Discussion of Angus Deaton, "Wellbeing: Measurement and Concepts"

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PPP Problems

International Comparisons of Welfare

- Penn World Tables
  - National Accounts across space and time
  - More than 8000 citations in Google Scholar!

- Key inputs
  - National accounts data (United Nations)
  - Comparable prices (International Comparison Program)
    - From just 10 countries in 1970
    - To 146 in 2005 and 180 in 2011

- Essential to answering many questions and disciplining many theories
  - How large are the income gaps between countries?
  - Are these gaps growing or shrinking?

But not (yet) without problems...

- Robert Summers: "You always look better riding someone else's horse!"

  ○ China's GDP is 60 percent larger if we use China's prices rather than US/Intl prices for the comparison.

  ○ What about chaining?

- Angus Deaton:

  ○ Standard errors for PPP's based on the goods sampled can be large (30 percent for China and India)

  ○ With Heston: Why did China's real GDP fall by 40% after the introduction of 2005 PPPs? (urban prices, methods)

  ○ Deaton on 2005 ICP: "The new numbers 'reshape' the world..."

(continued)

- Alwyn Young (2012):

  - Half the constant price national accounts data for sub-Saharan Africa (1991–2004) was missing

  - 1/3 of countries reported no constant price data at all

  - Explores improvements using micro data from the Demographic and Health Surveys

- Johnson, Larson, Papageourgiou, Subramanian (2009):

  - Robustness of research to new versions of PWT?

  - Only 9 of 13 studies they examine are robust

  - Successive versions of PWT "forget" earlier benchmarks

- Feenstra, Inklaar, Timmer, et al: PWT 8.0 coming soon

Per capita GDP, 2000

	PWT Version		
	6.2	6.3	7.0
United States	100	100	100
Sweden	73	69	78
Hong Kong	79	83	73
Singapore	86	90	98
Brazil	21	21	20
South Africa	24	22	15
China	12	10	7.4
India	7.7	6.8	4.7
Kenya	3.7	5.0	2.9

Mean absolute deviation between 6.3 and 7.0 is 25 percent!
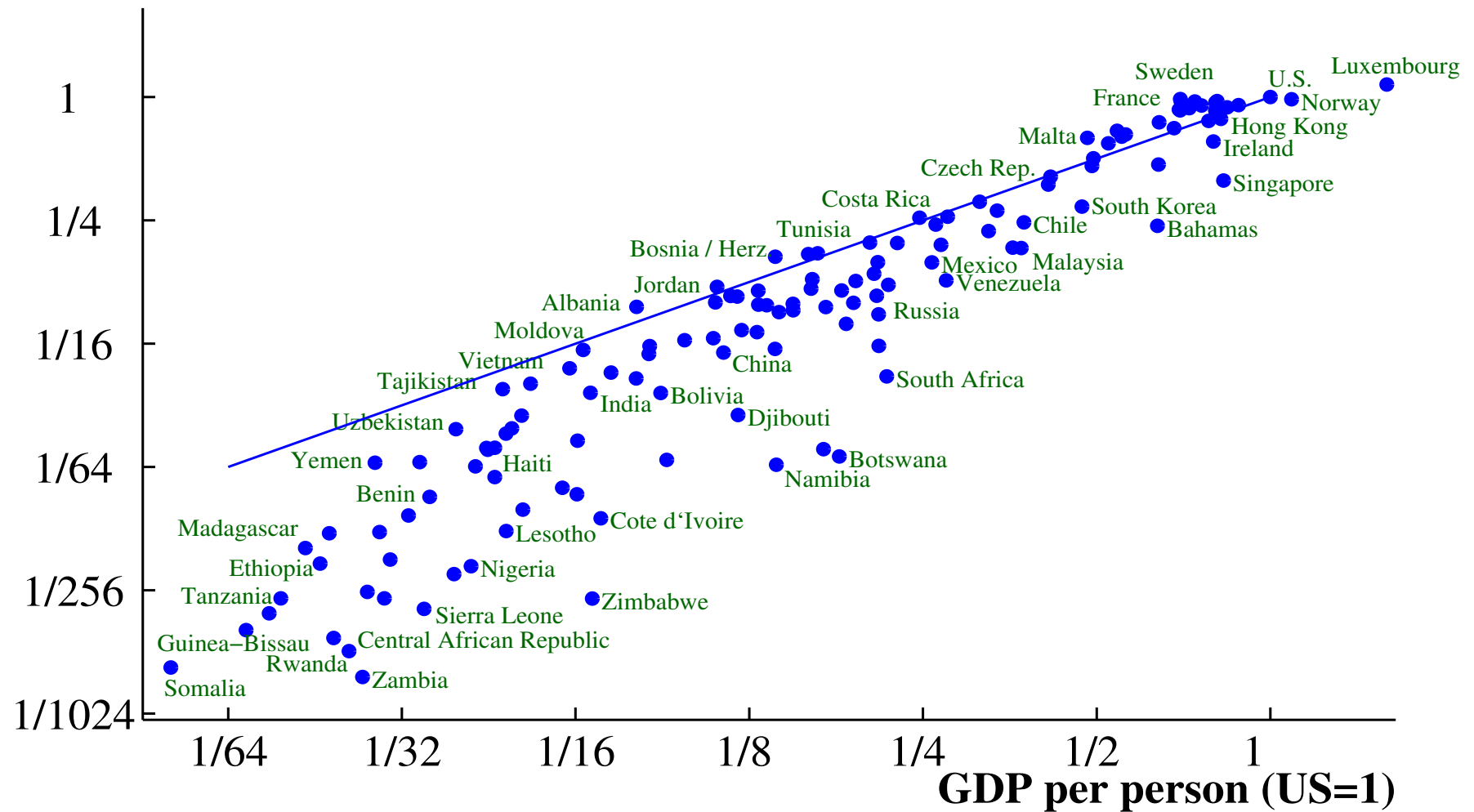
Beyond GDP

