Risk-Taking Adaptation to Macroeconomic Experiences

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- Recessions are common and have large impacts on many individual outcomes
- Recession experiences affect risk-taking, even decades after the fact
  - **Malmendier and Nagel (2011)**; Sahm (2012); Dohmen, Lehmann, Pignatti (2016); Ampudia and Ehrmann (2017); Guiso, Sapienza, Zingales (2018)
- Current lit focused on downturn aspect of recessions ($\downarrow$ mean income)
- Plausibly as important: uncertainty aspect of recessions ($\uparrow$ variance income)

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- Current lit focused on downturn aspect of recessions ($\downarrow$ mean income)
- Plausibly as important: uncertainty aspect of recessions ($\uparrow$ variance income)
- **This paper**: Lifetime experiences of macro volatility have *first-order* effects on individual risk attitudes
  - $\Rightarrow$ Macro experiences shape risk aversion by improving/worsening and stabilizing/destabilizing agents' environments

THIS PAPER

1. **Model**: Exogenous long-run income experiences $\Rightarrow$ risk preferences
   - Experience effects for risk $\Longleftrightarrow$ Bayesian learning over background risk
2. **Empirical analysis**:
   - Panel surveys: Indonesia + Mexico, total N = 22K, T = 2
     - Δ lifetime mean + SD of state-level GDP growth $\Rightarrow$ Δ elicited risk prefs
   - Results: across settings...
     - $\uparrow$ mean experienced growth $\Rightarrow$ $\downarrow$ risk aversion
     - $\uparrow$ variance experienced growth $\Rightarrow$ $\uparrow$ risk aversion

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     - Highly robust to controls, alternate specifications
     - $\uparrow$ risk aversion correlates with $\downarrow$ investment, migration, smoking

MODEL

Risk Preference Adaptation Model

- Each period EU maximizer chooses **foreground risk** from menu of lotteries
- + Exogenous, unavoidable, statistically-independent **background risk**
- Bayesian agent learns from experience about parameters of **background risk**

$$\underbrace{v_t(w, \tilde{x}_t)}_{\text{foreground utility}} = \mathbb{E}_{\tilde{y}} \underbrace{u(w, \tilde{x}_t, \tilde{y}_t | B_t(y))}_{\text{background utility}}$$

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- Goal: how does foreground risk aversion $r_t(w)$ change with experiences of $\tilde{y}_t$?

Some Additional Structure

1. Background risk dynamic: additive, income
2. Perceived DGP: stationary, Gaussian, unknown mean *and* variance

$$\underbrace{v_t(w, \tilde{\boldsymbol{x}}_t)}_{\text{foreground utility}} = \mathbb{E}_{\tilde{\boldsymbol{y}}} \underbrace{u(w + \tilde{\boldsymbol{x}}_t + \tilde{\boldsymbol{y}}_t | \mathcal{N}(M, \Sigma^2))}_{\text{background utility}}$$

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- \+ Key behavioral assumption: u is risk vulnerable (Gollier and Pratt (1996))
- $\Rightarrow$ **Foreground risk** & **background risk** are substitutes

MAIN THEORETICAL RESULT

Proposition

Let A, B be positive constants. Then, in the long-run, $\forall w$

$$r_2(w) - r_1(w) \approx -A(\bar{y}_2 - \bar{y}_1) + B(s_2^2 - s_1^2).$$

Predictions: foreground absolute risk aversion...

1. $\downarrow$ in experienced lifetime mean of **background risk**
2. $\uparrow$ in experienced lifetime variance of **background risk**
3. Moment effects are additive

EMPIRICS

IFLS

- Born after 1961
- In IFLS4 (’07-’08) & IFLS5 (’14)

MXFLS

- Born after 1925
- In MXFLS2 (’05-’06) & MXFLS3 (’09-’12)

Macro Data

- BPS + World Bank
- INEGI + German-Soto (2005)

Risk Aversion Measures

- Hypothetical, high-stakes choices between sure income, 50-50 gamble
- Staircase design
- Construct ordinal measure of risk aversion R_{it}

Identification advantages:

1. Odds & payoffs known $\Rightarrow$ foreground beliefs fixed
2. Lotteries exogenous to own history

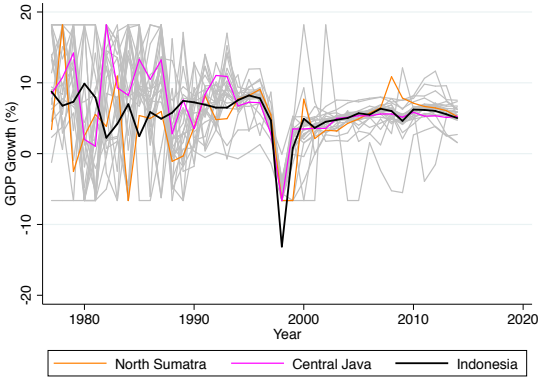
GROWTH EXPERIENCE VARIABLES

1. Construct annual real GDP growth time series by state
2. Assign subjects to growth time series from birth to measurement
   - Ex: born in 1992 in West Java
   - IFLS4: WJ time series 1992–2007
   - IFLS5: WJ time series 1992–2014
3. Calculate ΔMean, ΔStd. Dev. of lifetime real GDP growth

