# Happiness: An econometric perspective

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## Warning

- The author of these slides just read only a few papers (Easterlin's, but also work of Gilbert\*, Koszegi and Rabin, and others)
- The author has experience with econometrics and forecasting, but "previous success is no guarantee for future success"
- \* "If money doesn't make you happy, then you probably aren't spending it right"





## Outline

• What is happiness?

(from a purely econometric perspective)

- Modeling happiness
- Measurement issues
- Relevance
- Conclusion





# What is happiness?

Happiness is a latent variable: it is not directly observable (like stock market returns or sales based on barcode data).

Happiness has to be asked using survey questions (perhaps in the future using brain scans?)





# What is happiness? - 2

Variables that have similar features (often used for example in marketing, but also in macroeconomics) are loyalty, satisfaction, trust, consideration set, and consumer confidence

(also sometimes coined as stated preference data)





# Modeling happiness

For happiness to be a useful construct (in econometric terms):

- Happiness can be <u>predicted</u> (≠ being simultaneously correlated with) by variables, of which part of these can be set by policy makers.
- Happiness itself should have <u>predictive power</u> for individual behavior (like: "happy people work harder and are more productive, even if we keep salaries constant")





## Other latent variables

- Monthly consumer confidence can be predicted by events, news, and the past, but it has almost no useful predictive power for durables sales, let alone for the macro economy
- Inclusion of brands in the unobserved consideration set can be predicted, and future choice can be predicted from consideration sets
- Stated preferences for new products (conjoint) have modest predictive power for future market share





## Measurement issues

Typical for latent variables are

(so also for happiness)

- Which are the questions used? (consensus?, proper wording?)
- Framing issues (when and how are the questions asked?)
- Does aggregation make sense? (or can unobserved heterogeneity be usefully exploited?)





## Measurement issues - 2

Some further remarks:

- Happiness is most likely observed with measurement error, so adjustment of estimation routines is mandatory
- What is the optimal sampling frame of happiness? (not much variation over time per individual, much variation in cross section: resort to RCSS methods)





## Relevance

A few final thoughts:

- Asking questions about happiness should add information to observable behavior that already reflects happiness (see also Koszegi and Rabin, J of Pub Econ. 2008)
- Would (1 minus happiness) perhaps be more informative? (perhaps happy people do not do much, while unhappy people do, and there is more variation)



## Conclusion

#### Research on happiness is very valuable.

#### There are many challenges for econometric work.

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