Extending Welfare Comparisons

- Large literature:

  ○ Nordhaus and Tobin (1972)

  ○ Deaton (1997, 2005), Deaton and Zaidi (2002)

  ○ Becker, Philipson, Soares (2008)

  ○ Fleurbaey (2009), Fleurbaey and Gaulier (2009)

- Recent work with Pete Klenow...

  ○ Use a "standard" utility function to combine consumption, leisure, life expectancy, and inequality

  ○ Consumption equivalent units

Welfare and Income Are Correlated 0.95 in 2000

But Welfare typically differs from Income by about 46%

The ratio of Welfare to Income

GDP per person (US=1)

Consumption-equivalent welfare: Rich countries

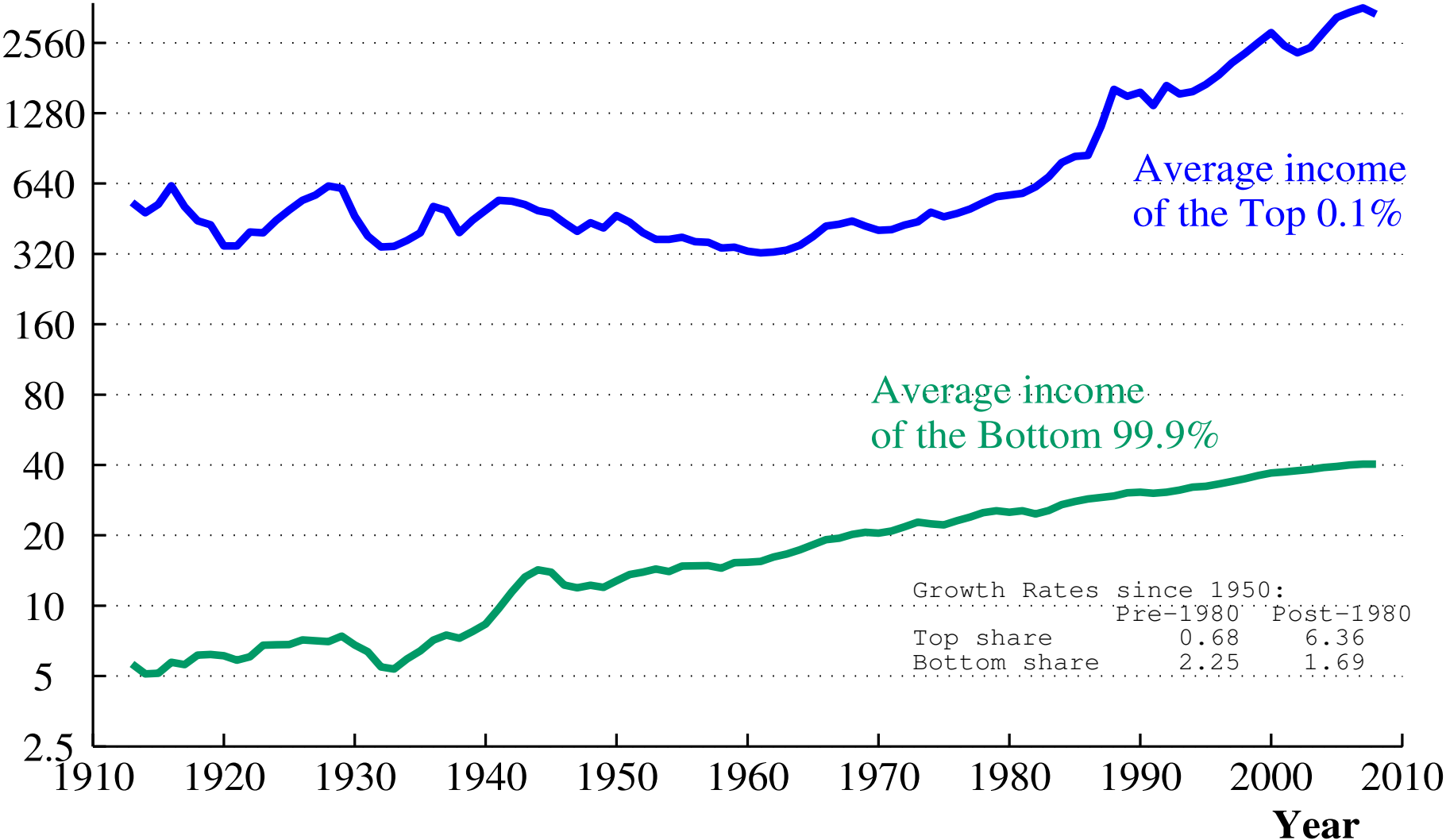|	Welfare λ	Income	Log Ratio	Life Exp.	*— Decomposition —*		
					C/Y	Leis.	Ineq.
U.S.	100.0	100.0	0.000	0.000	0.000	0.000	-0.000
				77.0	0.762	0.798	0.640
Sweden	97.7	69.8	0.335	0.165	-0.038	0.089	0.120
				79.6	0.734	0.829	0.413
Sgpore	39.1	82.9	-0.752	0.059	-0.581	-0.192	-0.039
				78.1	0.426	0.742	0.698

green #s are underlying data

Consumption-equivalent welfare: Emerging markets

	Welfare λ	Income	Log Ratio	Life Exp.	C/Y	Leis.	Ineq.
					Decomposition		
U.S.	100.0	100.0	0.000	0.000	0.000	0.000	-0.000
				77.0	0.762	0.798	0.640
China	5.7	11.3	-0.690	-0.287	-0.088	-0.147	-0.168
				71.4	0.698	0.754	0.863
S. Africa	4.3	21.6	-1.609	-1.382	0.122	0.096	-0.445
				56.1	0.861	0.832	1.140

U.S. Economic Growth by Inequality

Thousands of 2005 chained dollars

Average income of the Top 0.1%

Average income of the Bottom 99.9%

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Growth Rates since 1950:
                    Pre-1980   Post-1980
Top share              0.68       6.36
Bottom share           2.25       1.69
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Year

Happiness

# Happiness

- Difficult for a growth economist to imagine that absolute levels do not matter

    - Over history

    - Between poor and rich countries

- Relative comparisons may matter as well

    - Not "instead"

    - Flow utility bounded for many "conventional" specifications

        – life expectancy crucial for lifetime welfare

        – relative comparisons may be more salient at high levels of consumption for flow of welfare

