



# **Positional Concerns of Rural-to-Urban Migrants in China**

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# Summary



- We estimate well-being on income, relative income and controls to investigate **relative (positional or status) concerns** among rural-to-urban migrants in China.
- First question whether relative concerns result in a negative externality due to **status** (“envy”) or a positive externality due to the **signal** of a better future (“tunnel-effect”).
- Case of migrants: possibly multiple reference groups (mean income in source region, among other migrants, in urban area where they live) > we find status effect w.r.t. to other migrants and (rural) source region but signaling effect w.r.t to “similar” urban
- Also:
  - Difference with relative concerns of urban and rural people
  - How is the development of the relative concerns by duration to stay?

# Agenda



- Introduction
- Data
- Results
  - Rural, urban, migrants
  - Urban for a check
  - Extensive analysis of migrants

# Introduction



- **Well-being may depend not only on absolute but also on relative-income**
  - Old story: Veblen 1899, Duesenberry, 1949
  - Revisited in recent literature on self-reported subjective well-being: Frank, 1997; Solnick and Hemenway 1998; Johansson-Stenman et al. 2002; Clark et al. 2008, Senik, 2004, 2008
- **Significant relationship**
  - usually *negative effect* of relative income in developed countries (e.g., Clark and Oswald 1996; McBride 2001; Ferrer-i-Carbonell 2005; Luttmer 2005; Senik, 2004, 2008; Clark et al. 2008)
  - more *mixed results* in developing/transition economies, in particular evidence of **signal/tunnel effect** for poor chinese workers (Kingdon et al., 2009); similar evidence for SA (Bookwalter and Dalenberg, 2009)
- **Yet little is known about what the relevant reference group should be**
  - exception: Clark and Senik (2009)

- Migrants is particularly interesting as moving may perturb the composition of their reference group
  - they confront different set of opportunities and their expectations may change
- **RUMiCI** data is unique opportunity to study Chinese rural-to-urban migrants and compare them to three groups:
  - rural people from source region
  - other, comparable migrants
  - urban residents
- Wealth of data
  - subjective well-being
  - migration history
  - as yet, cross-section (panel in future)
- This study: is based on the subjective well-being approach (SWB) and uses the average income of “relevant others” as **relative income** for an indicator of **relative concerns**:

$$GHQ_i^* = \beta_{absolute} \log(income_i) + \beta_{relative} \log(relative\ income_j) + x_i' \beta + \alpha_k + u_i$$

# Data: RUMICI



- Separate samples of urban, rural and rural-to-urban migrants (urban for generations / “natives”)
- 10 provinces
  - incl. the largest provinces sending and receiving migrants (Shanghai, Jiangsu, Zhejiang, Hubei, Sichuan, Guangdong, Henan, Anhui and Sichuan)
  - all containing balanced proportion of each type (except one province purely rural and one purely urban = only with urban and migrants)
- This wave collected in 2008 (panel in future) : 18,000 households, among which:
  - 5,000 migrant households (living in the same regions as urban households)
  - 8000 urban households
- There are 79 "cities":
  - 15 contain urban samples and migrant samples, 6 of which also contain rural samples (rural parts of the cities where urban people live); 61 pure rural samples
- Information: household, health-status, employment, social networks, SWB, migration history ...
- We consider effect of **individual labor income** on happiness. Next steps: use info on family and household labor income. Yet individual income may better proxy how happiness depend on personal achievement, aspiration, etc...

