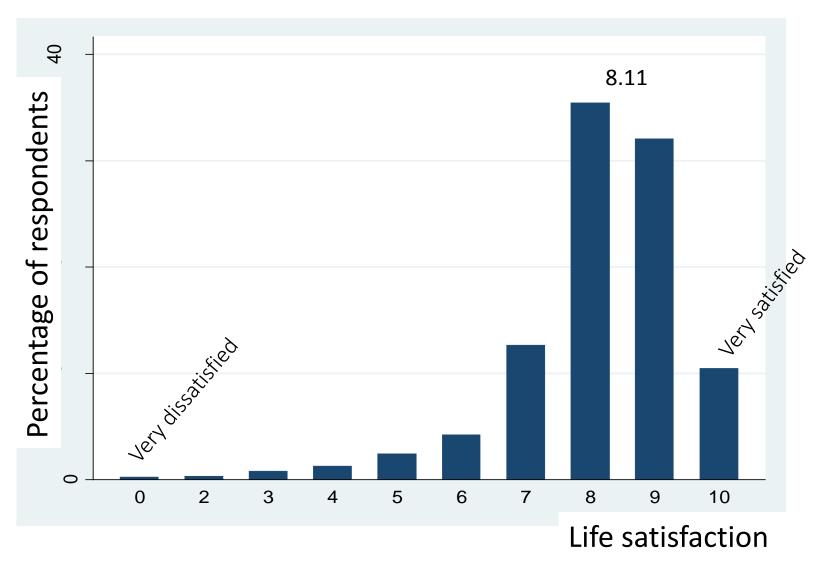
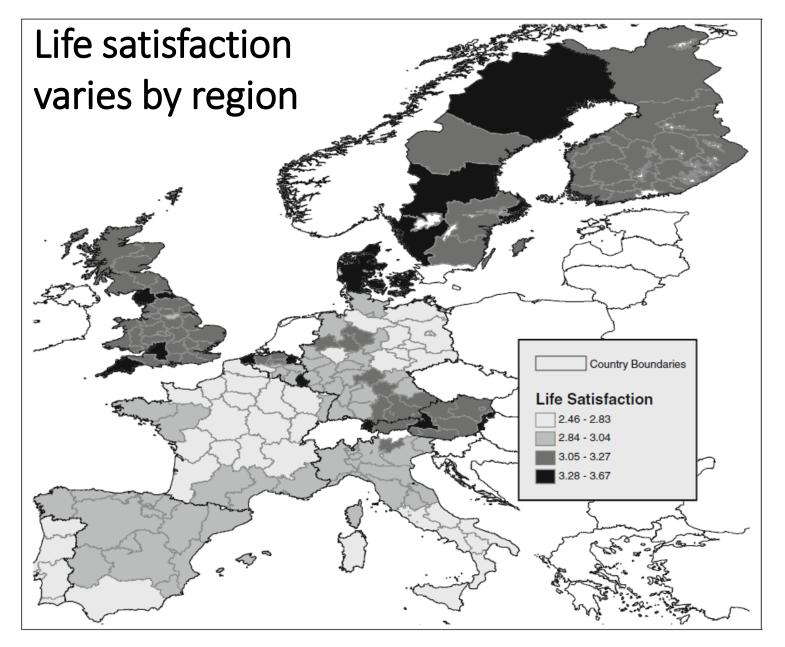


"All things considered, how satisfied are you with your life as a whole nowadays?"

