Misplaced Childhood: When Depression Babies Grow Up As Central Bankers

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Introduction

"A former Bank of England informant said: You learn from the past. There is something else. Knowledge is made up of training and experience. For example, I often used to divide the members of the Monetary Policy Committee over whether they had been involved in some of the great policy disasters of the United Kingdom. If you had been involved in those policy disasters you had a very different take on life. (12 March 2002)". [from Pixley (2004)]

Where do central bankers' preferences come from?

Are they innate, directly inherited, or acquired by some more oblique transmission channels?

What are the consequences of acquired / formed preferences on policy?

Introduction

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Our aims:

- Theory: Assessing the impact of "bad" early experiences on central bankers' preferences

- Empirics: Estimating this impact on a panel of central bankers

3 background literatures:

(1) Evidence on early-life formation of preferences

Dohmen et al. (2011): parents transfer risk-attitudes to children;

Emmeneger et al. (2017): early-life experiences “scar” people;

Malmendier & Nagel (2011): “depression babies” have lower willingness to take financial risk, and are more pessimistic about future stock returns;

Giuliano and Spilimbergo (2013): for those who experienced a recession when young, success in life depends more on luck than effort, support more government redistribution, and tend to vote for left-wing parties.

3 background literatures:

(1) Evidence on early-life formation of preferences

What happens when 'depression babies' grow-up as policy-makers? Are they more risk-averse? More recession-averse?

Malmendier et al. (2017) show impact on inflation aversion for FOMC members: their speeches are more "dovish".

3 background literatures:
(2) Evidence on leadership effects

(Starting from the literature in Management studies)

Besley et al. (2011), Hayo and Neumeier (2012), ...:
leaders impact on LR economic growth

Chappell et al. (2005), Eichler and Lahner (2013), ...:
true for FOMC members

Gohlmann and Vaubel (2007), Farvaque et al. (2011, 2014), Lebaron and Dogan (2016):
verified for central bankers in general

If leaders matter, their experiences should matter too!

3 background literatures:
(3) Theory on formation of preferences

1. Preferences are transmitted, “vertically” or “obliquely”:
   in the line of Bisin & Verdier (2001, 2010)
   => parents, or role-models, matter

2. Preferences are built through personal experience(s):
   defining impact of the first years:
   experience brings prudence (Kimball, 1990),
   a higher-order risk attitude (Noussair et al., 2014)

In our context: recession aversion emerges from bad experiences, as a form of downside risk-aversion (Crainich and Eeckhoudt, 2008)

Background literatures:
Summarizing

1. Leaders matter,
2. Their experience matters, (in)forms preferences,
3. Bad experience brings recession-aversion.

This gives (microeconomic and behavioral) foundations to asymmetric loss functions for central bankers, à la Cukierman and Muscatelli (2008), Gerlach (2003) or Geraats (2006).

Here: use of the functional form proposed by Surico (2008).

Model

Assumptions

The economy:

- Phillips curve: $y_t = \theta\left(\pi_t - \pi_t^e\right) + u_t$,
- REH: $\pi_t^e = E_{t-1}\pi_t$,
- IS curve: $y_t^d = \phi\left(i_t - \pi_t\right) + v_t$,
- Benchmark loss function: $L_t = \frac{1}{2}\left[\left(\pi_t - \pi^*\right)^2 + \lambda y_t^2\right]$.

Model

Assumptions

The recession-averse central banker:

$$L_t^A = \frac{1}{2}\left[(\pi_t - \pi^*)^2 + \lambda\left(\frac{exp\,(\gamma y_t) - \gamma y_t - 1}{\gamma^2}\right)\right]$$

γ <0: asymmetric preference on output stabilization (recession-aversion)

In fact: $\gamma = \gamma(\varpi)$, i.e., a function of policy-maker's (endowment of) past experience

Model

Assumptions

The committee decision-making rule (proxied):

$$i_t^C = \alpha i_t + (1 - \alpha)\, i_t^A$$

$(1 - \alpha)$: relative power of the recession-averse policy-maker inside the committee

= either a Chairman dominance effect à la Riboni & Ruge-Murcia (2010), or results from bargaining or voting rules inside the committee (Hayo & Méon, 2013; Farvaque et al., 2009).