# Selection of workers, 17-70

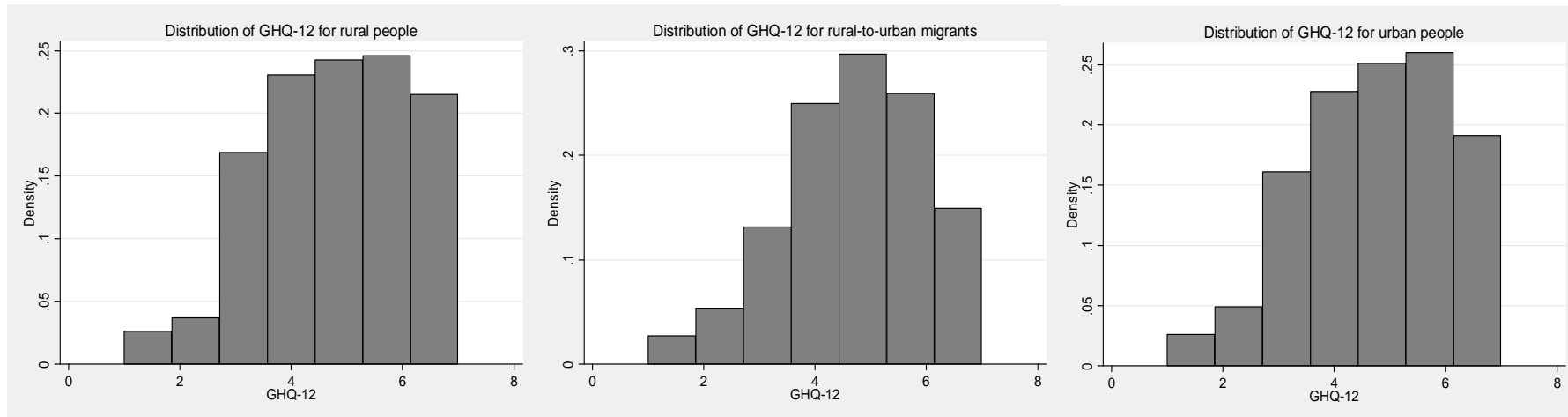


	Rural	Migrant	Urban
salary worker (0/1)	0.76 (0.43)	0.79 (0.40)	0.88 (0.32)
log hours of work	3.8 (0.6)	4.1 (0.3)	3.7 (0.4)
age	46 (8.4)	31 (10.2)	43 (8.4)
female	0.02 (0.15)	0.30 (0.46)	0.28 (0.45)
married	0.98 (0.14)	0.54 (0.50)	0.94 (0.24)
0 child	0.03 (0.16)	0.48 (0.50)	0.08 (0.27)
1 child	0.38 (0.48)	0.31 (0.46)	0.84 (0.37)
2 children	0.42 (0.49)	0.17 (0.38)	0.07 (0.26)
educ	8.2 (2.4)	9.4 (2.5)	11.8 (2.8)
abs. income	1456 (1064)	1632 (1141)	2477 (1801)
<b>GHQ-12</b>	5.1 (1.47)	4.8 (1.47)	4.9 (1.52)
# observations	3142	4963	2417

# Well-being



- GHQ-12 mental strength scale (used in (Oswald and Clark, 1994, 2001, 2007; Blanchflower and Oswald, 2008, among others).
- shapes of SWB distributions similar to past studies (Winkelmann and Winkelmann, 1997; Clark and Oswald, 1994): left-skew and very few people report lowest well-being levels
- Average SWB highest in rural areas, and very similar between migrants and urban / yet mean difference btw the 3 groups insignificant. Larger variance for the migrants is potentially the result of migration experience and the high variation of other measures such as income of the migrants



