MDA	0.0	0.3*	-0.3	0.4*	2740
MEX	0.0	0.1	-0.2*	-0.3*	3782
MKD	0.0	-0.3*	0.0	-0.2	1600
MLI	0.0	2.2*	0.9	1.6+	82
MNE	0.0	0.1	0.5*		939
MYS	0.0	0.3*	0.1	-0.2	1559
NGA	0.0	-0.0	0.1	0.0	4628
NLD	0.0	0.3	0.2	0.4	1581
NOR	0.0	-0.1	-0.1		1830
NZL	0.0	0.2	-0.2		625
PAK	0.0		0.3	0.4*	1131
PER	0.0	0.2	0.7*	-0.3	1122
PHL	0.0	-0.2	-0.4	-0.2	2343
POL	0.0	-0.2	-0.1	-0.2+	2683
PRI		0.0	-0.0		1669
ROU	0.0	-0.2*	-0.3*	0.3*	3966
RUS	0.0	0.1	0.1	0.2*	3999
RWA	0.0	-0.1	-0.3*	0.3	2432
SAU			0.0	0.5*	1311
SRB	0.0	-0.0	0.3*	-0.5*	3128
SVK	0.0	0.0			902
SVN	0.0	0.2+	0.1	-0.3	1896
SWE	0.0	0.2	0.1	0.1	1888
THA	0.0	-0.1	0.1	-0.0	2387
TTO	0.0	0.2			957
TUN	0.0	-0.1			901
TWN	0.0	0.3	0.3	0.2	2914
UKR	0.0	-0.1	-0.4*	-0.4*	3593
URY	0.0	0.1	-0.2	-0.1	2511
USA	0.0	0.0	-0.1	-0.2	3493
UZB	0.0	-0.0	0.0	-0.3*	1407
VEN	0.0	-0.5	-0.8*	-0.1	1111
VNM	0.0	0.3*	-0.3	-0.8*	2330
YEM	0.0	1.3	1.7*	1.3*	567
ZAF	0.0	0.2+	0.2+	0.0	5575
ZMB				0.0	1013
ZWE	0.0	-0.1	0.1	-0.0	1492

* p<0.05, + p<0.1; robust std err

Table 38: ex1

Table 39: .

	-5	5-500k	500k-	N
ALB	0.0	-0.3*	-0.0	1864
AND	0.0	-0.1		931
ARG	0.0	-0.2	-0.0	955
ARM	0.0	0.0	0.6	1057
AUS	0.0	-0.1	-0.1	3895
AZE	0.0	-0.2	0.1	995
BFA	0.0	0.3	-0.0	636
BGD	0.0	0.2*	0.8*	2562
BGR	0.0	0.0	-0.1	1637
BIH	0.0	-0.3*		2190
BLR	0.0	0.1	-0.1	3394
BRA	0.0	0.0	-0.2	3780
CAN	0.0	-0.2*	-0.5*	3320
CHE	0.0	-0.4*		926
CHL	0.0	-0.5+	-0.5	3823
CHN	0.0	0.5*	0.3*	4371
COL		0.0	-0.1	4376
CYP	0.0	-0.1	-0.7	1931
DEU	0.0	-0.0	0.1	5137
DOM	0.0	0.5	0.0	321
DZA	0.0	-0.5*	-0.9*	1806
ECU	0.0	-1.0*	-0.8*	1187
EGY	0.0	-0.7*	-1.4*	3466
ESP	0.0	-0.0	-0.3+	1652
EST	0.0	-0.3*		1428
ETH	0.0	0.0	-0.2	1246
GEO	0.0	0.1	0.2	2602
GHA	0.0	0.3*	-0.1	2602
HTI	0.0	-0.0	0.7	1584
HUN	0.0	-0.1	-0.6*	952
IDN	0.0	0.1	0.1	2459
IND	0.0	0.0	0.2+	6931
IRN	0.0	-0.4*	-0.0	2208
IRQ	0.0	0.1	0.0	1233
ITA	0.0	-0.2	0.1	639
JOR	0.0	0.1	-0.4+	2137
KAZ	0.0	0.1	-0.3*	1497
KGZ	0.0	-0.1	-0.5*	2427
KWT	0.0	0.3	0.2	953
LBN	0.0	-0.0	-0.3	898
LBY	0.0	-0.5*	0.9	1880
LTU	0.0	0.2	0.5+	889
LVA	0.0	-0.3+	-0.7*	1119
MAR	0.0	-0.1	0.4*	888
MDA	0.0	0.2*	0.5*	2740
MEX	0.0	-0.0	-0.3*	3782
MKD	0.0	-0.2+	-0.3+	1600
MLI	0.0	1.7*	1.7+	82
MNE	0.0	0.3*		939
MYS	0.0	0.1	-0.2	1559
NGA	0.0	-0.3*	-0.3*	4628
NLD	0.0	-1.3*	-1.1*	1581
NOR	0.0	-0.1		1830
NZL	0.0	0.0		625
PAK	0.0	0.5*	0.5*	1131
PER	0.0	0.5*	-0.3	1122
PHL	0.0	-0.3	-0.2	2343
POL	0.0	-0.1	-0.2+	2683
PRI		0.0		1669
ROU	0.0	-0.1+	0.3*	3966
RUS	0.0	0.1	0.3*	3999
RWA	0.0	-0.8*	-0.3	2432
SAU		0.0	0.5*	1311
SRB	0.0	0.1	-0.5*	3128
SVK	0.0	-0.1		902
SVN	0.0	0.2*	-0.3	1896
SWE	0.0	0.2	0.2	1888
THA	0.0	0.1	0.0	2387
TTO	0.0	0.1		957
TUN	0.0	0.1		901
TWN		0.0	-0.2+	2914
UKR	0.0	-0.2*	-0.4*	3593
URY	0.0	0.1	-0.1	2511
USA	0.0	-0.0	-0.2	3493
UZB	0.0	0.1	-0.3+	1407
VEN	0.0	-2.2*	-1.6*	1111
VNM	0.0	0.1	-0.9*	2330
YEM	0.0	-0.1	1.2*	567
ZAF	0.0	0.2*	0.0	5575
ZMB			0.0	1013
ZWE	0.0	0.2	0.1	1492

* p<0.05, + p<0.1; robust std err

Table 40: ex1

11.1 very first results

Table **??** shows resuls of regression of `SWB` on place size dummies (controlling for year dummies), which essentially differences in means for each size category. Results are mixed, but large cities (500k-) and even medium sized (100-500k) are often happier than the

smallest category (the base case or reference category, -2k). Usually diferences are small to moderate, about .5 (on 1-10 SWB scale), but sometimes large, larger than 1. Do mention the extremes and think about why–but we do not have explanation for those.

This is what the literature reports, tht results are mixed, in some cases cities are happier, in some cases they are not. A key finding of this study is that once we properly control for key predictors of SWB, almost uniformly large cities (500k-) are less happy than the smallest settlements (-2k). Results are shown in the body in table 39.

Results in table **??** are remarkable. In most countries large cities are less happy than small settlements. Remarkably, in no developed country city is happier than smallest areas (with exception of KWT and SAU–these are middle eastern and oil rich, where cities are glorious indeed)–and they are not developed countries according to IMF or UN anyway neither have very high HDI.