Model
Results

Substituting delivers:

$$i_t^C = \pi^* - \frac{1}{\phi} v_t + \left[\alpha \left(\frac{1 - \phi\theta\lambda}{\phi\left(1 + \theta^2\lambda\right)} \right) + (1-\alpha)\frac{1}{\phi} \right] u_t - (1-\alpha)\theta\lambda\gamma \left(\frac{\phi + \theta}{2\phi} \right) \sigma_y^2$$

And:

$$\frac{\partial i_t^C}{\partial (1-\alpha)} = \left(\frac{\theta\lambda(\phi+\theta)}{\phi\left(1+\theta^2\lambda\right)} \right) u_t - \theta\lambda\gamma \left(\frac{\phi+\theta}{2\phi} \right) \sigma_y^2,$$

$$\frac{\partial i_t^C}{\partial \gamma} = -(1-\alpha)\theta\lambda \left(\frac{\phi+\theta}{2\phi} \right) \sigma_y^2,$$

$$\frac{\partial^2 i_t^C}{\partial (1-\alpha)\partial\gamma} = -\theta\lambda \left(\frac{\phi+\theta}{2\phi} \right) \sigma_y^2.$$

As $\gamma < 0$, sign of first derivative is positive, sign of the last two is negative.

Model

Results

$$\frac{\partial i_t^C}{\partial (1-\alpha)} = \left(\frac{\theta\lambda(\phi+\theta)}{\phi(1+\theta^2\lambda)}\right) u_t - \theta\lambda\gamma\left(\frac{\phi+\theta}{2\phi}\right)\sigma_y^2,$$

$$\frac{\partial i_t^C}{\partial \gamma} = -(1-\alpha)\theta\lambda\left(\frac{\phi+\theta}{2\phi}\right)\sigma_y^2,$$

$$\frac{\partial^2 i_t^C}{\partial (1-\alpha)\partial\gamma} = -\theta\lambda\left(\frac{\phi+\theta}{2\phi}\right)\sigma_y^2.$$

As $\gamma < 0$, sign of first derivative is positive, sign of the last two is negative.

⇒ relative power of recession averse decision-maker has positive impact on interest rate rule (reflects chairmen agenda-setting power).

⇒ Chairman's recession aversion has a negative impact on interest rate, and stronger influence than his relative power.

⇒ *the more recession-averse policy-maker, and the larger his influence in the committee, the smaller the interest rate, ceteris paribus.*

Empirics
Data & Method

9 central banks
(AUS, CAN, ECB, JPN, NZL, SWE, SWI, UK, USA)
Period: 1999Q1 − 2015Q4

Monetary policy decisions as discrete-choices:
From at least Eichengreen et al. (1985, for BoE), to
Nojković & Petrović (2015, multi-country).

Advantage over ”standard” (e.g. Taylor-type) modeling:
allows for different determinants of cuts and hikes.

Here: Multinomial logit

Empirics

Descriptive Stats.

Table 1: Descriptive Statistics - Policy rates

	Overall period (1999-2015)			Period 2008-2015		
	No change	Hike	Cut	No change	Hike	Cut
Australia (AUS)	52.94%	25%	22.06%	50%	15.63%	34.38%
Canada (CAN)	50%	23.53%	26.47%	71.88%	6.25%	21.88%
Euro Area (ECB)	54.41%	22.06%	23.53%	62.50%	9.38%	28.13%
Japan (JPN)	92.65%	2.94%	4.41%	96.88%	0.00%	3.13%
New Zealand (NZL)	50%	29.41%	20.59%	59.38%	15.63%	25%
Sweden (SWE)	38.24%	29.41%	32.35%	37.50%	21.88%	40.63%
Switzerland (SWI)	63.24%	19.12%	17.65%	84.38%	0.00%	15.63%
United Kingdom (UK)	61.76%	17.65%	20.59%	87.50%	0.00%	12.50%
United States (USA)	63.24%	20.59%	16.18%	87.50%	3.13%	9.38%
Whole Sample	58.50%	21.08%	20.42%	70.83%	7.99%	21.18%

Empirics

Descriptive Stats.

Table 2: Central banker turnovers

Country	Turnover	Central Bankers	Number of years
Australia (AUS)	2	Macfarlane	7.75
		Stevens	9.25
Canada (CAN)	4	Carney	5.5
		Dodge	7
		Poloz	2.5
		Thiessen	2
Euro Area (ECB)	3	Draghi	4.25
		Duisenberg	4.75
		Trichet	8
Japan (JPN)	4	Fukui	5.5
		Hayami	4.25
		Kuroda	2.75
		Shirakama	4.5
New Zealand (NZL)	3	Bollard	10.5
		Brash	3.25
		Wheeler	3.25
Sweden (SWE)	3	Böckström	4
		Heikenstein	3
		Ingves	10
Switzerland (SWI)	4	Hildebrand	2
		Jordan	3.75
		Meyer	2
		Roth	9
United Kingdom (UK)	3	Carney	2.5
		George	4.5
		King	10
United States (USA)	3	Bernanke	8
		Greenspan	7
		Yellen	2

Empirics
Descriptive Stats.