Flow Utility $u(c)$ for $\gamma > 1$

Utility
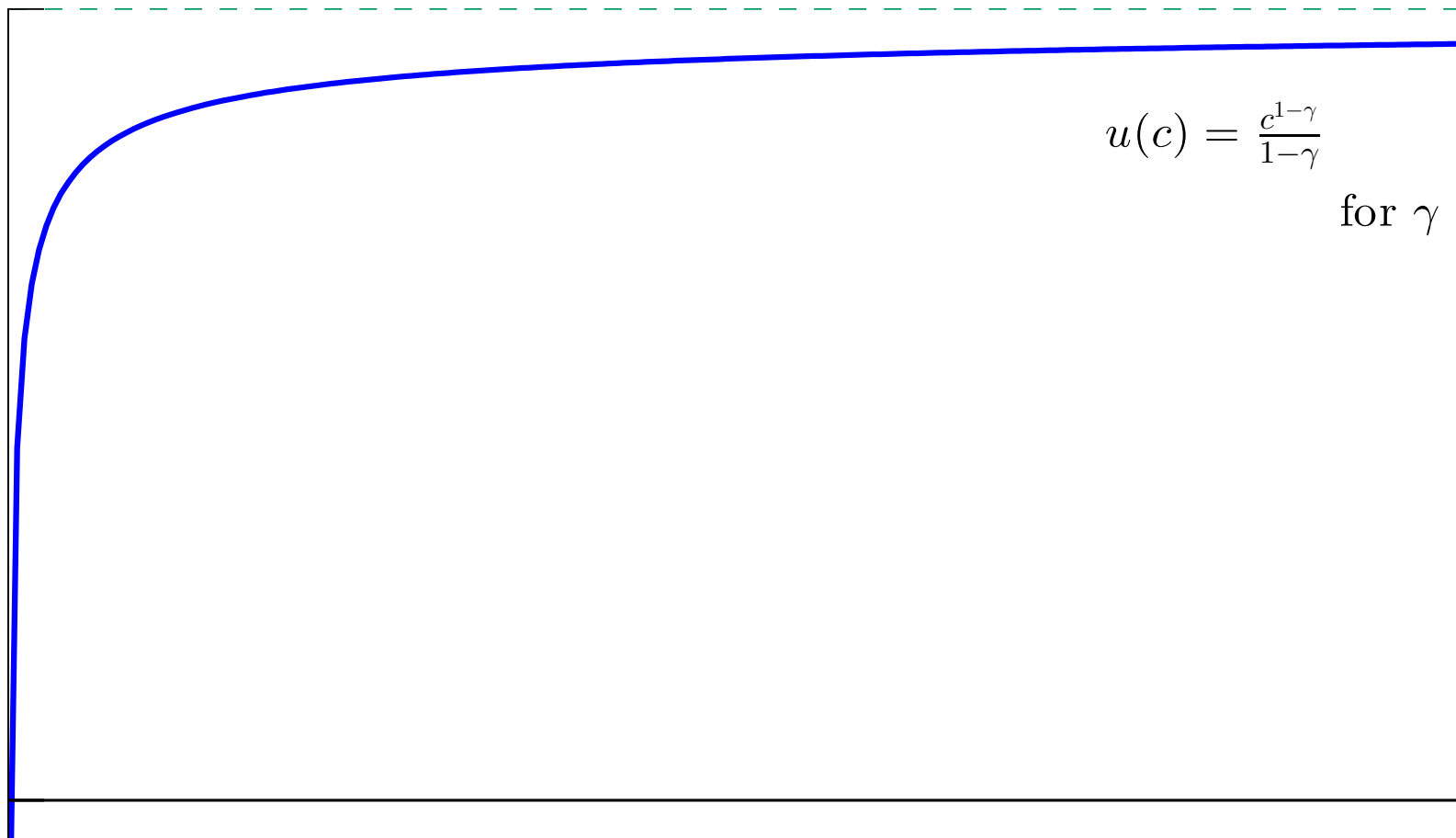
$$u(c) = \frac{c^{1-\gamma}}{1-\gamma}$$

for $\gamma > 1$

Consumption, c

In conclusion

Many fascinating and important issues remain to be worked out regarding the measurement of well-being!