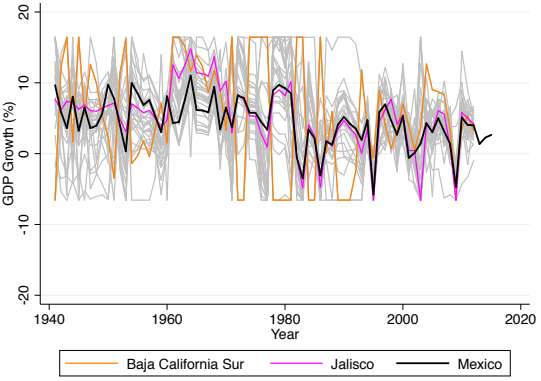
Identification advantages:

1. Estimate within-person, long-run changes
2. Multiple sources of variation: country, sub-national, cohort

Indonesia



Mexico



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EMPIRICAL SPECIFICATION

$$\Delta R_{it} = \alpha + \beta_1 \Delta A_{it} + \beta_2 \Delta V_{it} + \gamma \mathit{Inflation}_p + \epsilon_{it},$$

Where

- R_{it}: Measured risk aversion for subject i, year t
- A_{it}, V_{it}: mean & std. dev of real GDP growth for subject i, birth to year t
- $\mathit{Inflation}_p$: Sub-national inflation between waves
- ϵ_{it}: Clustered at state-of-birth by birth-year level

IDENTIFICATION CHALLENGES AND SOLUTIONS

Gamble averse: share of sample (esp. Indonesia) rejects FOSD lotteries

- Misunderstanding, religiosity, or high risk aversion (Gneezy et al. (2006))
- Cut sample w/diagnostics (second risk task, cognitive ability, attention check)

Change in risk aversion instrument across waves in Mexico

- Collapse bins to ensure symmetry + conduct structural estimation

Endogenous migration

- Use macro conditions in state of birth
- Repeat analysis for sample who migrated out of state of birth when < 17

Real GDP growth as measure of background risk

- Show GDP changes closely correlate with changes in living standards
- Results stronger for subjects employed in more procyclical industries

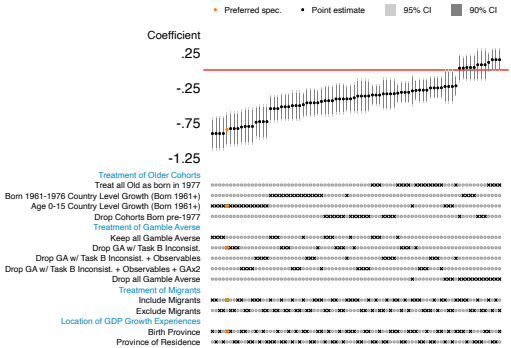
Main Results

Dep. Var: Δ Meas. Risk Av.	(1)	(2)	(3)
Indonesia			
Δ Growth Mean	-0.23***		-0.85***
	(0.06)		(0.12)
Δ Growth Std. Dev.		-0.01	0.45***
		(0.04)	(0.08)
Observations	11636	11636	11636
Mexico			
Δ Growth Mean	-1.04***		-0.86***
	(0.20)		(0.20)
Δ Growth Std. Dev.		2.02***	1.61***
		(0.41)	(0.42)
Observations	10224	10224	10224

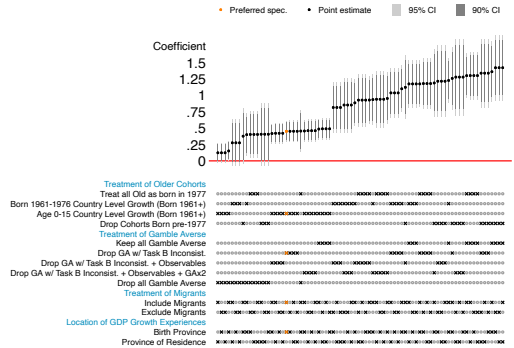
Notes: Measured Risk Aversion: 1–5 (Indonesia and Mexico), with 5 being the highest measured risk aversion. *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Clustered standard errors in parentheses.