Table 3: Descriptive Statistics - Recessions, chairpersons and committees

Variable	Obs	Mean	Std. Dev.	Min	Max
Number of continuous recession's years of the Chairman	612	4.655	2.73	0	11
Number of maximum successive recession's years of the Chairman	612	1.851	1.018	0	5
Minimum value of the GDP per capita growth of the Chairman	612	-9.77	13.923	-49.374	1.309
Number of continuous recession years of the Chairman superior to 4 years	612	.382	.486	0	1
Chairman from academia dummy	612	.109	.312	0	1
Insider Chairman dummy	612	.425	.495	0	1
Committee age gap	543	3.694	8.013	-14.167	23.111
Committee professional heterogeneity	612	.365	.252	.097	1
Chairman born before World War II	612	.194	.396	0	1

Empirics
Results

1. Baseline
2. Marginal effects
3. Robustness checks:
    - without GFC
    - without Japan
    - with Country Fixed Effects
4. Placebo tests
5. Robustness checks of placebo tests:
    - without GFC
    - without Japan
6. Considering all variables (of interest and placebo) together

Empirics

Baseline Results

	Model 1		Model 2		Model 3		Model 4		Model 5	
Variables	Hike	Cut	Hike	Cut	Hike	Cut	Hike	Cut	Hike	Cut
GDP growth rate	0.682***	-0.120*	0.661***	-0.0824	0.657***	-0.151**	0.668***	-0.144**	0.667***	-0.156**
	(0.0919)	(0.0637)	(0.0920)	(0.0631)	(0.0925)	(0.0655)	(0.0926)	(0.0648)	(0.0923)	(0.0657)
Inflation rate (variation)	0.377***	-0.0451	0.425***	-0.0465	0.379***	-0.0407	0.377***	-0.0368	0.375***	-0.0418
	(0.0960)	(0.0716)	(0.0985)	(0.0732)	(0.0960)	(0.0719)	(0.0959)	(0.0718)	(0.0958)	(0.0727)
Global Financial Crisis	0.0110	0.560	0.0216	0.673*	0.0382	0.548	0.0427	0.588	0.0168	0.573
	(0.563)	(0.357)	(0.559)	(0.351)	(0.562)	(0.361)	(0.563)	(0.362)	(0.563)	(0.361)
Inflation targeting dummy	0.206	0.745***			0.279	0.809***	0.245	0.824***	0.336	1.027***
	(0.237)	(0.228)			(0.243)	(0.232)	(0.240)	(0.232)	(0.269)	(0.249)
Inflation target met dummy			0.945***	0.280						
			(0.321)	(0.377)						
Number of continuous recession's years of the Chairman					0.0742*	0.0993**				
					(0.0421)	(0.0418)				
Number of continuous recession years of the Chairman superior to 4 years							0.282	0.608***		
							(0.235)	(0.226)		
Number of maximum successive recession's years of the Chairman									0.146	0.382***
									(0.120)	(0.117)
Constant	-3.144***	-1.402***	-3.117***	-1.067***	-3.481***	-1.844***	-3.241***	-1.646***	-3.456***	-2.226***
	(0.329)	(0.213)	(0.317)	(0.178)	(0.389)	(0.291)	(0.340)	(0.237)	(0.435)	(0.345)
Log-likelihood	148.65	148.65	146.03	146.03	155.95	155.95	156.28	156.28	159.40	159.40
Pseudo R-sq	12.57	12.57	12.35	12.35	13.19	13.19	13.21	13.21	13.48	13.48
Observations	612	612	612	612	612	612	612	612	612	612

