Income Inequality and Subjective Well-Being in Urban China: Changes in het 2000s

Discussant remarks

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- **Main finding:** Income inequality relates positively to happiness in 2002 but not in 2007.
- **Author's explanation:** A decreased tolerance for income inequality.
- **Key unanswered question:** Why did tolerance plunge so rapidly?

  2002: Positive relation (Jiang et al. 2012 using CHIP)

  2005: Negative relation (Wu and Li 2013 using Chinese GSS)

  2006: Inverted U-shaped relation (Wang et al. 2015 using Chinese GSS)

  2007: Non-positive (or negative) relation (Fu 2017 using CHIP)

Table 2 Income inequality at city level (2002 & 2007)

Year	Variable	Obs.	Mean
2002	BI	26	1.779
	City-level Gini	26	0.333
2007	BI	15	1.276
	City-level Gini	15	0.322

- Perhaps happiness relates positively to inequality growth but not to the absolute degree of inequality?
- Availability of literature/data that provides evidence for decreasing tolerance?
- Perhaps change in reference groups due to technological advancement?
- Did something significant happen in China in the period 2002-2007?
- Why not explore an inverted U-shaped relation?

Suggestions literature (1)

- Direct proof of a "tunnel effect" in China (based on 2012 data):
  - Cheung, F. (2016). Can Income Inequality be Associated With Positive Outcomes? Hope Mediates the Positive Inequality–Happiness Link in Rural China. *Social Psychological and Personality Science*, *7*(4), 320-330.

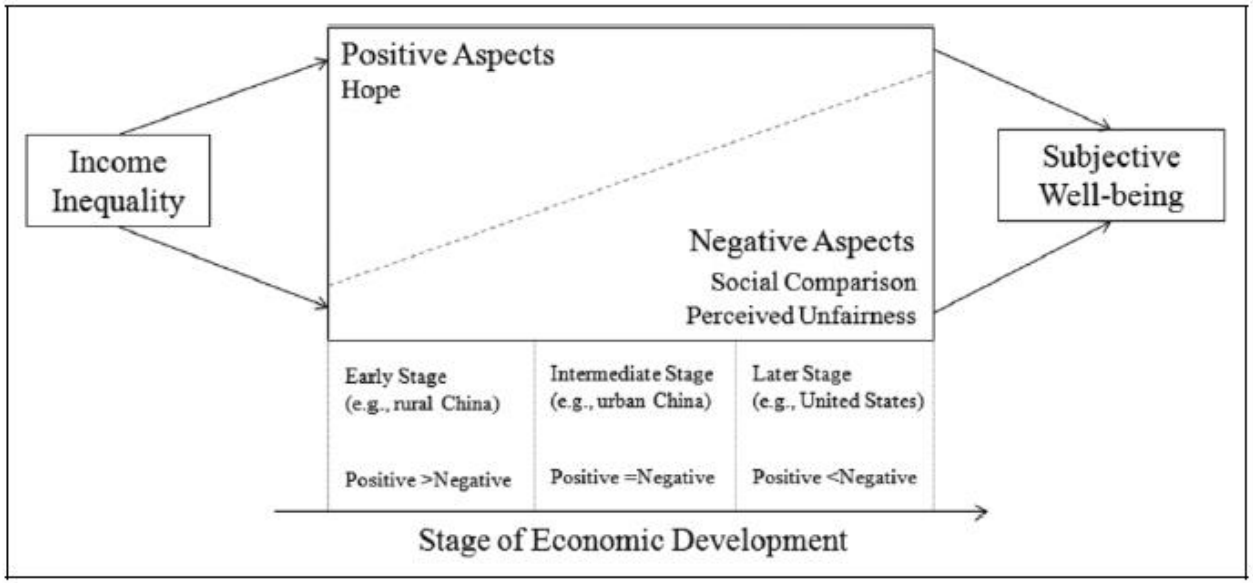

Figure 3. A dual process model of income inequality.

Suggestions literature (2)

- Positioning the income inequality debate in the broader happiness economics literature:
  - Relative income (micro) – income inequality (macro):
    - Duesenberry's relative income hypothesis
    - Why does relative income but not income inequality relate negatively to happiness?
  - The Easterlin paradox
    - Any implications for explaining the Easterlin paradox in China? Perhaps an absent relation between relative income and happiness explains the Easterlin paradox?