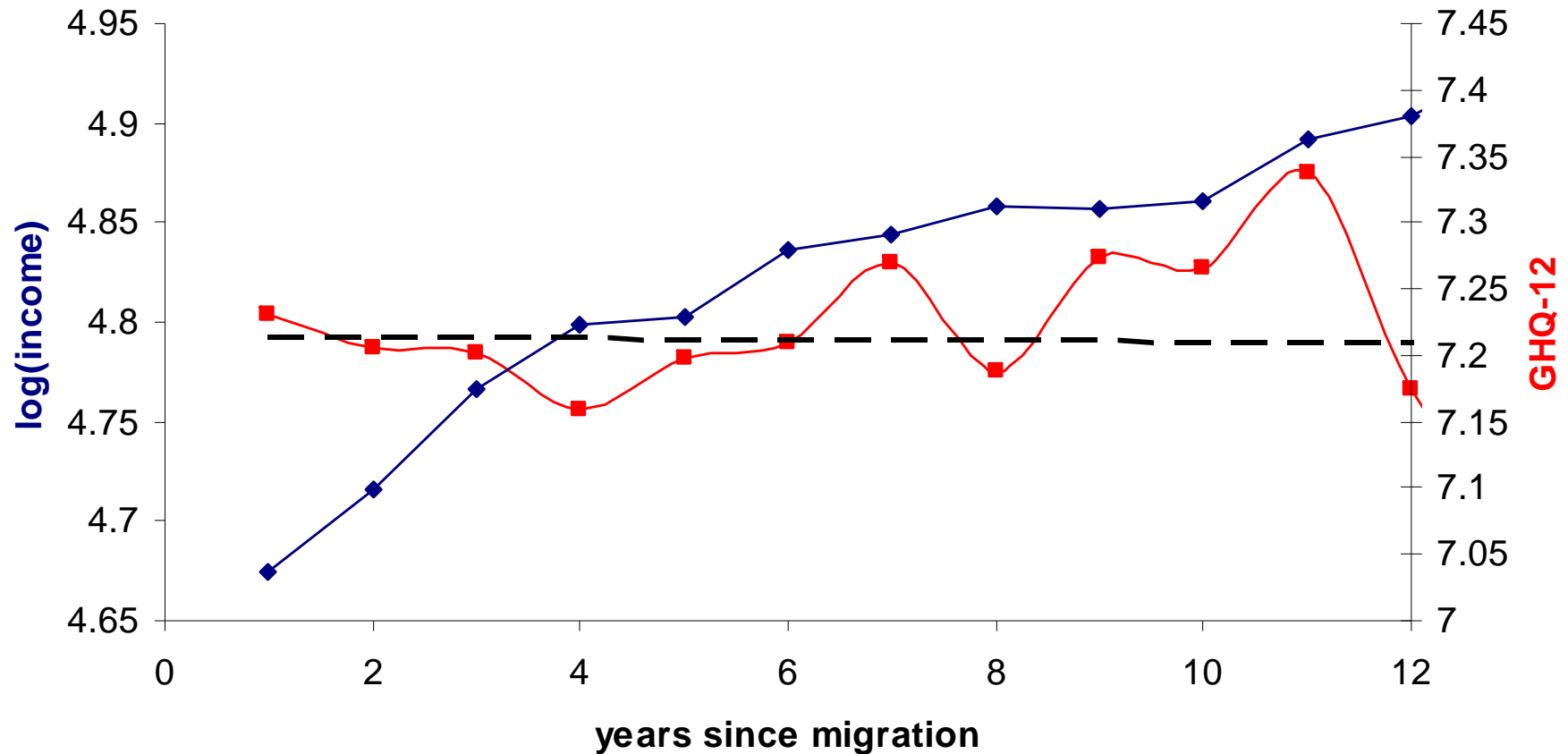


# Easterlin paradox



Immigrants arriving in a host region with lack of urban-specific human capital may develop skills and improve their financial situation over time. Their mental health stays constant because of a change in their relative concerns and income aspirations over time.

Income and SWB by year-since-migration



## To whom do subjects compare themselves to?

- We do not know the exact reference groups
- In literature: age, cohort, standard of living and combinations (McBride, 2001), spatial, age, educ and occup. (Clark and Oswald, 1996, Ferrer-i-Carbonell, 2005)
- Here relative income is defined using “cities” (region), age or year-since-migration, checking different reference group (rural, urban, other migrants)
- Controls: age, age2, education, health, marital status, number of children, work hours, salaried worker (vs. self-empl.), hukou status

## Reference groups

	City	City + type (rural, urban, migrant)	City + age	City + type + age
salary worker (0/1)	-0.028 (0.030)	-0.030 (0.030)	-0.032 (0.031)	-0.036 (0.031)
hours of work	-0.161 *** (0.028)	-0.165 *** (0.028)	-0.143 *** (0.030)	-0.149 *** (0.030)
age	-0.012 (0.008)	-0.012 (0.008)	-0.009 (0.009)	-0.013 (0.009)
age2	0.021 ** (0.010)	0.021 ** (0.010)	0.015 (0.011)	0.020 * (0.011)
female	-0.092 *** (0.036)	-0.093 *** (0.036)	-0.115 *** (0.037)	-0.120 *** (0.037)
married	0.285 *** (0.051)	0.289 *** (0.051)	0.301 *** (0.055)	0.301 *** (0.055)
health2	-0.482 *** (0.026)	-0.480 *** (0.026)	-0.479 *** (0.027)	-0.477 *** (0.027)
health3	-0.876 *** (0.034)	-0.877 *** (0.034)	-0.876 *** (0.036)	-0.876 *** (0.036)