ROBUSTNESS – INDONESIA

Mean coefficient

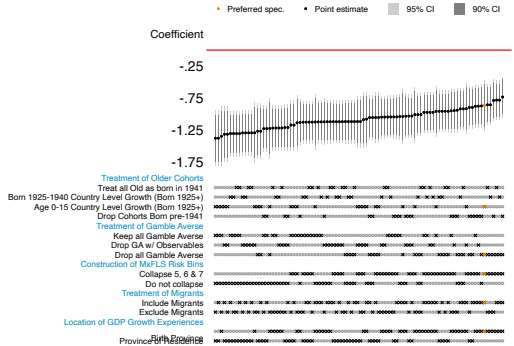


SD coefficient

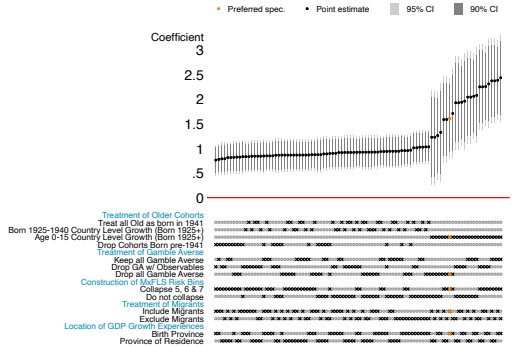


ROBUSTNESS – MEXICO

Mean coefficient



SD coefficient

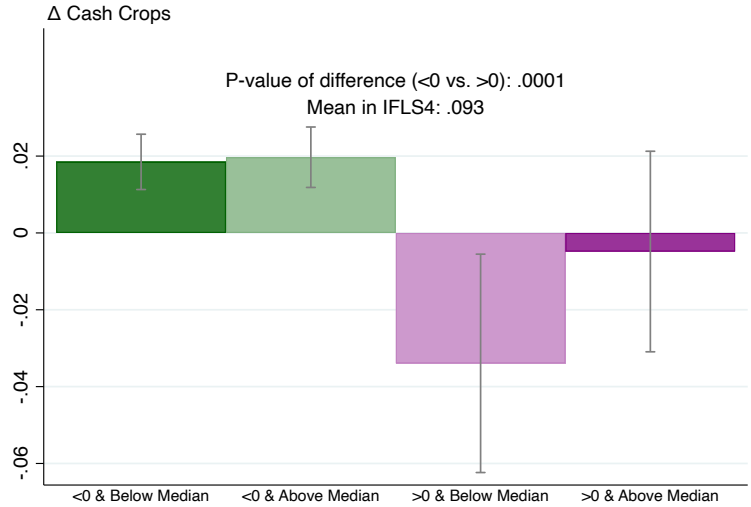


Additional Analyses

1. Add controls >
   - Δ Demographics, Δ income, Δ assets, Δ savings, Δ (self reported + admin) violence, Δ natural disasters
   - Results stable

Additional Analyses

1. Add controls >
   - Δ Demographics, Δ income, Δ assets, Δ savings, Δ (self reported + admin) violence, Δ natural disasters
   - Results stable
2. Correlations between $\widehat{\Delta R_{it}}$ and Δ risky behaviors >
   - $\uparrow \widehat{\Delta R_{it}} \Leftrightarrow \downarrow$ smoking (Mexico)
   - $\uparrow \widehat{\Delta R_{it}} \Leftrightarrow \downarrow$ migration (Mexico)
   - No correlation with Δ self-employment
   - $\uparrow \widehat{\Delta R_{it}} \Leftrightarrow \downarrow$ **cash crop planting (Indonesia)**


Δ Cash Crops
P-value of difference (<0 vs. >0): .0001
Mean in IFLS4: .093
.02
0
-.02
-.04
-.06
<0 & Below Median
<0 & Above Median
>0 & Below Median
>0 & Above Median

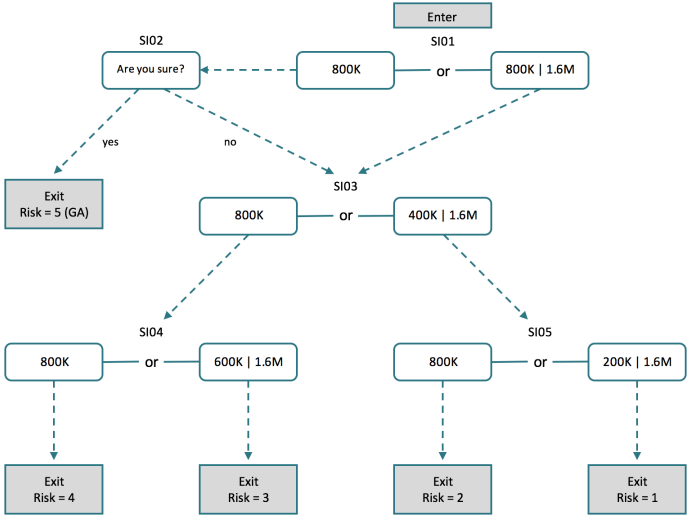
CONCLUSIONS

Conclusions

- Experiences of macro volatility are first-order drivers of Δ risk attitudes
- Implication: asymmetry in marginal effects of recessions and booms
  - | Effect of large negative shock | $>$ | effect of large positive shock |
- Could explain why we see “Depression Babies,” not “Post-War Boom Babies”

APPENDIX

RISK INSTRUMENT – IFLS4/5



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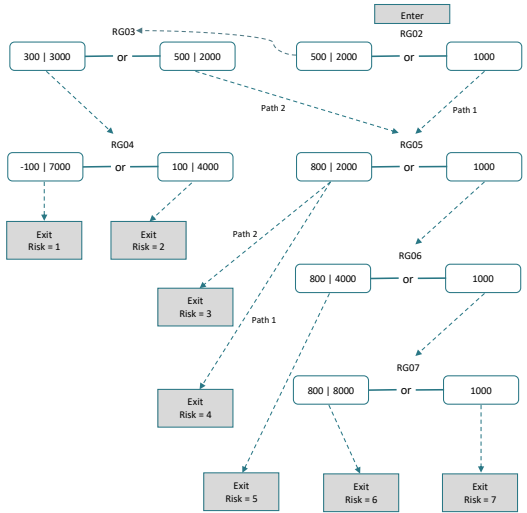
RISK INSTRUMENT – MXFLS2



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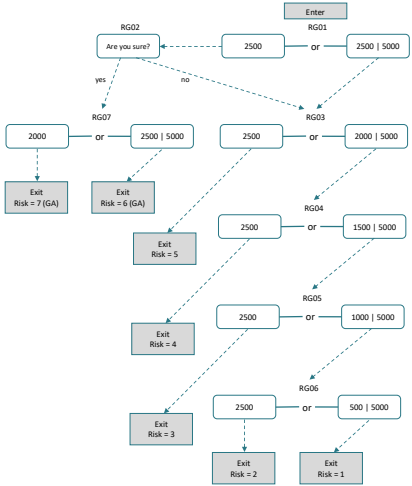
RISK INSTRUMENT – MXFLS3