Empirics

Baseline Results

	Hike	Cut	Hike	Cut	Hike	Cut	Hike	Cut	Hike	Cut
GDP growth rate	0.679***	-0.127**	0.655***	-0.182***	0.687***	-0.137**	0.688***	-0.156**	0.716***	-0.123*
	(0.0921)	(0.0644)	(0.0926)	(0.0678)	(0.0936)	(0.0647)	(0.0947)	(0.0657)	(0.106)	(0.0729)
Inflation rate (variation)	0.380***	-0.0327	0.378***	-0.0173	0.376***	-0.0536	0.380***	-0.0454	0.389***	-0.0545
	(0.0960)	(0.0725)	(0.0957)	(0.0747)	(0.0958)	(0.0729)	(0.0958)	(0.0732)	(0.112)	(0.0828)
Global Financial Crisis	-0.0142	0.485	-0.0327	0.422	0.00790	0.674*	-0.0449	0.607*	0.314	0.642
	(0.565)	(0.360)	(0.564)	(0.369)	(0.566)	(0.363)	(0.570)	(0.365)	(0.592)	(0.400)
Inflation targeting dummy	0.155	0.586**	0.279	0.808***	0.202	1.008***	0.320	1.065***	0.402	1.024***
	(0.267)	(0.244)	(0.284)	(0.258)	(0.259)	(0.256)	(0.270)	(0.257)	(0.291)	(0.265)
Minimum value of the GDP per capita growth of the Chairman	0.00471	0.0167*	0.00965	0.0309***						
	(0.0106)	(0.00949)	(0.0116)	(0.0114)						
Number of maximum successive recession's years of the Chairman			0.190	0.505***			0.300*	0.307**	0.0693	0.300**
			(0.128)	(0.125)			(0.181)	(0.156)	(0.139)	(0.127)
Chairman born before World War II					0.0123	0.817***	-0.531	0.289		
					(0.312)	(0.304)	(0.466)	(0.413)		
Chairman from academia dummy									0.206	-0.110
									(0.412)	(0.375)
Insider Chairman dummy									-0.305	-0.397
									(0.280)	(0.254)
Committee age gap									0.0232	-0.00139
									(0.0185)	(0.0161)
Committee professional heterogeneity									-0.00786	2.263**
									(1.086)	(0.987)
Constant	-3.058***	-1.135***	-3.375***	-1.979***	-3.156***	-1.711***	-3.700***	-2.171***	-3.505***	-2.593***
	(0.382)	(0.254)	(0.449)	(0.346)	(0.338)	(0.251)	(0.494)	(0.349)	(0.529)	(0.457)
Log-likelihood	152.07	152.07	168.60	168.60	155.95	155.95	161.61	161.61	152.78	152.79
Pseudo R-sq	12.86	12.86	14.26	14.26	13.19	13.19	13.36	13.36	14.72	14.72
Observations	612	612	612	612	612	612	612	612	543	543

Empirics
Baseline Results − Marginal Effects

	Model 1			Model 2			Model 3			Model 4			Model 5		
Variables	Status quo	Hike	Cut	Status quo	Hike	Cut	Status quo	Hike	Cut	Status quo	Hike	Cut	Status quo	Hike	Cut
Probability of the status quo	0.301			0.289			0.312			0.308			0.318		
GDP growth rate		1.977***	0.887*		1.936***	0.920		1.929***	0.860**		1.950***	0.865**		1.948***	0.855**
		(0.182)	(0.056)		(0.178)	(0.058)		(0.178)	(0.056)		(0.180)	(0.056)		(0.180)	(0.056)
Inflation rate (variation)		1.458***	0.0956		1.530***	0.954		1.460***	0.960		1.458***	0.964		1.454***	0.959
		(0.140)	(0.068)		(0.150)	(0.070)		(0.140)	(0.068)		(0.140)	(0.069)		(0.139)	(0.070)
Global Financial Crisis		1.011	1.750		1.021	1.960*		1.039	1.729		1.043	1.800		1.017	1.773
		(0.569)	(0.624)		(0.571)	(0.688)		(0.584)	(0.624)		(0.587)	(0.651)		(0.572)	(0.640)
Inflation targeting dummy		1.228	2.106***					1.077	2.245***		1.277	2.279***		1.399	2.791***
		(0.290)	(0.481)					(0.045)	(0.521)		(0.306)	(0.530)		(0.376)	(0.695)
Inflation target met dummy					2.571***	1.323									
					(0.825)	(0.061)									
Number of continuous recession's years of the Chairman								1.077*	1.104**						
								(0.045)	(0.046)						
Number of continuous recession years of the Chairman superior to 4 years											1.325	1.837***			
											(0.311)	(0.192)			
Number of maximum successive recession's years of the Chairman														1.157	1.465***
														(0.139)	(0.171)
Constant		0.043***	0.246***		0.044***	0.344***		0.030***	0.158***		0.039***	0.192***		0.031***	0.107***
		(0.014)	(0.052)		(0.317)	(0.178)		(0.011)	(0.046)		(0.013)	(0.045)		(0.013)	(0.037)
Log-likelihood		148.65	148.65		146.03	146.03		155.95	155.95		156.28	156.28		159.40	159.40
Pseudo R-sq		12.57	12.57		12.35	12.35		13.19	13.19		13.21	13.21		13.48	13.48
Observations		612	612		612	612		612	612		612	612		612	612

