

# The urban-rural happiness gradient across countries: city unhappiness is common across the world (despite claims to the contrary by economists)

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This study shows, for the first time, that city unhappiness is common across the World. The finding is important because there are publications manipulating data through cherry-picking (Glaeser 2011, Glaeser et al. 2016, Burger et al. 2020) and claiming the opposite, that urban areas are happier.

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 <sup>1</sup>

Intersection of quality of life and urban studies is an exciting area. Academics, policymakers, administrators, and common people start to pay more attention to QOL/SWB, not just \$. We finally realize, even some economists do Stiglitz et al. (2009) that money is not everything and time to look at human flourishing and subjective wellbeing or happiness. Although many economists manipulate data through cherry-picking (Glaeser 2011, Glaeser et al. 2016, Burger et al. 2020) and try to claim the opposite, that cities are happier—this is another reason for present study, to provide yet more evidence that economists' claim of city happiness is false.

And 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 our QOL/SWB. Hence, the question, what cities do to human condition?

Modern research on effect of cities on human wellbeing is founded on 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 human wellbeing. Quantitative research on the urban-rural happiness gradient dates back to Gurin et al. (1960), Campbell et al. (1976), which also showed negative effect of urbanicity. Yet these were for just the US. Most research is about US, Western Europe, and recently China and handful of other countries. Again, there were studies conducted in separate countries, but not using a uniform dataset across countries with three exceptions discussed later.

First we briefly define SWB and mechanisms that would produce SWB from size of a place.

## 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).

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<sup>1</sup>Yet most research is about US, Western Europe and recently China, and handful of other countries. again, there were studies conducted in separate 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. 2010) 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 and Easterlin is problematic; Gallup charges \$30,000 per year for 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).

## 2 urban definition and theory and causal mechanism/pathway

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It is useful to start with the theory that would define places and predict how different place sizes would affect swb. Defining mechanisms first helps to define urbanicity. In other words, we present rationality for urbanicity definition with respect to swb. There is a mechanism that would produce different outcomes in swb by urbanicity. Note that this is rather illustrative than exhaustive and full presentation is beyond the scope of this study.

First, we acknowledge 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<sup>3</sup>

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 at which malaise intensifies though.

Another indication of continuity in effect of size of a place on human condition comes from physics, and clearly points to a continuum. There is physical city constant of 1.15, double 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).

But we would like to especially highlight biological/evolutionary mechanism. **TODO merge these 2** Throughout most of our evolutionary history, humans have lived in small homogenous 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,<sup>4</sup> living in heterogeneous, dense, and large settlements (city living) is simply unnatural to human beings.

**TODO merge these 2** For over 95% of our evolutionary history<sup>5</sup> 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 (again, >250k) 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).

There larger the place, the more built environment differs from the habitat in which we have evolved, denser and often crowded living (cite on crowdedness from city book), airport, often subway or rapid transit, taller buildings in downtown etc; and again, while clearly a continuum, there is likely to a threshold, perhaps around hundred thousand or more.

There is wilderness, open country, villages, small towns, large towns, cities, large cities, very large cities. Surely, it is rarely captured in its entirety; but most dataset allow several stages, including wvs used here.

It is a gradient raising from smallest to greatest as argued in Berry and Okulicz-Kozaryn (2009), hence presentation must be ordinal with multiple categories, we have 8 in appendix and can be summarized as smallest v largest; why smallest v largest This study will use 8 categories of urbanicity, and summarize results as 3 categories.

**this is the key!!! it is not everything is urban or rural as in easterlin or burger! it is rather very rural, say <2k or say <10k v very big >couple hundred thousand; stuff in the middle is mixed; it is a gradient! we use two as gradient illustrative extremes not classifying everything in between! again gradient is non-linear it is very largest cities v everything else, that dichotomy make sense too, but neither this is what easterlin and burger do**

## 3 the three studies on urban rural happiness gradient across countries GUESS WRITE THIS AT THE END LOL

The topic of urbanicity and happiness has been recently taken up by economists. "World Happiness Report" (Helliwell et al. 2020) is edited by economists: John Helliwell, Richard Layard, Jeffrey D. Sachs, and Jan Emmanuel De Neve. The report contains chapter about urban-rural gap in happiness (Burger et al. 2020).

