

# Trends in Monetary Policy Transparency

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# Monetary Policy Transparency

Transparency refers to absence of asymmetric information.

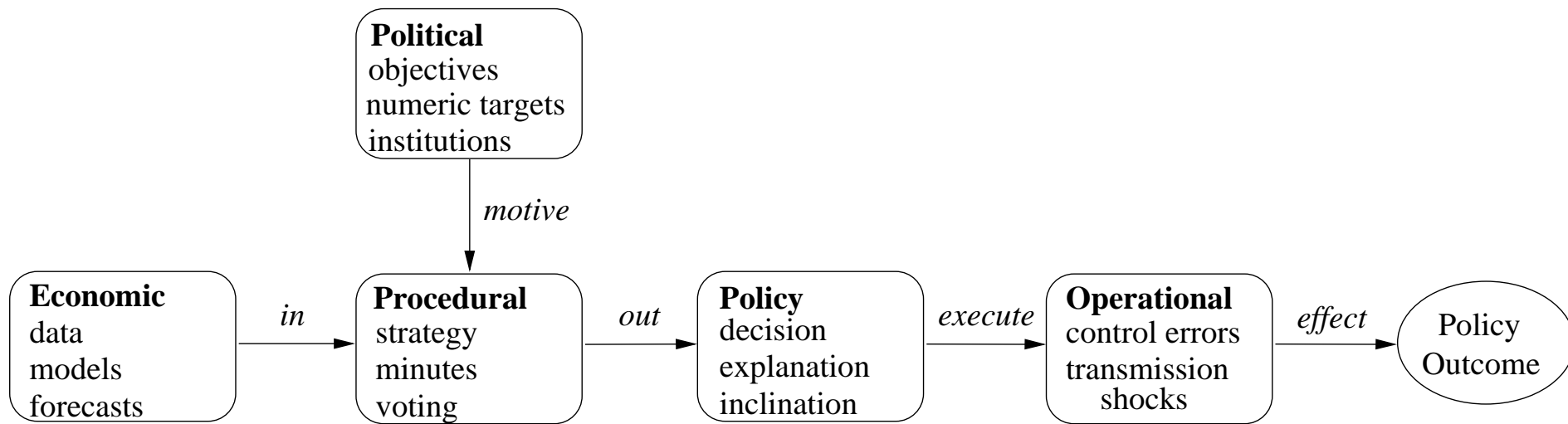
Approaches to measuring transparency:

- Financial market reactions (Blinder, Ehrmann, Fratzscher et al 2008)
- Disclosure of information pertinent to monetary policymaking (Eijffinger and Geraats 2006; Dincer and Eichengreen 2007)

Transparency index by Eijffinger and Geraats (2006)  
for 9 major central banks from 1998 to 2002,  
extended by Dincer and Eichengreen (2007)  
to 100 central banks from 1998 to 2006.

# Conceptual Framework

Adopted by Eijffinger-Geraats index, following Geraats (EJ 2002).



# Theoretical Framework

Central bank objective function:

$$W = -\frac{1}{2}\alpha(\pi - \tau)^2 - \frac{1}{2}(1 - \alpha)(y - \kappa)^2$$

Economic structure:

$$\pi = \pi^e + y + s$$

$$y = -r + d$$

Policy stance (optimum under discretion):

$$r = \alpha(\pi^e - \tau) - (1 - \alpha)\kappa + \alpha s_a + d_a$$

Policy outcomes:

$$y = \alpha(\tau - \pi^e - s) + (1 - \alpha)\kappa + \alpha s_u + d_u$$

$$\pi = \alpha\tau + (1 - \alpha)(\pi^e + \kappa + s) + \alpha s_u + d_u$$

Central bank forecasts:  $\pi_{cb} = \pi^e - r + d_a + s_a$  and  $y_{cb} = -r + d_a$

# Transparency Theory

- \* Information effects (Geraats, IJCB 2007)

- + Publication of inflation target  $\tau$  beneficial because it allows alignment of private sector expectations  $\pi^e$ .

- Publication of output target  $\kappa$  and supply shock  $s$  detrimental as it hampers inflation and output stabilization.