Empirics
Baseline Results − Marginal Effects

Probability of the status quo	0.292		0.314		0.309		0.318		0.322	
GDP growth rate	1.971***	0.881**	1.925***	0.833***	1.987***	0.872**	1.990***	0.855**	2.045***	0.884*
	(0.181)	(0.056)	(0.178)	(0.056)	(0.186)	(0.056)	(0.188)	(0.056)	(0.216)	(0.064)
Inflation rate (variation)	1.461***	0.968	1.460***	0.983	1.456***	0.948	1.462***	0.955	1.476***	0.947
	(0.140)	(0.070)	(0.140)	(0.073)	(0.139)	(0.069)	(0.140)	(0.070)	(0.165)	(0.078)
Global Financial Crisis	0.985	1.624	0.968	1.524	1.007	1.961*	0.956	1.835*	1.368	1.900
	(0.556)	(0.585)	(0.546)	(0.254)	(0.570)	(0.712)	(0.544)	(0.671)	(0.810)	(0.759)
Inflation targeting dummy	1.167	1.797**	1.321	2.242***	1.223	2.741***	1.377	2.901***	1.495	2.785***
	(0.312)	(0.438)	(0.375)	(0.579)	(0.317)	(0.701)	(0.371)	(0.744)	(0.435)	(0.737)
Minimum value of the GDP per	1.004	1.017*	1.009	1.031***						
capita growth of the Chairman	(0.010)	(0.009)	(0.012)	(0.011)						
Number of maximum successive			1.209	1.656***			1.350*	1.358**	1.071	1.350**
recession's years of the Chairman			(0.154)	(0.207)			(0.244)	(0.212)	(0.148)	(0.171)
Chairman born before					1.012	2.264***	0.588	1.335		
World War II					(0.316)	(0.689)	(0.274)	(0.550)		
Chairman from academia dummy									1.229	0.896
									(0.507)	(0.336)
Insider Chairman dummy									0.737	0.672
									(0.206)	(0.170)
Committee age gap									1.023	0.999
									(0.018)	(0.016)
Committee professional heterogeneity									0.992	9.609**
									(1.077)	(9.488)
Constant	0.047***	0.321***	0.034***	0.138***	0.042***	0.180***	0.025***	0.114***	0.030***	0.075***
	(0.017)	(0.254)	(0.015)	(0.346)	(0.014)	(0.045)	(0.012)	(0.040)	(0.016)	(0.034)
Log-likelihood	152.07	152.07	168.60	168.60	155.95	155.95	161.61	161.61	152.78	152.79
Pseudo R-sq	12.86	12.86	14.26	14.26	13.19	13.19	13.36	13.36	14.72	14.72
Observations	612	612	612	612	612	612	612	612	543	543

Empirics

Robustness checks: 1. Excluding GFC

	Model 1		Model 2		Model 3		Model 4		Model 5	
Variables	Hike	Cut	Hike	Cut	Hike	Cut	Hike	Cut	Hike	Cut
GDP growth rate	0.605***	-0.328***	0.609***	-0.167	0.615***	-0.324***	0.617***	-0.323***	0.599***	-0.371***
	(0.111)	(0.116)	(0.111)	(0.106)	(0.113)	(0.116)	(0.113)	(0.117)	(0.113)	(0.119)
Inflation rate (variation)	0.282**	-0.242*	0.307**	-0.239*	0.288**	-0.226*	0.290**	-0.215	0.284**	-0.232*
	(0.122)	(0.132)	(0.123)	(0.136)	(0.122)	(0.132)	(0.122)	(0.133)	(0.121)	(0.136)
Inflation targeting dummy	0.161	1.008***			0.136	1.101***	0.150	1.038***	0.190	1.614***
	(0.278)	(0.333)			(0.289)	(0.343)	(0.280)	(0.337)	(0.350)	(0.388)
Inflation target met dummy			0.345	-0.297						
			(0.400)	(0.566)						
Number of continuous recession's years of the Chairman					-0.0143	0.0742				
					(0.0479)	(0.0540)				
Number of continuous recession years of the Chairman superior to 4 years							-0.0894	0.657**		
							(0.271)	(0.301)		
Number of maximum successive recession's years of the Chairman									0.0268	0.480***
									(0.142)	(0.139)
Constant	-2.469***	-0.631**	-2.444***	-0.427	-2.409***	-1.109**	-2.458***	-1.017***	-2.519***	-1.905***
	(0.387)	(0.292)	(0.381)	(0.278)	(0.457)	(0.458)	(0.399)	(0.348)	(0.516)	(0.481)
Log-likelihood	76.84	76.84	68.54	68.54	79.22	79.22	82.67	82.67	89.69	89.69
Pseudo R-sq	10.79	10.79	9.62	9.62	11.12	11.12	11.61	11.61	12.60	12.60
Observations	342	342	342	342	342	342	342	342	342	342