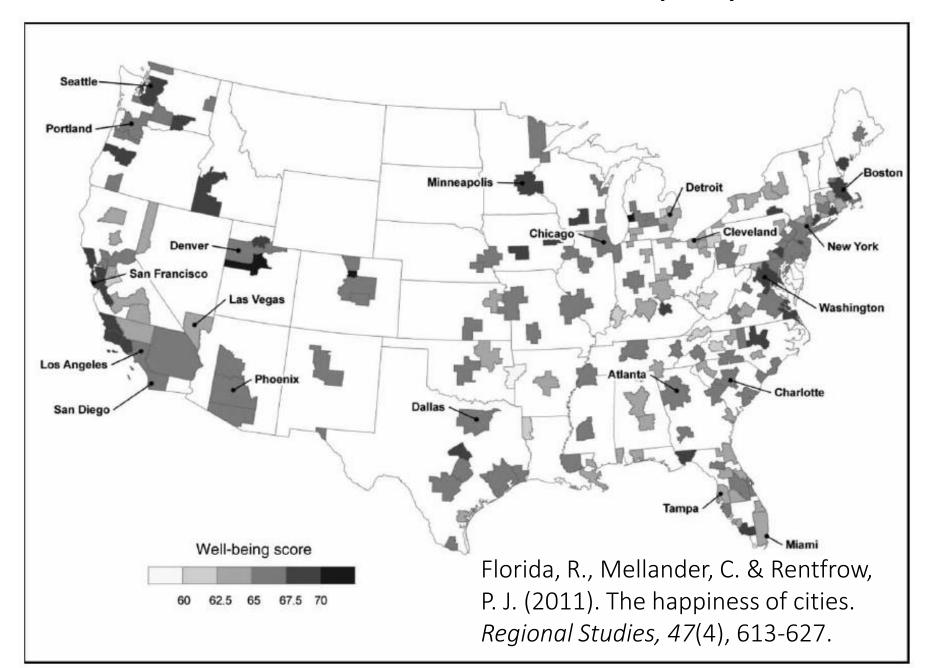


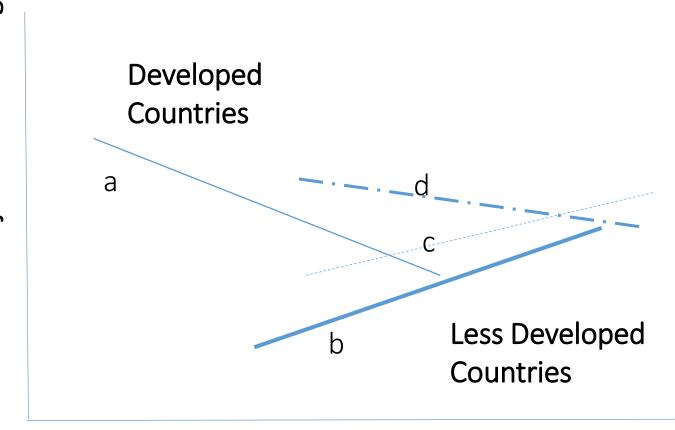
Source: European Social Survey. Wave 6. 2012



Okulicz-Kozaryn, A. (2011). Geography of European life satisfaction. *Social Indicators Research*, 101, 435-445.