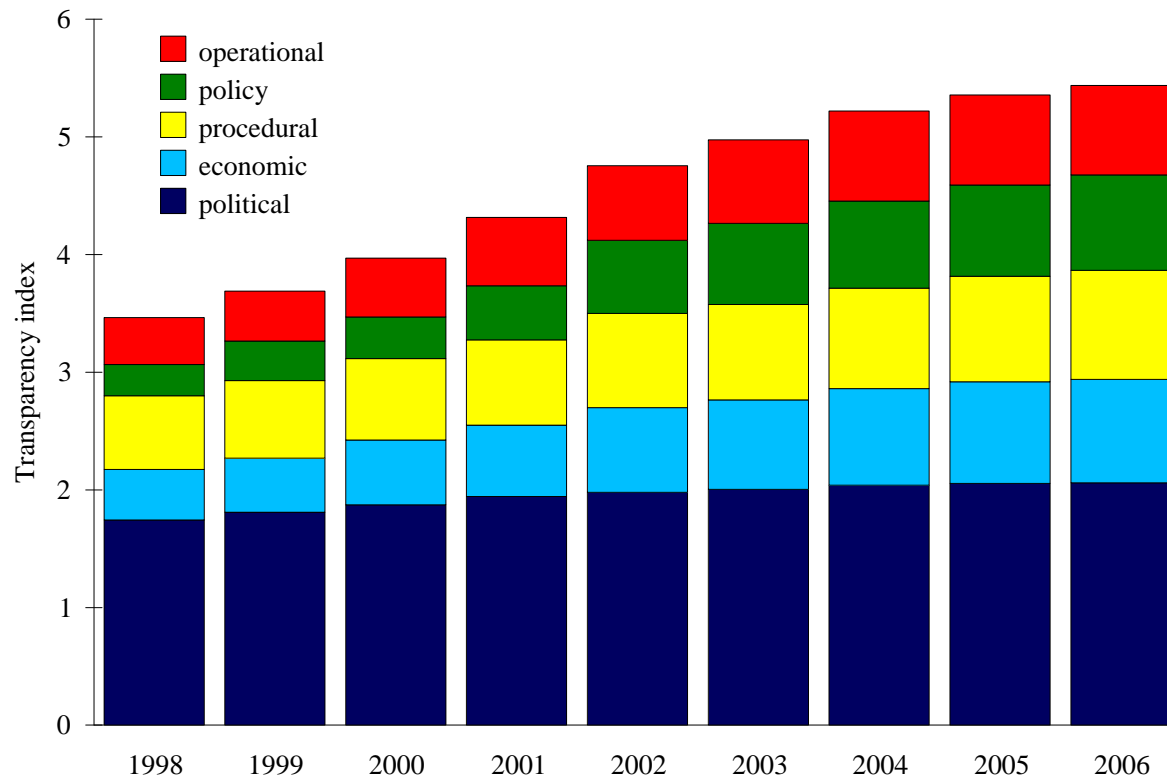
- \* Incentive effects

- + Publication of central bank forecasts makes policy action more accurate signal of central bank's intentions, quickly exposing any inflationary policy and thereby exerting discipline on central bank (Geraats 2005)

- Noisy public information could induce greater economic volatility as financial markets focus on it to coordinate their actions (Morris and Shin, AER 2002)