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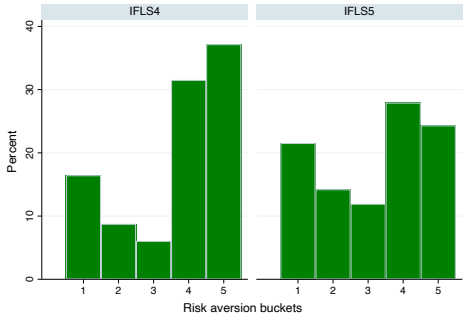
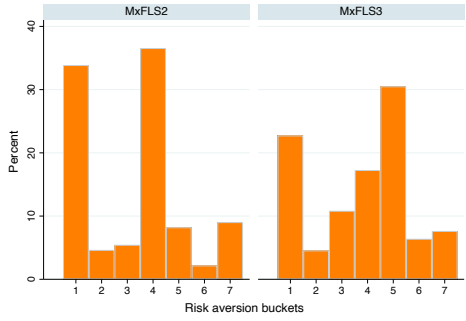
HISTOGRAMS OF MEASURED RISK AVERSION

Indonesia



Mexico



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CORRELATES OF RISK AVERSION MEASURES

Dep. Var:	Indonesia Measured Risk Aversion	Mexico Measured Risk Aversion
Self-employed	-0.11***	0.03
	(0.03)	(0.04)
Ever migrated	-0.12***	0.0003
	(0.03)	(0.04)
Income	1.75e-06***	6.19e-08**
	(4.67e-07)	(2.47e-08)
Assets	-0.0002***	2.33e-08***
	(0.0001)	(6.18e-09)
Yearly savings	0.0003	1.72e-07
	(0.0003)	(3.08e-07)
Yearly borrowing	-0.002***	-2.75e-07
	(0.001)	(2.68e-07)
Consumption	-0.00001	-2.44e-07
	(0.00004)	(3.09e-07)
Currently smoke	0.03	-0.20***
	(0.04)	(0.06)
Cigarettes/day	-0.001	0.002*
	(0.003)	(0.001)
Woman	0.31***	0.02
	(0.03)	(0.03)
Age	-0.02*	-0.02***
	(0.01)	(0.01)
Age^2	0.0003*	0.0002***
	(0.0002)	(0.0001)
Observations	17,158	10,608

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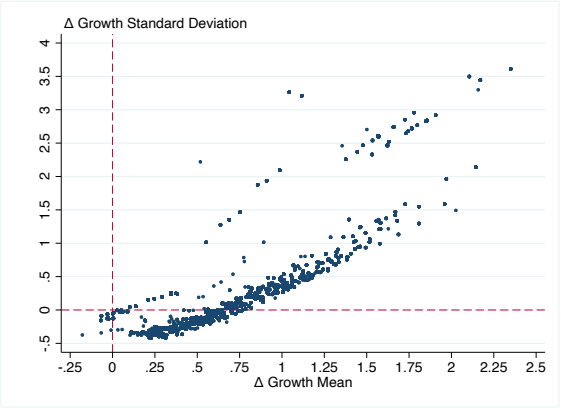
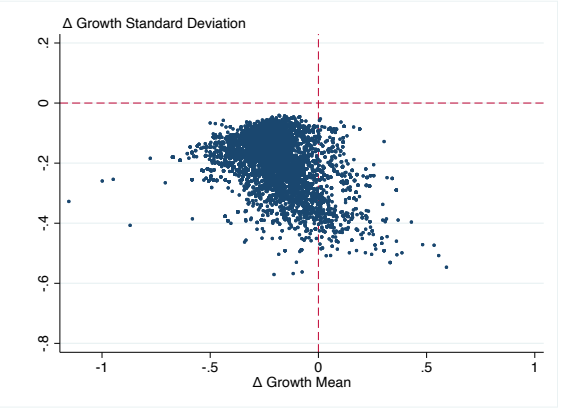
Indonesia



Mexico



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Summary Statistics and Risk Transition Matrix in IFLS

	Never GA	Once GA	Twice GA
Avg. age	39.02	40.86	42.51
Prop. female	0.51	0.59	0.63
Prop. Muslim	0.89	0.9	0.91
Raven's score	5.25	4.76	4.44
Prop. with comp. elementary	0.32	0.44	0.54
Prop. with comp. middle school	0.18	0.19	0.19
Prop with comp. high school	0.32	0.26	0.20
Prop. with above high school	0.17	0.10	0.07
Avg. income/month	12.28	8.10	4.77

	Risk Aversion Bucket in IFLS5					
Risk Aversion Bucket in IFLS4	1	2	3	4	5(GA)	Total
1	26.04%	11.75%	9.44%	23.62%	29.15%	100%
2	23.44%	13.90%	10.77%	25.69%	26.20%	100%
3	20.91%	16.06%	14.33%	25.43%	23.28%	100%
4	18.66%	12.54%	11.62%	28.59%	28.59%	100%
5(GA)	18.22%	12.31%	9.99%	24.24%	35.23%	100%
Total	20.11%	12.62%	10.68%	25.60%	30.99%	

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Structural Estimation

- Repeat main results using structurally estimated measure of risk aversion
- Use CRRA to find risk aversion range consistent with agents' lottery choices
- To find risk aversion range, add gamble amounts to:
  - Per-person household income (broad bracketing)
  - Zero (narrow bracketing)
- To calculate magnitude of within-person change in risk aversion range:
  - Use mid-interval approach (with added sophistication for end buckets)
  - Hausdorff metric + Normal CDF with mean/std. dev of mid-interval measure
- Results are consistent with baseline >