Life satisfaction also varies by city

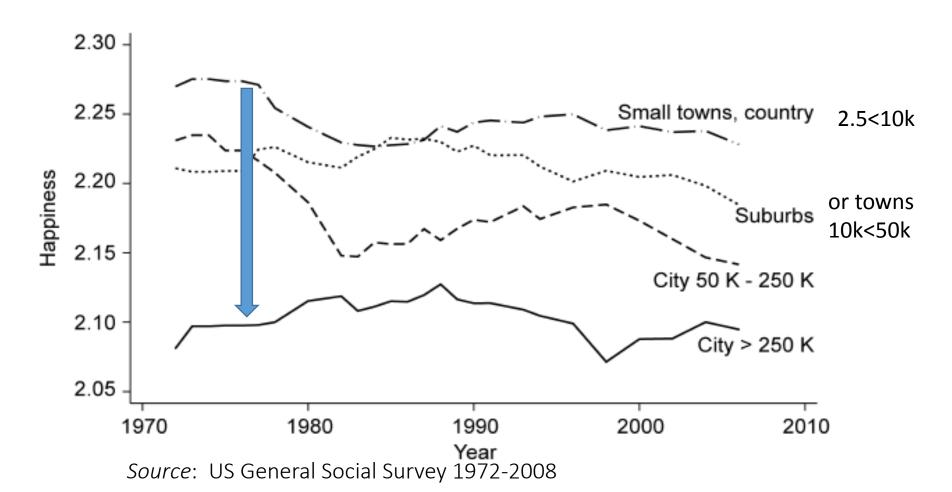




Urban population size/density

Subjective well-being is lower in large cities

The USA case: *

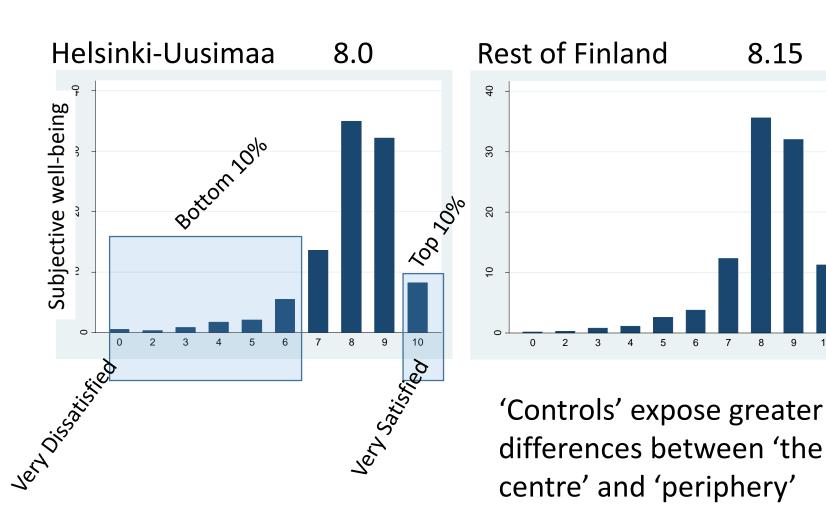


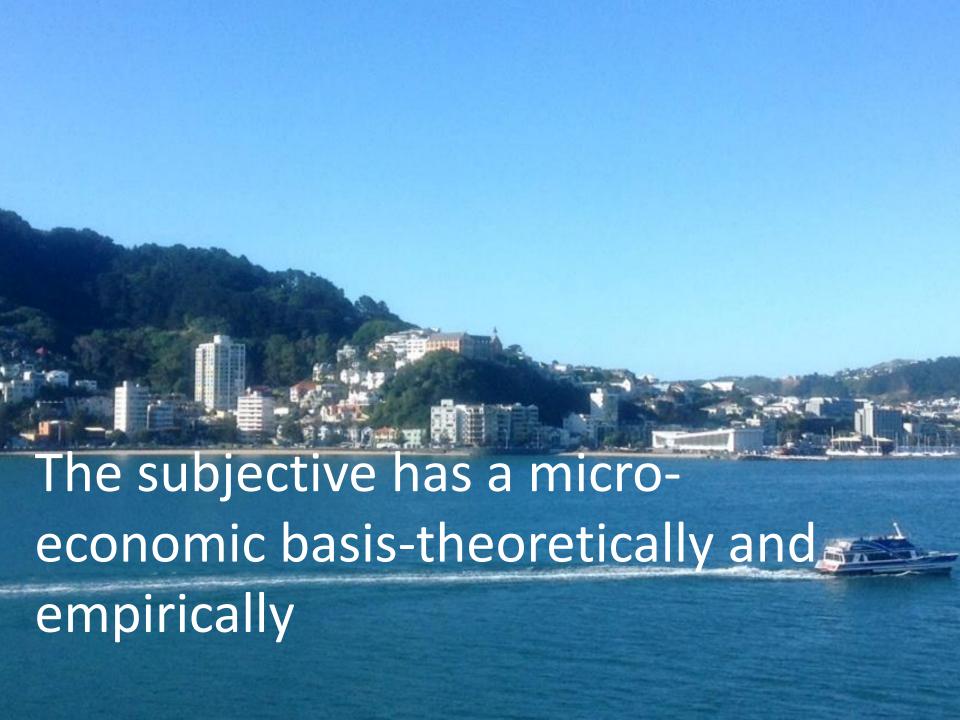
*Berry and Okulicz-Kozaryn An urban-rural happiness gradient *Urban Geography* 2011 32(6): 871-883

A spatial analogue to the Easterlin paradox?

- Large metropolitan centres are engines of growth.
- Subjective well-being is lower in large agglomerations (in developed economies).
- Is this a spatial analogue of the paradox of affluence?
- With increasing agglomeration will (relative) average levels of subjective well-being in countries fall?