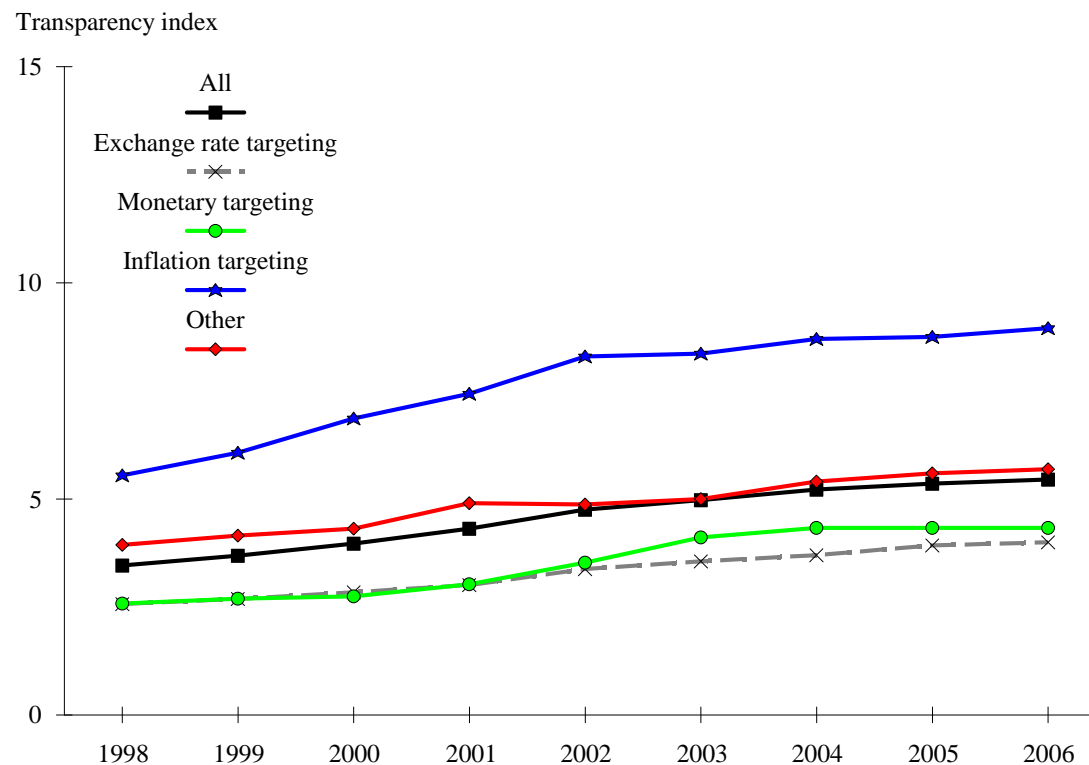
# World-Wide Transparency Trends

Significant increase in all transparency aspects, especially policy and economic transparency.



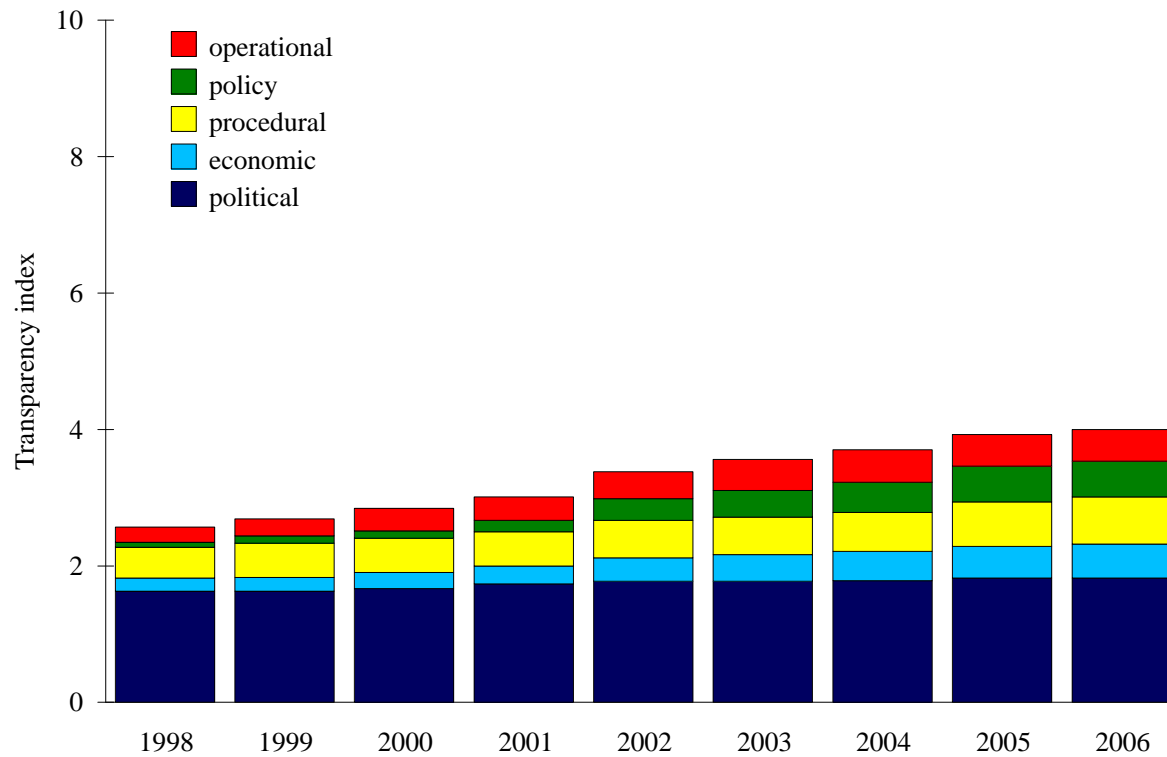
# Transparency Across Monetary Policy Frameworks