	Model 6		Model 7		Model 8		Model 9		Model 10	
GDP growth rate	0.573***	-0.369***	0.554***	-0.420***	0.646***	-0.330***	0.619***	-0.372***	0.676***	-0.377***
	(0.112)	(0.119)	(0.113)	(0.121)	(0.114)	(0.117)	(0.115)	(0.120)	(0.135)	(0.135)
Inflation rate (variation)	0.269**	-0.254*	0.268**	-0.245*	0.302**	-0.242*	0.307**	-0.222	0.339**	-0.177
	(0.122)	(0.132)	(0.121)	(0.137)	(0.122)	(0.133)	(0.122)	(0.137)	(0.140)	(0.147)
Inflation targeting dummy	-0.385	0.394	-0.238	0.936**	-0.197	1.151***	0.151	1.454***	0.133	1.342***
	(0.348)	(0.397)	(0.387)	(0.436)	(0.320)	(0.389)	(0.358)	(0.392)	(0.404)	(0.440)
Minimum value of the GDP per capita growth of the Chairman	0.0332**	0.0328**	0.0332**	0.0427***						
	(0.0137)	(0.0129)	(0.0141)	(0.0151)						
Number of maximum successive recession's years of the Chairman			0.0992	0.552***			0.498**	0.791***	-0.116	0.645***
			(0.147)	(0.146)			(0.218)	(0.209)	(0.190)	(0.197)
Chairman born before World War II					-0.772**	0.277	-1.584***	-1.140**		
					(0.338)	(0.359)	(0.521)	(0.546)		
Chairman from academia dummy									0.628	0.704
									(0.595)	(0.603)
Insider Chairman dummy									-0.455	-0.239
									(0.368)	(0.410)
Committee age gap									0.0145	-0.0698**
									(0.0284)	(0.0318)
Committee professional heterogeneity									-0.362	0.550
									(1.197)	(1.351)
Constant	-1.677***	0.227	-1.905***	-1.035*	-2.160***	-0.810**	-3.043***	-2.072***	-2.226***	-1.908***
	(0.480)	(0.431)	(0.561)	(0.551)	(0.410)	(0.370)	(0.597)	(0.503)	(0.634)	(0.644)
Log-likelihood	88.06	88.06	102.99	102.99	84.17	84.17	102.55	102.55	100.54	100.54
Pseudo R-sq	12.37	12.37	14.46	14.46	11.82	11.82	14.40	14.40	15.87	15.87
Observations	342	342	342	342	342	342	342	342	304	304

Empirics

Robustness checks: 2. Excluding Japan

	Model 1		Model 2		Model 3		Model 4		Model 5	
Variables	Hike	Cut	Hike	Cut	Hike	Cut	Hike	Cut	Hike	Cut
GDP growth rate	0.665***	-0.199***	0.636***	-0.170**	0.644***	-0.226***	0.656***	-0.220***	0.658***	-0.235***
	(0.0978)	(0.0727)	(0.0980)	(0.0718)	(0.0993)	(0.0745)	(0.0988)	(0.0739)	(0.0986)	(0.0752)
Inflation rate (variation)	0.391***	-0.0214	0.439***	-0.0189	0.391***	-0.0192	0.391***	-0.0177	0.390***	-0.0168
	(0.0981)	(0.0759)	(0.100)	(0.0772)	(0.0979)	(0.0761)	(0.0981)	(0.0760)	(0.0977)	(0.0773)
Global Financial Crisis	-0.0869	0.315	-0.0785	0.413	-0.0795	0.280	-0.0795	0.315	-0.0992	0.300
	(0.573)	(0.378)	(0.568)	(0.374)	(0.571)	(0.383)	(0.573)	(0.383)	(0.572)	(0.383)
Inflation targeting dummy	0.0165	0.562**			0.0660	0.595**	0.0412	0.621**	0.0628	0.845***
	(0.246)	(0.239)			(0.253)	(0.241)	(0.250)	(0.242)	(0.287)	(0.264)
Inflation target met dummy			0.840***	0.185						
			(0.322)	(0.378)						
Number of continuous recession's years of the Chairman					0.0499	0.0817*				
					(0.0442)	(0.0440)				
Number of continuous recession years of the Chairman superior to 4 years							0.163	0.476**		
							(0.242)	(0.232)		
Number of maximum successive recession's years of the Chairman									0.0566	0.330***
									(0.124)	(0.116)
Constant	-2.873***	-0.944***	-2.926***	-0.674***	-3.086***	-1.289***	-2.928***	-1.130***	-2.985***	-1.676***
	(0.351)	(0.236)	(0.339)	(0.200)	(0.405)	(0.306)	(0.362)	(0.256)	(0.455)	(0.363)
Log-likelihood	135.28	135.28	136.12	136.12	139.24	139.24	139.51	139.51	143.37	143.37
Pseudo R-sq	12.35	12.35	12.43	12.43	12.71	12.71	12.74	12.74	13.09	13.09
Observations	544	544	544	544	544	544	544	544	544	544