Subjective well-being in large agglomerations



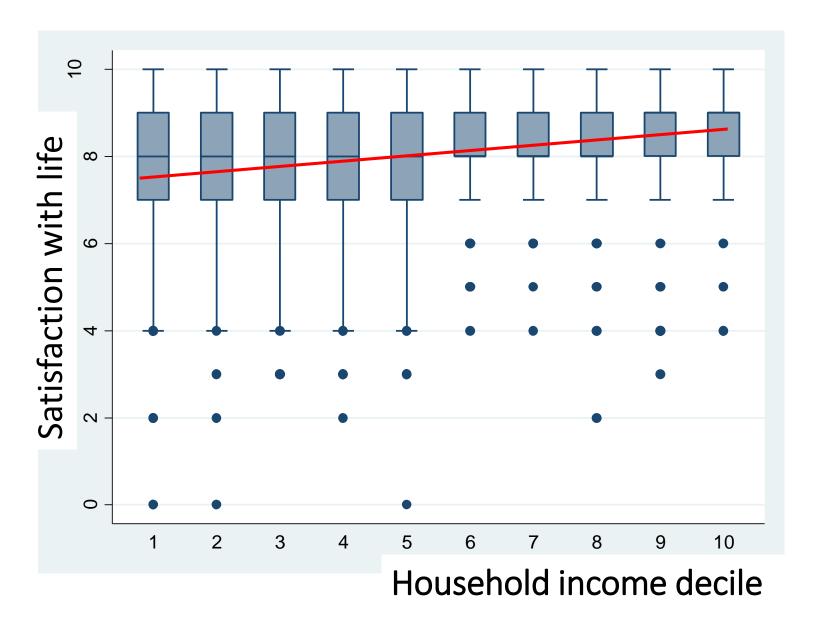


Subjective well-being is a (positive) function of income

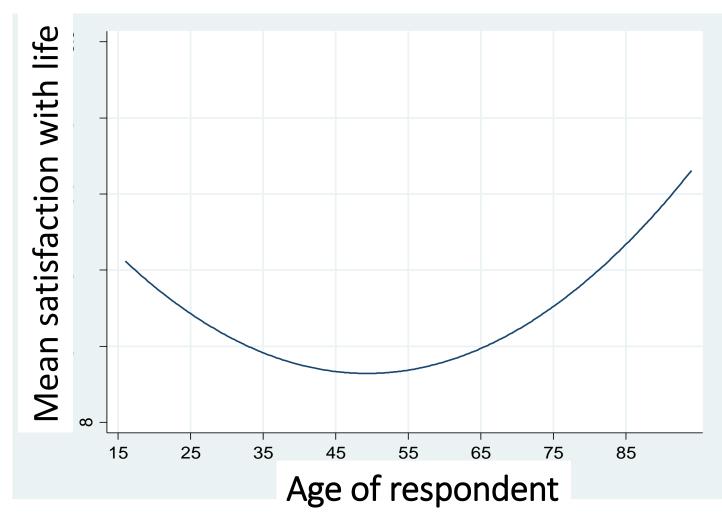
$$S = f(I)$$

While positively related, income only accounts for a small proportion of the variance in subjective well-being.

Satisfaction with life varies widely at all levels of income



Many other factors affect subjective well-being



Source: ESS6 (Finland)

Main others:

- Marriage
- Health
- Trust
- Genetics

Adding non-income personal characteristics, X

$$S = f(I, X)$$

Now add characteristics of the city, C

$$S = f(I, X, C)$$

In micro-economic theory, the individual's only connection with others is via the market.



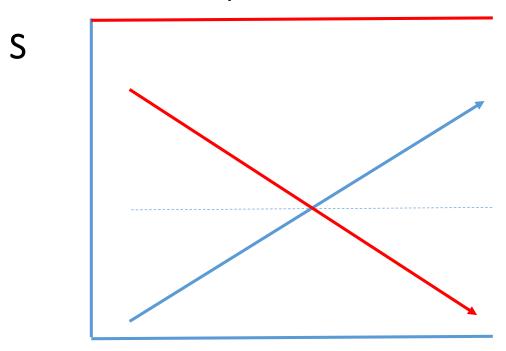
Subjective well-being is also affected by *relative* income**

$$S = f(I, I^*, X, C)$$

** Clark, A. E., & Oswald, A. J. (1996). Satisfaction and comparison income. *Journal of Public Economics*, 61(3), 359-381.