"World Happiness Report" is like capitalist manifesto by Sachs, an infamous spreader of capitalism in eastern Europe THAT BOOK WEDEL BUDDY OF DUMAS, and by corporations GALLUP

There are many "maverick economists" studying "economics of happiness." There are even few serious economists that have truly contributed to social indicators literature, Richard Easterlin and Andrew Oswald among them. Yet, there are skeptics who look down on SWB such as Angus Deaton (e.g., ?) and Ed Glaeser (?Glaeser et al. 2016). They are especially troubling: they do some SWB research and at the same time sneer at it. And vast majority of economists simply do not consider SWB, social indicators or for that matter any social science outside of economics as worthwhile (????).

<sup>2</sup>obviously as this is an observational study, we don't test causality here, nevertheless it is important to talk about the mechanism

<sup>3</sup>and thank no community: but see Fischers subculture theory

<sup>4</sup>Human nature is unlike that of bees: by one estimate we're 90% chimp and only 10% bee (Haidt 2012).

<sup>5</sup>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).

In addition to urban-rural gap, there is a chapter “Cities and Happiness: A Global Ranking and Analysis,” of course solely by economists, De Neve and Krekel, and citing almost exclusively economists. It starts with an assertion that “cities are economic powerhouses” and that they “they allow for an efficient division of labour” as if that was an advantage when talking about happiness! We know that division of labor results in alienation and unhappiness (?).

no chapter about two key problems, climate change and income inequality, and there is virtually nothing about income inequality, while the chapter on sustainable development, again by two economists, does address climate change. Yet, most of it either treats climate change as some overblown conspiracy:

Alongside social movements such as the “yellow vests” there are the pro-environment movements such as “Extinction Rebellion” that raise alarm bells over climate change

Or finds that sustainability is negatively related with SWB, e.g., “(Responsible consumption and production) and 13 (Climate action) are significantly negatively correlated with human well-being.” and that “climate action would also benefit from quantitative reductions in productive capacity that would lead to structural economic changes that would be in tension with other drivers of well-being” but at least they say “Needless to say, however, the urgency of climate change does require action to ensure the well-being of future generations”

Economists’ interest in the topic often is often a problem, because biased and flawed research is produced. The problem with economics is bizarre axioms that have little to do with reality, and then often research forces data to agree with these axioms. To economists, the more money (income or consumption), the more utility, and the more happiness. There is more income and consumption in cities, and hence, economists try to argue that cities must be happier.

Burger study is not only confusing and misguided, but actually deeply misleading and flawed. First it starts with faulty Gallup data<sup>6</sup>:

There are multiple problems with Gallup data. First, it is not meant for research but for commercial use—Gallup charges \$30,000 for access (per one year!). 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 notes that in 14 countries “rural area” responses were exceptionally low. Also, about half of world population is urban, but Burger reports that in their dataset only about quarter of respondents report rural residence.

Urbanness or urbanicity is a degree, not dichotomy. Strikingly, Burger says 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.

The most striking conclusion: “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.”—it is actually the opposite—most research finds urban populations to be less happy! It is very similar cherry picking to that in Glaeser (2011), Glaeser et al. (2016) both focus on poor countries or certain specific areas and exceptional cases, without any good rationale for doing so, and then extrapolate it to the world and claim global conclusions.

The earlier other two studies about urban-rural happiness gradient across countries are Easterlin et al. (2010) and Berry and Okulicz-Kozaryn (2009).

Both this study and Berry and Okulicz-Kozaryn (2009) use WVS, Easterlin et al. (2010) and (Burger et al. 2020) use Gallup. Easterlin’s paper focuses on effect of economic growth by urban-rural; only a small part of the study is about urban-rural differences in SWB, and their results are much like Berry cities paper, which finds that in richer countries people are happier in rural areas.