## Reference groups

	City	City + type (rural, urban, migrant)	City + age	City + type + age
0 child	0.139 *	0.137 *	0.119	0.108
	(0.076)	(0.076)	(0.081)	(0.081)
1 child	0.075	0.075	0.090	0.076
	(0.054)	(0.054)	(0.057)	(0.056)
2 children	0.116 **	0.116 **	0.123 **	0.117 **
	(0.053)	(0.053)	(0.057)	(0.057)
weight	0.002	0.002	0.002	0.002
	(0.002)	(0.002)	(0.002)	(0.002)
height	0.001	0.001	-0.001	-0.001
	(0.002)	(0.002)	(0.003)	(0.003)
hukou	-0.062 *	-0.019	-0.046	-0.044
	(0.034)	(0.038)	(0.036)	(0.036)
educ	0.029 ***	0.030 ***	0.031 ***	0.031 ***
	(0.005)	(0.005)	(0.005)	(0.005)
abs. income	<b>0.134 ***</b>	<b>0.134 ***</b>	<b>0.129 ***</b>	<b>0.120 ***</b>
	<b>(0.020)</b>	<b>(0.020)</b>	<b>(0.022)</b>	<b>(0.021)</b>
rel. income	<b>-0.165 ***</b>	<b>-0.165 ***</b>	<b>-0.132 ***</b>	<b>-0.060</b>
	<b>(0.054)</b>	<b>(0.054)</b>	<b>(0.049)</b>	<b>(0.050)</b>
# observations	8906	8906	8145	8145

# Well-being of rural, migrants and urban on AI, RI

Reference groups		All sample	Rural	Migrant	Urban
City	<i>AI</i>	0.134 *** (0.020)	0.116 *** (0.029)	0.116 *** (0.034)	0.173 *** (0.049)
	<i>RI</i>	-0.165 *** (0.054)	0.214 ** (0.091)	-0.219 ** (0.089)	-0.403 *** (0.153)
City + age(±5 years)	<i>AI</i>	0.129 *** (0.022)	0.096 *** (0.031)	0.118 *** (0.036)	0.164 *** (0.052)
	<i>RI</i>	-0.132 *** (0.049)	0.203 ** (0.079)	-0.244 *** (0.086)	-0.282 ** (0.137)
City + own type (rural, urban, migrant)	<i>AI</i>	0.134 *** (0.020)	0.117 *** (0.029)	0.114 *** (0.034)	0.182 *** (0.052)
	<i>RI</i>	-0.165 *** (0.054)	0.194 ** (0.094)	-0.253 ** (0.104)	-0.323 *** (0.115)
City + own type + age(3 groups)	<i>AI</i>	0.135 *** (0.020)	0.118 *** (0.029)	0.122 *** (0.034)	0.176 *** (0.052)
	<i>RI</i>	-0.153 *** (0.048)	0.148 * (0.082)	-0.310 *** (0.090)	-0.245 ** (0.107)
#Observations		10522	3142	4963	2417

# Well-being of rural, migrants and urban on AI, RI

- Positive effect of AI on SWB of all types
- RI impacts negatively for migrants and urban (status effect)
- But positively for rural (altruistic preferences or relative income as a source of information about future prospects, e.g. Kingdon and Knight, 2007, for South Africa; Kingdon et al., 2009, for China; Bookwalter and Dalenberg, 2009, for South Africa)
- Robust to narrowing down ref group to similar type, and with 3 age groups (<30, 30-45, >45) - yet trade-off due cell size
- “City” is important: reg on age only or age x type only give no RI effect
- Out of 69 "cities" with rural and 18 with urban, only 8 also both / hence cannot produce ref group checks for rurals but can do so for urban vs migrants: next slide