Income and relative income have opposite effects on subjective well-being

I* = Io/I (ratio of others income to own income)



I (own income)

Characteristics of contemporary models

$$S = f(I,I^*, X, C)$$

S = subjective well-being

I = income of individual or household

X = vector of other attributes of the individual

C = vector of city characteristics



- 1. Other measures of subjective well-being?
- 2. Recognising heterogeneity within well-being (ill-being vs well-being)
- 3. Incorporating reference group effects?
- 4. Controlling for personality differences big five
- 5. What do we mean by city size?
- 6. Measuring geographic context

Research challenges continued

- 7. Establishing causation (the role of panels)
- 8. Getting the above into data collections
- 9. Recognising sub-groups heterogeneity in behaviour

A quick look at

- Reference groups
- City size
- Geographic context

Incorporating reference group effects

Who in the world do we compare ourselves with?

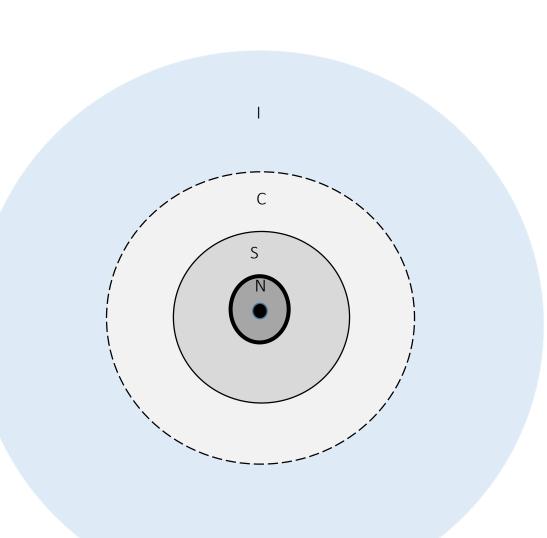


neighbourhood

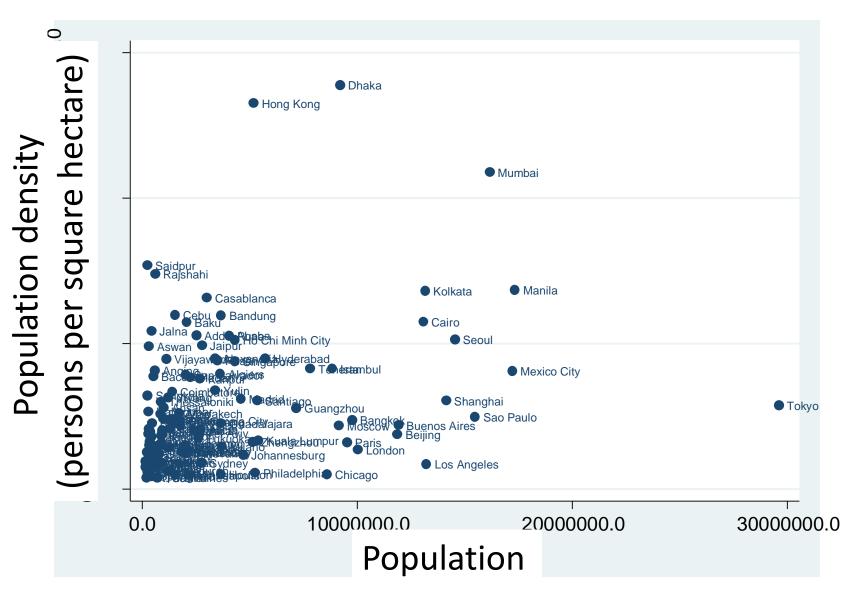
settlement

country

other countries

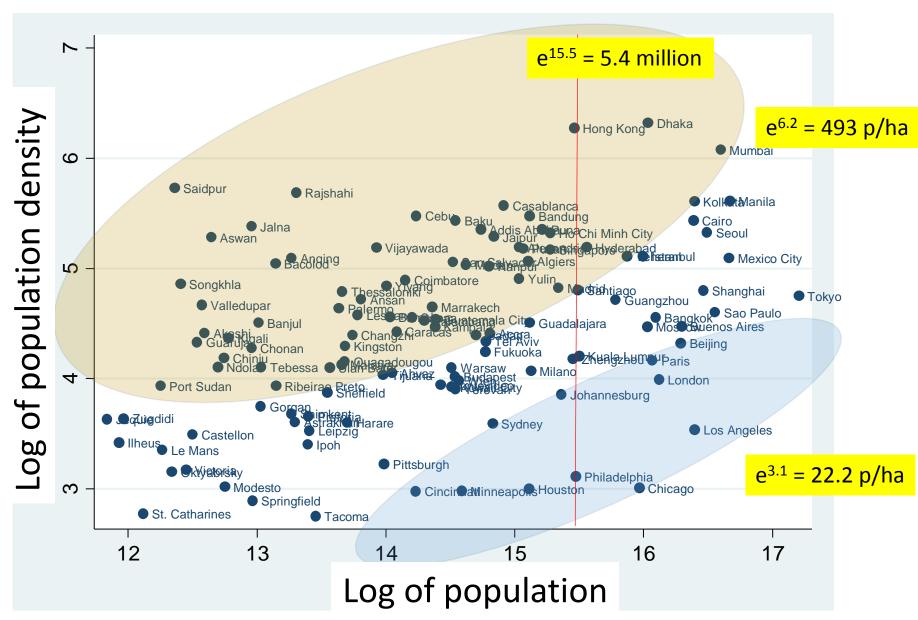