All three studies so far are limited (and again Burger et al. (2020) presents false conclusion). 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 extensive set of necessary controls.

## 4 Data And Model

We use <http://www.worldvaluessurvey.org/wvs.jsp>, which is representative of multiple countries, and as elaborated in previous section, is much better suited for the study than \$30,000 Gallup data. The sample is listed in table XXX. country coded and descriptive statistics are in SOM. in this study for the models reported in the body of the paper we use XX countries.

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 X049, note that it is objective and recoded by reviewer, not respondent. There are eight categories ranging from < 2k to > 500k. Because in many countries missing first 2 cat clubbed together...explain in detail **TODO**

<sup>6</sup>easterlin actually did acknowledge some limitations and tried to address them, but burger seems opposite an advertisement for gallup

elaborate more what exactly used in paper. Again the rationale as per theory above is to explore the gradient, the simplest way to do it is to contrast smallest v medium and largest: this is the key!!! it is not everything is urban or rural as in easterlin or burger! it is rather very rural, say j2k or say j10k v very big zcouple hundred thousand; stuff in the middle is mixed; it is a gradient! we use two as gradient illustrative extremes not cassifying everything in between! again gradient is non-linear it is very largest cities v everything else, that dichotomy make sense too, but neither thsi is what easterlin and burger do The rationale, as per theory is to

Because this aggregation is still somewhat arbitrary, we present alternative **enumerate** specifictions in SOM and we also present there full 8-step gradient.

Table 1 lists control variables used in the body of the paper.<sup>7</sup>

**Table 1:** Variable definitions.

name	description
happiness	"All things considered, how satisfied are you with your life as a whole these days?" 1="dis-satisfied" to 10="satisfied"; WVS
place size	"OBSERVATIONS BY THE INTERVIEWER; Code size of town where interview was conducted"
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 also confounded and higher in cities.<sup>8</sup>

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)<sup>9</sup>, 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).

## 5 Results

While, again, we do concern ourselves with the coninum, the urban-rural happiness gradient, results are in the SOM, here for ease of exposition, we only preent the contrast between smallest, medium, and largest places. zzz 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 staurated where too many variables result in too many missing obs), also the mdl presented here uses just 3 catogores, -5 (base), 5-500, and 500-; we are interested in comparison between -5 v 500- because this is aaccording to theory: evolution/ingroup v most unnatural (as this data allows).

**TODO have couple paragraphs interepting these regressions**

<sup>7</sup>There are models with additional controls in SOM (Supplementray Online Material).

<sup>8</sup>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—see appendix for tables with and wohou controls

<sup>9</sup>It originated in the Middle Ages, and it meant freedom from feudalism, non-feudal islands in a sea of feudalism (Harvey 2012).

Table 2: .

	-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&lt;0.05, + p&lt;0.1; robust std err

Table 3: exT3-3

5/25: 80 perc less happy! mostly easyern post soviet copy from below lol

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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 are happier in large cities are:

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 repeat it multiple times! TODO add NOR NLD** so the conclusion is that in all developed countries AUS, CAN, DEU, ESP, ITA, NZL, SWE, USA, cities are less happy <sup>11</sup> in vast majority of countries effect is negative, 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 don't have a good explanation **[blind for peer review]**

make the biggest swb gaps by country key focus of paper :) **TODO!!!** this research focus on specific countries esp where urban rural grading is greatest!

**yah i think just one table! refer though to bivairate in appendix and say this in footnote and or app** Table ?? shows

<sup>10</sup>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.

<sup>11</sup>at least in less elaborate specs, but even in most elaborate even if insig, still neg

results 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 differences 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, the 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 table ??.

## 6 Discussion AND Conclusion

it is not city problems but city itself—my paper with jonie the mechanism is important how and why would urbanness affect human wellbeing?