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RESULTS W/STRUCTURALLY ESTIMATED RISK AVERSION PARAMETER

Dep. Var: Δ Struct. Risk Av.	Mid-Interval Approach		Hausdorff Metric + C.D.F Approach	
	Broad br.	Narrow br.	Broad br.	Narrow br.
Indonesia				
Δ Growth Mean	-0.04*	-0.79***	-0.15***	-0.24***
	(0.02)	(0.13)	(0.03)	(0.04)
Δ Growth Volatility	0.02	0.43***	0.07***	0.13***
	(0.01)	(0.08)	(0.02)	(0.02)
N	11458	11636	11458	11636
Mexico				
Δ Growth Mean	-1.30***	-1.16***	-0.27***	-0.26***
	(0.27)	(0.25)	(0.06)	(0.07)
Δ Growth Volatility	2.17***	1.87***	0.53***	0.59***
	(0.58)	(0.51)	(0.13)	(0.13)
N	9811	10224	9811	10224

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LIMITING TO INDIVIDUALS WHO MIGRATED WHEN YOUNG AND USING STATE OF RESIDENCE TO BUILD MACROECONOMIC EXPERIENCES

Dep. Var: Δ Meas. Risk Av.	(1)	(2)	(3)
Indonesia			
Δ Growth Mean	-0.37***		-0.76**
	(0.14)		(0.29)
Δ Growth Volatility		-0.14	0.27
		(0.09)	(0.19)
Observations	1197	1197	1197
Mexico			
Δ Growth Mean	-1.17**		-0.82
	(0.57)		(0.59)
Δ Growth Volatility		3.82***	3.44***
		(1.08)	(1.12)
Observations	1025	1025	1025

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Relationship of changes in state-level real GDP growth to changes in measured living standard

- Regress change in income/poverty measures in our data + Mexican censuses on state-level average annual GDP growth
- Include time & state FE, and controls: Δ average age, prop. women, population

	Δ Log HH Income	Δ Unemployed	Δ Poverty	Δ Hunger	Δ Share w/ Earth Floor
Indonesia					
Average Annual Real GDP Growth	0.07***	0.0003	-0.03***	-0.03***	
	(0.02)	(0.001)	(0.01)	(0.01)	
Observations	9,261	9,430	9,426	9,426	
Level of analysis	Individual	Individual	Individual	Individual	
Data source	IFLS	IFLS	IFLS	IFLS	
Mexico					
Average Annual Real GDP Growth	0.002	-0.005***			-.004***
	(0.02)	(0.002)			(.001)
Observations	6,521	9,587			64
Level of analysis	Individual	Individual	Individual	Individual	State-by-year
Data source	MxFLS	MxFLS	MxFLS	MxFLS	Mexican census (1990, 2000, 2010)

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HETEROGENEITY OF RESULTS BY SECTOR OF EMPLOYMENT

- Repeat baseline analysis with interactions between growth variables and industry of employment
- Consider nine industries harmonized across the two countries
- Literature ranks these sectors according to cyclicality in dev countries:
  - Most procyclical: Agriculture, mining, finance, social services
  - Medium procyclical: Manufacturing, construction, utilities
  - Least procyclical: Wholesale and retail, transportation
- Results bear out that effects are strongest for agents employed in most procyclical sectors Indonesia Mexico

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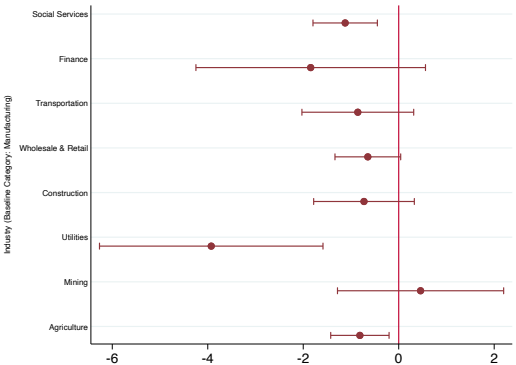
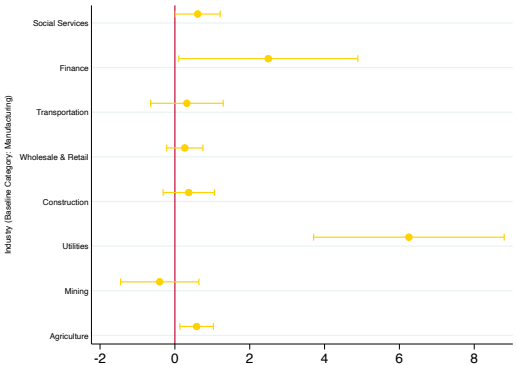
HETEROGENEITY OF MAIN RESULTS BY SECTOR OF EMPLOYMENT

Indonesia

(a) Effect of mean growth by industry



(b) Effect of growth std. dev. by industry



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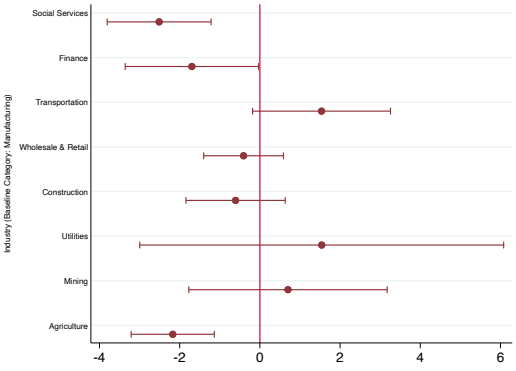
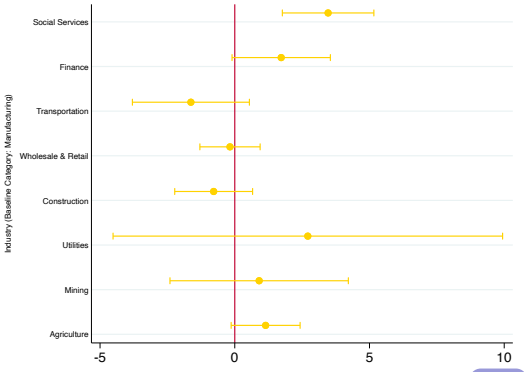
HETEROGENEITY OF MAIN RESULTS BY SECTOR OF EMPLOYMENT