# Well-being of urban with different ref. groups

	I	II	III
<i>Ref. group: city + type indicated below</i>			
AI	0.182 *** (0.052)	0.161 *** (0.053)	0.193 *** (0.059)
RI: urban income	-0.323 *** (0.115)		-0.408 *** (0.140)
RI: migrant income		-0.193 (0.172)	0.127 (0.200)
<i>Ref. group: city + age (3 groups) + type indicated below</i>			
AI	0.176 *** (0.052)	0.153 *** (0.052)	0.189 *** (0.059)
RI: urban income	-0.245 ** (0.107)		-0.343 *** (0.122)
RI: migrant income		-0.007 (0.131)	0.146 (0.141)

# Relative concerns of migrants



- We now focus on our main group of interest: rural-to-urban migrants
- Several potential reference groups can apply and we use the possibility to differentiate between
  - different sub-populations
  - and the effect of time spend in the host region after migration (YSM)
- Three main reference groups
  - Other migrants
  - Migrants from same region (labor income / hypothetical rural income as proxy of rural income)
  - Urban workers
- Combined with age or YSM
- Check RI effect, overall and for different YSM



# Ref group: all migrants

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Ref. groups >>	same city	same city + age group	same ysm (+- 3 years) / <b>all cities!</b>	same city + ysm (+- 3 years)
<i>AI</i>	0.114 *** (0.034)	0.122 *** (0.034)	0.094 *** (0.033)	0.123 *** (0.034)
<i>RI</i>	-0.253 ** (0.104)	-0.310 *** (0.090)	-0.279 (0.189)	-0.279 *** (0.085)

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! Check showing that city matters

# Ref group: same origin migrants / rural IZA

labor income			
Reference groups >>	same age group / all cities*	same city + age (3 groups)	same city + ysm (+- 3 years)
<i>AI</i>	0.115 ***	0.128 ***	0.135 ***
	0.037	0.038	0.040
<i>RI</i>	-0.084	-0.075	-0.084
	0.059	0.054	0.056
hypothetical rural income			
Reference groups >>	same age group / all cities*	same city + age (3 groups)	same city + ysm (+- 3 years)
<i>AI</i>	0.113 ***	0.113 ***	0.112 ***
	0.033	0.034	0.034
<i>RI</i>	-0.136 ***	-0.076 **	-0.070 **
	0.044	0.036	0.034

\* here, NOT a check that city matters: rural region matters (ref = all migrants from the same source region whatever city they live in). With labor income, only significant if same city only.

# Overview



- **Status effect** emerge from comparison with
  - All migrants of same city
  - Same origin migrants' hypothetical rural income / proxy for origin region
- Robust to comparison with same age or YSM, but also occ or marital status
- With urban (same city + age gr.), we find a **signal effect** (RI coeff: 0.257 \*\*\*)
- We now test for several groups simultaneously, and vary the effect over time since migration (by interacting RI and YSM in 3 groups: 5-,5-10, 10+ years since migration)

# All ref group simult. & over time since migration

	for same city	for same city + age group	for same city		
	all	all	ysm <=5	5 < ysm <= 10	ysm>10
AI	0.130 *** (0.037)	0.112 *** (0.039)	0.063 (0.056)	0.217 *** (0.077)	0.180 *** (0.062)
RI: all migrants	-0.265 ** (0.125)	-0.424 *** (0.103)	0.042 (0.126)	-0.302 * (0.162)	-0.454 *** (0.156)
same origin's migrants, labor inc.	-0.019 (0.065)	0.016 (0.062)	-0.075 (0.090)	-0.022 (0.122)	0.042 (0.120)
same origin's migrants, hypo rural inc.	-0.135 *** (0.046)	-0.070 * (0.039)	-0.199 *** (0.068)	-0.084 (0.086)	-0.127 (0.086)
urban	0.174 *** (0.065)	0.302 *** (0.047)	0.124 (0.093)	0.153 (0.123)	0.310 *** (0.119)

# Conclusion



- Immigrant well-being show very similar pattern to Easterlin Paradox
- Migrants experience very strong relative concerns / check: urban too but only with themselves
- Early stage: migrants compared to source region: status effect
- Later on: switch to mixed ref group with envy toward more successful migrants (status effect) and taking urban income as sign for better future (signalling effect)

## Future work...

Refine using

- Marital link (wife still in rural area or not)
- Role of remittance
- Questions on motives for migrations, tendency to migrate several times...
- Consider institutional aspects on migration, Hukou status / panel will be needed