; while again we would like to have more gradation at the top of the distribution, but 500k is a reasonable and adequate cutoff to distinguish 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 TOO BIG.

limitations: Have in paper caveat about cross cultural comparability, see shourjya paper lol

Many countries where no difference— this is still striking and worth reporting and city triumph—one would think cities are the best places to live, people flock there in droves. Show graph from UN, and the common narrative is that city is the place to be, and so one would think people are happier there. So finding of no difference is already surprising.

Do visualize results, say a even a small country of 10m and even a miniscule effect of .1 on scale from 1-10 that translates to an effect equivalent to making 100k people from most miserable to most happy on swb scale 1-10 if everyone lived in smallest v largest. Small or moderate effect sizes translate into large effects because of the sheer size of urbanization in billions of people.

that graph from ingelhart, in developing countries, and as per maslow pyramid, at first one need to focus on necessities such as survival and cities do help; it is remarkable that in all developed countries studied here, cities are less happy!

Why in developed world people are less happy in large cities, but in many developing countries they are happier? There are at least two reasons. In many developing countries life is simply unbearable outside of the city lacking necessities such as shelter, food, water, sanitation, and healthcare. In developed countries, even smallest places have reasonable access to necessities, and they do not suffer from urban disamenities. Also, it may be so that the grass is always greener on the other side—people idealize what is missing or what is rare.

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, and its presentation (e.g., that new zealand happiness conference) is largely an advertisement for Gallup. Gallup then sells the happiness data at \$30,000 (per year!)<sup>12</sup>—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).

## 7 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 COMPASS PLEASURE ARISTOTLE. Notably, climate change is more important than human happiness, and cities are most environmentally friendly type of settlement (MEYER). and there are some limited things that can be done to make cities less miserable—we know what makes city happy BALLAS.

perhaps the clearest takeaway for practice is that we suffer from overpopulation; again, we need cities because of climate change (not of production DEGROWTH KALIS), 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—cp from book; 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; Ancient athens were 140k and rome was 450k

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<sup>12</sup>Author's inquiry with Gallup to use their data.

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## 8 ONLINE APPENDIX (THIS WILL NOT BE A PART OF THE PAPER)

### 8.1 Country Codes

note for ease of presentation numbers rounded to full digits



Table 4:

cc	s c	ls	town
1	ALB	Albania	5 3
2	ARG	Argentina	7 7
3	AUS	Australia	8 6
4	AZE	Azerbaijan	6 5
5	BFA	BurkinaFaso	6 4
6	BGD	Bangladesh	7 3
7	BGR	Bulgaria	5 4
8	BLR	Belarus	5 5
9	BOL	Bolivia	7 5
10	BRA	Brazil	8 6
11	CAN	Canada	8 5
12	CHL	Chile	7 7
13	CHN	China	7 6
14	COL	Colombia	8 6
15	DEU	Germany	7 5
16	DZA	Algeria	6 5
17	ECU	Ecuador	8 6
18	EGY	Egypt	6 5
19	ESP	Spain	7 5
20	ETH	Ethiopia	5 5
21	FRA	France	7 5
22	GEO	Georgia	5 4
23	GHA	Ghana	6 3
24	GRC	Greece	6 5
25	GTM	Guatemala	8 6
26	HRV	Croatia	6 4
27	HUN	Hungary	6 5
28	IDN	Indonesia	7 4
29	IND	India	6 4
30	IRN	Iran	6 6
31	IRQ	Iraq	5 6
32	ITA	Italy	7 5
33	JOR	Jordan	7 5
34	KAZ	Kazakhstan	7 5
35	KGZ	Kyrgyzstan	7 4
36	KWT	Kuwait	7 6
37	LBN	Lebanon	7 5
38	LTU	Lithuania	5 4
39	LVA	Latvia	5 5
40	MAR	Morocco	6 6
41	MDA	Moldova	5 3
42	MEX	Mexico	8 5
43	MKD	NorthMacedonia	5 4
44	MYS	Malaysia	7 5
45	NGA	Nigeria	6 5
46	NZL	NewZealand	8 5
47	PAK	Pakistan	7 5
48	PER	Peru	7 5
49	PHL	Philippines	7 5
50	POL	Poland	7 4
51	ROU	Romania	6 4
52	RUS	Russia	6 5
53	RWA	Rwanda	6 6
54	SRB	Serbia	6 5
55	SVN	Slovenia	7 3
56	SWE	Sweden	8 6
57	THA	Thailand	7 2
58	TJK	Tajikistan	8 3
59	TUN	Tunisia	6 4
60	TUR	Turkey	6 6
61	UKR	Ukraine	5 5
62	URY	Uruguay	7 6
63	USA	UnitedStates	8 5
64	UZB	Uzbekistan	8 3
65	VEN	Venezuela	7 6
66	VNM	Vietnam	7 4
67	ZAF	SouthAfrica	7 3
68	ZWE	Zimbabwe	5 4