Mexico

(a) Effect of mean growth by industry



(b) Effect of growth std. dev. by industry



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ALTERNATE SPECIFICATIONS

- Ordered probit >
- Binarized measure of risk aversion >
- Alternate clustering >
- Non-linear temporal weight of experiences a la Malmendier & Nagel (2011) >

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ORDERED PROBIT

Dep. Var: Δ Meas. Risk Av.	(1)	(2)	(3)
Indonesia			
Δ Growth Mean	-0.12*		-0.44*
	(0.03)		(0.06)
Δ Growth Volatility		-0.00	0.23*
		(0.02)	(0.04)
Observations	11636	11636	11636
Mexico			
Δ Growth Mean	-0.46***		-0.39***
	(0.09)		(0.09)
Δ Growth Volatility		0.87***	0.69***
		(0.18)	(0.18)
Observations	10224	10224	10224

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BINARIZED MEASURE OF RISK AVERSION

Dep. Var: Δ Binarized Meas. Risk Av.	(1)	(2)	(3)
Indonesia			
Δ Growth Mean	-0.05***		-0.22***
	(0.02)		(0.04)
Δ Growth Volatility		0.00	0.12***
		(0.01)	(0.02)
Observations	11636	11636	11636
Mexico			
Δ Growth Mean	-0.29***		-0.24***
	(0.06)		(0.06)
Δ Growth Volatility		0.58***	0.46***
		(0.12)	(0.13)
Observations	10224	10224	10224

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ALTERNATE CLUSTERING LEVELS

Dep. Var: Δ Meas. Risk Av.	(1)	(2)	(3)
Indonesia			
Δ Growth Mean	-0.85***	-0.85***	-0.85***
	(0.18)	(0.23)	(0.27)
Δ Growth Std. Dev.	0.45***	0.45***	0.45***
	(0.11)	(0.11)	(0.11)
Observations	11636	11636	11636
Cluster	5-year YOB bins by POB	10-year YOB bins by POB	15-year YOB bins by POB
Mexico			
Δ Growth Mean	-0.86***	-0.86***	-0.86**
	(0.25)	(0.29)	(0.34)
Δ Growth Std. Dev.	1.61***	1.61**	1.61**
	(0.56)	(0.65)	(0.70)
Observations	10224	10224	10224
Cluster	5-year YOB bins by POB	10-year YOB bins by POB	15-year YOB bins by POB

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NON-LINEAR TEMPORAL WEIGHTING

- Apply non-linear temporal weighting when constructing growth experience variables to allow for formative years/recency bias, etc
- Construct weighted mean and std. dev. of lifetime real GDP growth using weight function with single parameter λ:

$$w_{it}(s, \lambda) = \frac{(age_{it} - s)^{\lambda}}{\sum_{s=0}^{age_{it}} (age_{it} - s)^{\lambda}}.$$

- Weights are monotonic and add up to unity
- $\lambda = 0 \Rightarrow$ flat weighting; $\lambda > 0 \Rightarrow$ recency bias; $\lambda < 0 \Rightarrow$ early life bias Example
- Estimate effects of experiences jointly with λ using NLLS
- Results remain consistent and exhibit recency bias in both settings >

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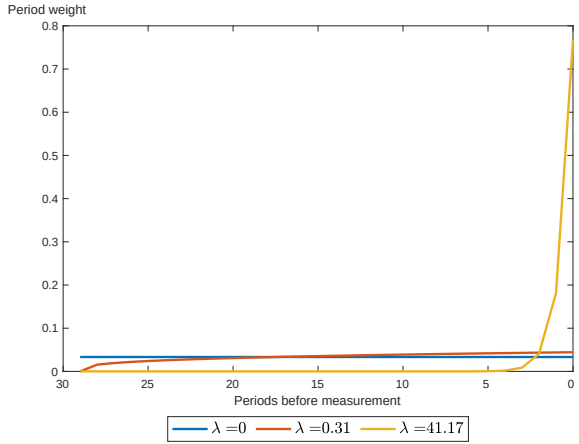
Relative weights placed on years of growth for an individual of age 30 at different levels of λ



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RESULTS WITH NON-LINEAR TEMPORAL λ WEIGHTING

Dep. Var: Δ Meas. Risk Av.	(1)	(2)	(3)
Indonesia			
Δ Growth Mean	-0.10***		-0.02
	(0.03)		(0.02)
Δ Growth Volatility		0.76***	0.72***
		(0.13)	(0.14)
λ	3.68***	43.00***	41.17***
	(0.56)	(5.41)	(5.51)
Observations	11633	11633	11633
Mexico			
Δ Growth Mean	-0.65***		-0.75***
	(0.18)		(0.18)
Δ Growth Volatility		0.99***	1.04***
		(0.29)	(0.28)
λ	0.30***	0.41***	0.31***
	(0.01)	(0.02)	(0.01)
N	10223	10223	10223