	Model 6		Model 7		Model 8		Model 9		Model 10	
GDP growth rate	0.637***	-0.218***	0.635***	-0.236***	0.669***	-0.239***	0.679***	-0.237***	0.699***	-0.198**
	(0.0992)	(0.0738)	(0.0991)	(0.0752)	(0.102)	(0.0752)	(0.104)	(0.0754)	(0.115)	(0.0850)
Inflation rate (variation)	0.390***	-0.0248	0.392***	-0.0177	0.390***	-0.0315	0.394***	-0.0341	0.419***	-0.0235
	(0.0981)	(0.0763)	(0.0976)	(0.0774)	(0.0979)	(0.0780)	(0.0984)	(0.0782)	(0.116)	(0.0897)
Global Financial Crisis	-0.0588	0.301	-0.0692	0.301	-0.104	0.396	-0.118	0.409	0.162	0.388
	(0.570)	(0.383)	(0.568)	(0.383)	(0.574)	(0.386)	(0.577)	(0.388)	(0.608)	(0.423)
Inflation targeting dummy	0.272	0.836***	0.229	0.885***	0.0256	0.842***	0.0800	0.819***	0.149	0.918***
	(0.306)	(0.280)	(0.312)	(0.285)	(0.266)	(0.259)	(0.290)	(0.267)	(0.319)	(0.287)
Minimum value of the GDP per capita growth of the Chairman	-0.0276	-0.0354**	-0.0334	-0.0110						
	(0.0178)	(0.0170)	(0.0215)	(0.0211)						
Number of maximum successive recession's years of the Chairman			-0.0751	0.283**			0.0965	-0.0669	-0.0112	0.282**
			(0.152)	(0.144)			(0.216)	(0.188)	(0.141)	(0.124)
Chairman born before World War II					0.126	1.274***	-0.0802	1.434***		
					(0.347)	(0.330)	(0.588)	(0.557)		
Chairman from academia dummy									0.126	-0.242
									(0.410)	(0.373)
Insider Chairman dummy									-0.115	-0.288
									(0.297)	(0.272)
Committee age gap									0.0295	0.00769
									(0.0189)	(0.0164)
Committee professional heterogeneity									-0.808	0.957
									(1.109)	(1.057)
Constant	-3.141***	-1.295***	-3.004***	-1.680***	-2.905***	-1.256***	-3.120***	-1.146***	-2.908***	-1.858***
	(0.400)	(0.300)	(0.461)	(0.365)	(0.353)	(0.260)	(0.582)	(0.400)	(0.563)	(0.502)
Log-likelihood	140.81	140.81	145.80	145.80	150.08	150.08	150.52	150.52	132.20	132.20
Pseudo R-sq	12.86	12.86	13.31	13.31	13.70	13.70	13.74	13.74	13.88	13.88
Observations	544	544	544	544	544	544	544	544	475	475

Empirics
Placebo Tests

From Black et al. (2017): Sibling spillovers.
Their intuition:
second child in a family is differentially affected when the third child is disabled;
provide evidence suggesting that sibling spillovers work at least partly through relative exposure to parental time and financial resources.

Table 8: Descriptive Statistics - Alternatives variables

Variable	Obs	Mean	Std. Dev.	Min	Max
Number of siblings	234	1.859	1.503	0	6
Rank of brotherhood	234	1.662	1.359	0	6
Single child	234	.081	.274	0	1
Number of children of the parents	486	2.019	1.139	0	4
PhD Keynesian school	543	.105	.307	0	1
Left's political tendency of chairmen	71	.38	.489	0	1