\* p&lt;0.05, + p&lt;0.1; robust std err

Table 5: 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 cttegrory: enumerate here: **TODO**

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

Table 6: .

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&lt;0.05, + p&lt;0.1; robust std err

Table 7: lcount

## 9 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!

## 9.1 Limitations

We do not use Gallup data. Some may argue it is a limitation because 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 don't have many people in smallest or biggest areas

Cross cultural comparability is a caveat, we run separate for each country and don't pool data but still, it should be kept in mind that happiness can mean something different in different countries. likewise world cities are very different, breadth of the study is accompanied by oversimplification.

"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)."

## 9.2 Urbanicity Definition and results by different definition and sequential elaboration

we have 3 different operationalizations of urbanicity: original 8 cat, collapse one way and collapse the other way; and 3 sets of models: bivariate (with yr dummies), essentially mean diff between cat; basic set of controls; necessary/important ones; full//extended (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 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

Table 8: .

	-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&lt;0.05, + p&lt;0.1; robust std err

Table 9: exT4-1

Table 10: .

	-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&lt;0.05, + p&lt;0.1; robust std err

Table 11: exT3-1

Table 12: .

	-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&lt;0.05, + p&lt;0.1; robust std err

Table 13: exT-1

Table 14: .

	-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&lt;0.05, + p&lt;0.1; robust std err

Table 15: exT4-2

Table 16: .

	-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&lt;0.05, + p&lt;0.1; robust std err

Table 17: exT3-2



Table 18: .

	-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	0.0	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	0.0		-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&lt;0.05, + p&lt;0.1; robust std err

Table 19: exT-2

Table 20: .

	-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&lt;0.05, + p&lt;0.1; robust std err

Table 21: exT4-3

Table 22: .

	-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&lt;0.05, + p&lt;0.1; robust std err

Table 23: exT3-3

Table 24: .

	-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&lt;0.05, + p&lt;0.1; robust std err

Table 25: exT-3

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

Table 26: .

	-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&lt;0.05, + p&lt;0.1; robust std err

Table 27: 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 countries are less happy in cities, AUS (insignificant but sig in next table (**todocheck!**))

Table 28: .

	-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 29:** 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 ctioes

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 30:

	-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	-0.1	-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 31: exT-3; note robustness check 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 repeat it multiple times! TODO add NOR NLD** so the conclusion is that in all developed countries AUS, CAN, DEU, ESP, ITA, NZL, SWE, USA, cities are less happy <sup>13</sup> 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 thirdd 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

<sup>13</sup>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 distribuion of place size by country!

9.2.1 original 8 categories

9.2.2 0-5k v 500k+

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

### 9.3 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 would be happier otherwise

Table 32: .

	-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 33: exT4-4



Table 34: .

	-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&lt;0.05, + p&lt;0.1; robust std err

Table 35: exT3-4

Table 36: .

	-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&lt;0.05, + p&lt;0.1; robust std err

Table 37: exT-4

# 10 !!!PLAYING DROP THIS LATER

Table 38: .

	-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 39: ex1

Table 40:

	-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
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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&lt;0.05, + p&lt;0.1; robust std err

Table 41: ex1

## 10.1 very first results

Table ?? shows results 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 differences 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 table ??.

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.