Table 3 The impact of income inequality on subjective-wellbeing (2002 & 2007)

Dependent Variable: Happiness Score

	2002			2007	
	(1)	(2)	(3)	(4)	(5)
BI	-0.0608***	-0.0546**	-0.0663**	-0.0790***	-0.0966**
	(0.0226)	(0.0230)	(0.0333)	(0.0227)	(0.0468)
Gini	1.352***	1.488***	1.743***	-0.329	-1.190*
	(0.320)	(0.330)	(0.419)	(0.323)	(0.630)
Urban *hukou*		-0.129	-0.139	0.0328**	0.0282*
		(0.0815)	(0.0819)	(0.0151)	(0.0151)
Male	-0.0495**	-0.0302	-0.0321	-0.0324***	-0.0346***
	(0.0222)	(0.0226)	(0.0227)	(0.0109)	(0.0109)
Age	-0.0261***	-0.0351***	-0.0347***	-0.0178***	-0.0169***
	(0.00581)	(0.00582)	(0.00584)	(0.00269)	(0.00269)
Age-*squared*	0.000326***	0.000429***	0.000425***	0.000197***	0.000188***
	(0.0000593)	(0.0000596)	(0.0000598)	(0.0000277)	(0.0000277)
Married	0.0915*	0.0604	0.0561	0.173***	0.167***
	(0.0551)	(0.0563)	(0.0565)	(0.0208)	(0.0208)
Divorced	-0.247**	-0.272**	-0.276**	-0.171***	-0.179***
	(0.109)	(0.110)	(0.110)	(0.0532)	(0.0530)
Widowed	-0.171*	-0.201**	-0.207**	-0.0595	-0.0573
	(0.0997)	(0.102)	(0.102)	(0.0502)	(0.0500)
Years of education	0.000492	0.00493	0.00454	0.0116***	0.0121***
	(0.00373)	(0.00377)	(0.00376)	(0.00188)	(0.00189)
Good health	0.214***	0.248***	0.242***	0.236***	0.231***
	(0.0251)	(0.0258)	(0.0259)	(0.0132)	(0.0132)
Bad health	-0.150***	-0.164***	-0.163***	-0.196***	-0.203***
	(0.0533)	(0.0542)	(0.0539)	(0.0369)	(0.0367)
Unemployed	-0.0164	-0.0936*	-0.0924*	-0.0695**	-0.0627**
	(0.0305)	(0.0504)	(0.0505)	(0.0317)	(0.0317)
Log household income per capita	0.286***	0.309***	0.326***	0.0647***	0.0798***
	(0.0175)	(0.0180)	(0.0191)	(0.00975)	(0.0102)
GDP per capita/10^4			0.0534		-0.0191**
			(0.0598)		(0.00891)
Population growth rate			0.00690		0.00752
			(0.0322)		(0.00948)
Big city			0.0248		-0.0436***
			(0.0300)		(0.0166)
Central			-0.0245		-0.0150
			(0.0446)		(0.0260)
Western			-0.0915*		0.0363
			(0.0551)		(0.0361)
Constant	-0.109	-0.0935	-0.187	2.768***	3.007***
	(0.228)	(0.230)	(0.234)	(0.168)	(0.267)
Observations	5,881	5,881	5,881	12,890	12,890
R-squared	0.143	0.103	0.105	0.062	0.066

Suggestions Methodology

- All models have downward biased standard errors.
  - $N_{cities\ 2002}=26$; $N_{cities\ 2007}=15$
  - See e.g., The "42" rule described in Angrist, J. D., & Pischke, J. S. (2008). *Mostly harmless econometrics: An empiricist's companion*. Princeton university press.

  Solution: wild cluster bootstrap method

  Cameron, A. C., Gelbach, J. B., & Miller, D. L. (2008). Bootstrap-based improvements for inference with clustered errors. The Review of Economics and Statistics, 90(3), 414-427.

- *Extension:* Robustness check with all available cities in 2007 (for urban residents).
- *Extension:* Specification excluding endogenous controls that may block pathways of the income inequality-happiness relation (health condition and employment status).