Empirics

Placebo Tests

	Model 1		Model 2		Model 3	
Variables	Hike	Cut	Hike	Cut	Hike	Cut
GDP growth rate	0.707***	-0.266*	0.665***	-0.262*	0.797***	-0.257*
	(0.206)	(0.140)	(0.195)	(0.141)	(0.206)	(0.143)
Inflation rate (variation)	0.637***	0.214	0.613***	0.219	0.662***	0.244
	(0.194)	(0.145)	(0.190)	(0.147)	(0.196)	(0.151)
Global Financial Crisis	0.851	1.404*	0.886	1.435**	0.745	1.491**
	(1.249)	(0.720)	(1.243)	(0.718)	(1.284)	(0.720)
Inflation targeting dummy	1.698*	1.496	1.720*	1.895*	1.941**	1.687
	(0.992)	(1.006)	(0.947)	(0.993)	(0.970)	(1.050)
Chairman from academia dummy	-0.287	0.0678	-0.330	0.247	-0.0885	0.00453
	(0.988)	(0.785)	(0.984)	(0.787)	(0.976)	(0.823)
Insider Chairman dummy	-0.954	-0.754	-0.564	-0.589	-1.080*	-1.055*
	(0.611)	(0.595)	(0.729)	(0.669)	(0.624)	(0.583)
Committee age gap	0.140**	0.0994*	0.135**	0.132**	0.168***	0.107*
	(0.0595)	(0.0580)	(0.0536)	(0.0537)	(0.0579)	(0.0579)
Committee professional heterogeneity	2.904	3.616*	1.772	3.891*	5.828*	1.284
	(2.430)	(2.198)	(2.660)	(2.265)	(3.446)	(2.943)
Number of Siblings	-0.0649	-0.312				
	(0.210)	(0.190)				
Rank of Brotherhood			-0.385	-0.249		
			(0.421)	(0.229)		
Single Child					-1.092	1.443
					(1.100)	(0.917)
Constant	-5.219***	-2.379*	-4.401***	-2.945**	-6.556***	-2.448*
	(1.669)	(1.259)	(1.706)	(1.196)	(1.698)	(1.256)
Log-likelihood	93.46	93.46	92.37	92.37	94.58	94.58
Pseudo R-sq	22.87	22.87	22.60	22.60	23.14	23.14
Observations	234	234	234	234	234	234

Empirics
Placebo Tests

	Model 4		Model 5		Model 6	
GDP growth rate	0.797***	-0.0766	0.718***	-0.0848	0.318	-0.322
	(0.118)	(0.0786)	(0.106)	(0.0700)	(0.262)	(0.241)
Inflation rate (variation)	0.376***	-0.0727	0.402***	-0.0589	1.405***	-0.0323
	(0.130)	(0.0900)	(0.116)	(0.0821)	(0.514)	(0.390)
Global Financial Crisis	0.367	0.713*	0.353	0.710*		
	(0.607)	(0.400)	(0.598)	(0.395)		
Inflation targeting dummy	0.241	0.784***	-0.0380	0.933***	7.971*	-5.081
	(0.304)	(0.260)	(0.319)	(0.291)	(4.660)	(6.539)
Chairman from academia dummy	0.181	-0.104	1.207**	-0.126	-3.008	-16.88
	(0.417)	(0.383)	(0.576)	(0.432)	(2.796)	(1.894)
Insider Chairman dummy	-0.271	-0.240	-0.265	-0.477*		
	(0.318)	(0.289)	(0.276)	(0.253)		
Committee age gap	0.00822	0.0108	0.0125	0.00783	0.346*	-0.196
	(0.0196)	(0.0170)	(0.0179)	(0.0159)	(0.187)	(0.259)
Committee professional heterogeneity	0.332	2.239**	-0.795	2.896***	-10.74	0.661
	(1.233)	(1.063)	(1.128)	(1.007)	(8.941)	(12.32)
Number of Children of the parents	-0.171	0.105				
	(0.144)	(0.138)				
PhD Keynesian school			-2.176**	0.108		
			(0.855)	(0.502)		
Left's political tendency of Chairmen					7.087	-1.392
					(4.419)	(6.010)
Constant	-3.175***	-2.237***	-2.873***	-2.220***	-6.363**	3.361
	(0.530)	(0.493)	(0.498)	(0.463)	(3.216)	(3.747)
Log-likelihood	136.90	136.90	155.44	155.44	36.98	36.98
Pseudo R-sq	14.57	14.57	14.97	14.97	24.68	24.68
Observations	486	486	543	543	71	71

Empirics
Results

1. Baseline
2. Marginal effects
3. Robustness checks:
    - without GFC
    - without Japan
4. Placebo tests
5. Robustness checks of placebo tests:
    - without GFC
    - without Japan
6. Considering all variables (of interest and placebo) together

Conclusion

- ✓ Analysis of interest rate setting behavior of 9 major central banks, testing for an early (childhood) depression influence.
  - Tests and confirms influence of traditional determinants of monetary policy.
  - Detects a recession-averse behavior, intensified by the early life experience of recessions by chairmen.

  ⇒ *Confirms the "depression baby" effect, revealed for policy-makers.*

  - Overall, our results are generally robust to alternative specifications and inclusion (or not) of the Great Recession period.

- ✓ Policy implications: *whom should be chosen to manage monetary policy in 30 years from now? A « millenial » central banker, a younger one, or an older one?*
  - Each choice would have far-reaching consequences.

Merci de votre attention.

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