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Additional Controls

Dep. Var: Δ Meas. Risk Av.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Indonesia							
Δ Growth Mean	-0.85***	-0.89***	-0.89***	-0.89***	-0.89***	-0.88***	-0.89***
	(0.12)	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)
Δ Growth Std. Dev.	0.45***	0.47***	0.47***	0.47***	0.47***	0.46***	0.47***
	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)
Observations	11,636	11,282	11,281	11,281	11,281	11,281	11,281
Mexico							
Δ Growth Mean	-0.86***	-0.91***	-0.91***	-0.91***	-0.91***	-0.80***	-0.78***
	(0.20)	(0.20)	(0.20)	(0.20)	(0.20)	(0.21)	(0.21)
Δ Growth Std. Dev.	1.61***	1.69***	1.70***	1.69***	1.69***	1.87***	1.80***
	(0.42)	(0.43)	(0.43)	(0.43)	(0.43)	(0.44)	(0.44)
Observations	10,224	10,050	10,050	10,050	10,050	9,627	9,627
Inflation	X	X	X	X	X	X	X
Δ Demographics		X	X	X	X	X	X
Δ Income			X	X	X	X	X
Δ Assets				X	X	X	X
Δ Net yearly savings					X	X	X
Δ Violence						X	X
Δ Natural disasters							X

Notes: Demographics: marital status, household size, household size squared, and educational attainment. All monetary variables are at the household level and inflation-adjusted to local currency in the first wave of the survey (millions of rupiah of 2007 in Indonesia and pesos of 2005 in Mexico). Violence variables from self-reported exposure only for Indonesia, and self-reported exposure and municipal homicide rate built by Brown et al. (2017) for Mexico. Natural disasters variables from self-reported exposure in both settings. These results are for subjects in the primary sample, described in sec: primsample. Standard errors clustered at the cohort by state-of-birth level in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

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Details of Income, Assets, and Savings Effects + Additional Controls

Dep. Var: Δ Meas. Risk Av.	(1)	(2)	(3)	(4)	(5)	(6)
		Indonesia			Mexico	
Δ Growth Mean	-0.89***	-0.90***	-0.90***	-0.91***	-0.92***	-0.92***
	(0.13)	(0.13)	(0.13)	(0.20)	(0.20)	(0.20)
Δ Growth Std. Dev.	0.47***	0.47***	0.47***	1.69***	1.68***	1.67***
	(0.08)	(0.08)	(0.08)	(0.43)	(0.43)	(0.43)
Δ Income	4.56e-07			0.0001***		
	(1.24e-06)			(0.00002)		
Δ Non-transfer income		7.46e-07	7.60e-07		0.0001***	0.0001***
		(1.22e-06)	(1.22e-06)		(0.00003)	(0.00003)
Δ Transfer income		-0.0001**	-0.0001**		0.0008	0.0008
		(0.0001)	(0.0001)		(0.0005)	(0.0005)
Δ Assets	9.76e-06	6.59e-06	7.16e-06	0.00001	0.00001	0.00001
	(0.0001)	(0.0001)	(0.0001)	(9.08e-06)	(9.08e-06)	(9.08e-06)
Δ Net yearly savings	0.001*	0.001*	0.001*	0.00003	3.40e-06	-2.55e-06
	(0.0004)	(0.0004)	(0.0005)	(0.0002)	(0.0002)	(0.0002)
Δ Consumption			0.0001			0.0002***
			(0.0001)			(0.00006)
Observations	11,281	11,281	11,281	10,050	10,050	10,050
R-squared	0.0185	0.0191	0.0192	0.0081	0.0082	0.0084
Inflation	X	X	X	X	X	X
Δ Demographics	X	X	X	X	X	X

Notes: Demographics: marital status, household size, household size squared, and educational attainment. All monetary variables are at the household level and inflation-adjusted to local currency in the first wave of the survey (millions of rupiah of 2007 in Indonesia and pesos of 2005 in Mexico). These results are for subjects in the primary sample, described in sec: primsample. Standard errors clustered at the cohort by state-of-birth level in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

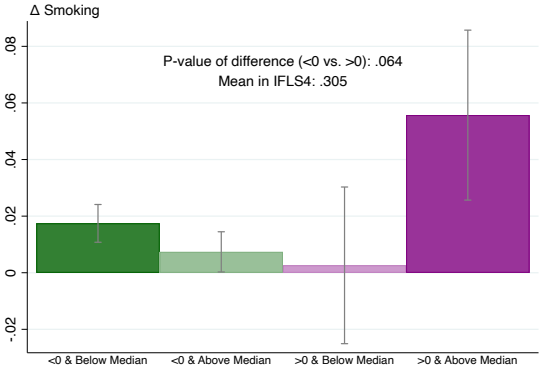
Correlation Between Macroeconomic Experiences and Wealth Controls