What do we mean by city size? Density vs population



Source: The Lincoln Institute

Is urban population a proxy for urban density?



Source: The Lincoln Institute

r = 0.313

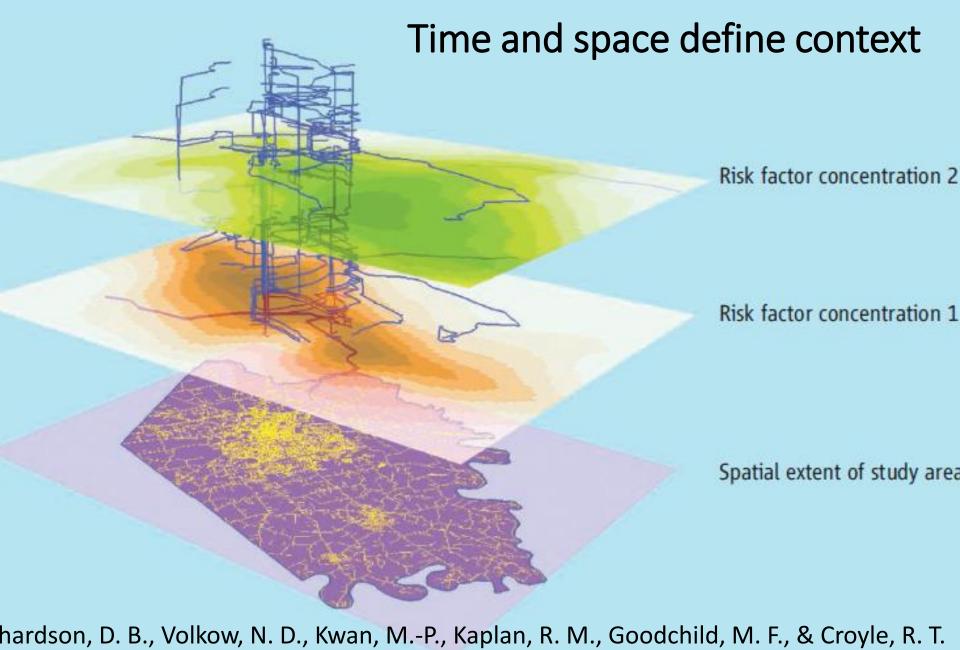
How does geographic context [and time] affect subjective well-being?

MAUP: The modifiable areal unit problem

UGCoP: The uncertain geographic context problem*

^{*}Schwanen, T., & Wang, D. (2014). Well-being, context, and everyday activities in space and time. *Annals of the Association of American Geographers*, 104(4), 833-851.

^{*}Kwan, M.-P. (2012). The uncertain geographic context problem. *Annals of the Association of American Geographers*, 102(5), 958-968.



nardson, D. B., Volkow, N. D., Kwan, M<mark>.-P., K</mark>aplan, R. M., Goodchild, M. F., & Croyle, R. T. 13). Spatial turn in health research. *Science, 339*(22 March), 1390-1392.

Key points

- 1. Quality of life is not the same as *subjective* well-being.
- 2. Agglomeration lowers local subjective well-being. Why?
- 3. We compare ourselves to others. Which others?
- 4. What is context where and when?
- 5. Qualitative studies of context?
- 6. A role for regional studies?