Dep. Var:	Δ Growth Mean		Δ Growth Std. Dev		Δ Growth Mean		Δ Growth Std. Dev	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Indonesia				Mexico			
Δ Non-transfer income	-1.25e-07	-1.31e-07	1.80e-07	1.73e-07	-3.02e-06	-3.06e-06	-2.04e-06	-2.04e-06
	(1.05e-07)	(1.05e-07)	(1.26e-07)	(1.26e-07)	(1.90e-06)	(1.91e-06)	(1.51e-06)	(1.51e-06)
Δ Transfer income	-0.00002	-7.94e-06	7.54e-07	7.77e-06	8.33e-06	7.71e-06	0.0001***	0.0001***
	(0.00001)	(0.00001)	(0.00001)	(0.00001)	(0.0001)	(0.0001)	(0.00002)	(0.00002)
Δ Assets	-0.00004**	-0.00004**	-0.00004	-0.00004	2.29e-07	2.15e-07	8.77e-07*	8.76e-07*
	(0.00002)	(0.00002)	(0.00003)	(0.00003)	(8.28e-07)	(8.26e-07)	(4.47e-07)	(4.47e-07)
Δ Net yearly savings	0.0003***	0.0003***	0.0003***	0.0004***	-0.00002	-0.00002	8.68e-06	8.66e-06
	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.00002)	(0.00002)	(8.58e-06)	(8.58e-06)
Δ Consumption		-0.00002*		-0.00002		0.00001		7.97e-07
		(0.00001)		(0.00002)		(7.78e-06)		(4.50e-06)
Observations	11,281	11,281	11,281	11,281	10,050	10,050	10,050	10,050
R-squared	0.1447	0.1451	0.1728	0.1730	0.0063	0.0065	0.0502	0.0502
Inflation	X	X	X	X	X	X	X	X
Δ Demographics	X	X	X	X	X	X	X	X

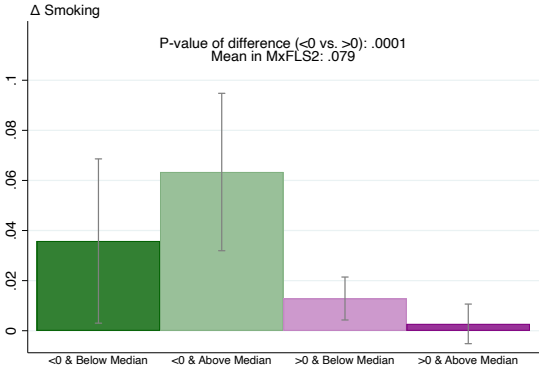
Notes: Demographics: marital status, household size, household size squared, and educational attainment. All monetary variables are at the household level and inflation-adjusted to local currency in the first wave of the survey (millions of rupiah of 2007 in Indonesia and pesos of 2005 in Mexico). These results are for subjects in the primary sample, described in sec: primsample. Standard errors clustered at the cohort by state-of-birth level in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

CORRELATIONS WITH BEHAVIOR – SMOKING

Indonesia



Mexico



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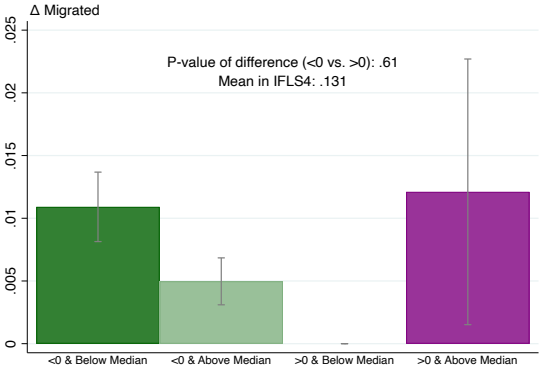
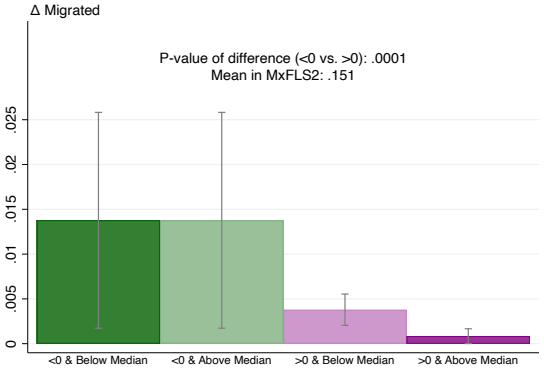
CORRELATIONS WITH BEHAVIOR – EVER MIGRATED

Indonesia



Mexico



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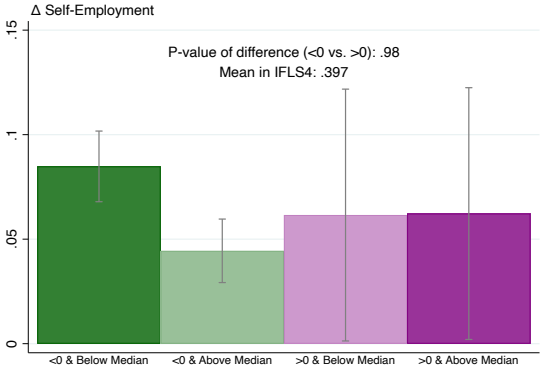
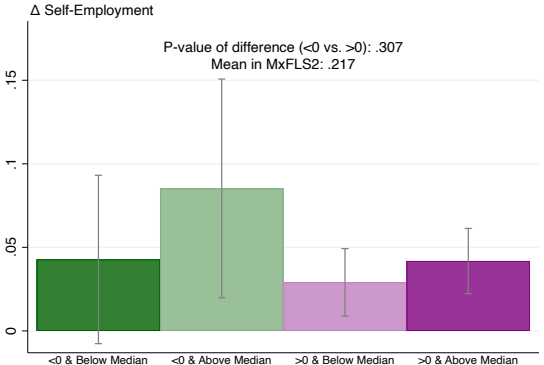
CORRELATIONS WITH BEHAVIOR – SELF-EMPLOYMENT

Indonesia



Mexico



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