Significant increase in transparency for all frameworks, with inflation targeters by far the most transparent.



# Transparency Trends for Exchange Rate Targeters

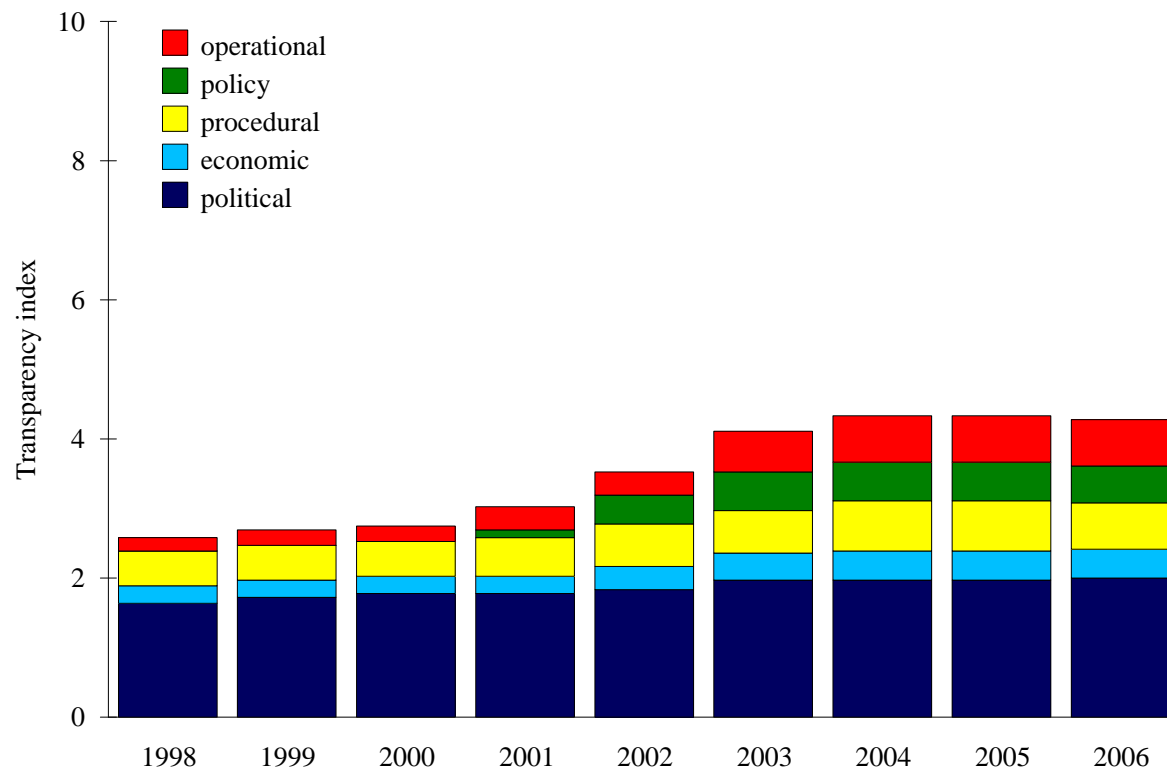
Strongest increases in policy and economic transparency.





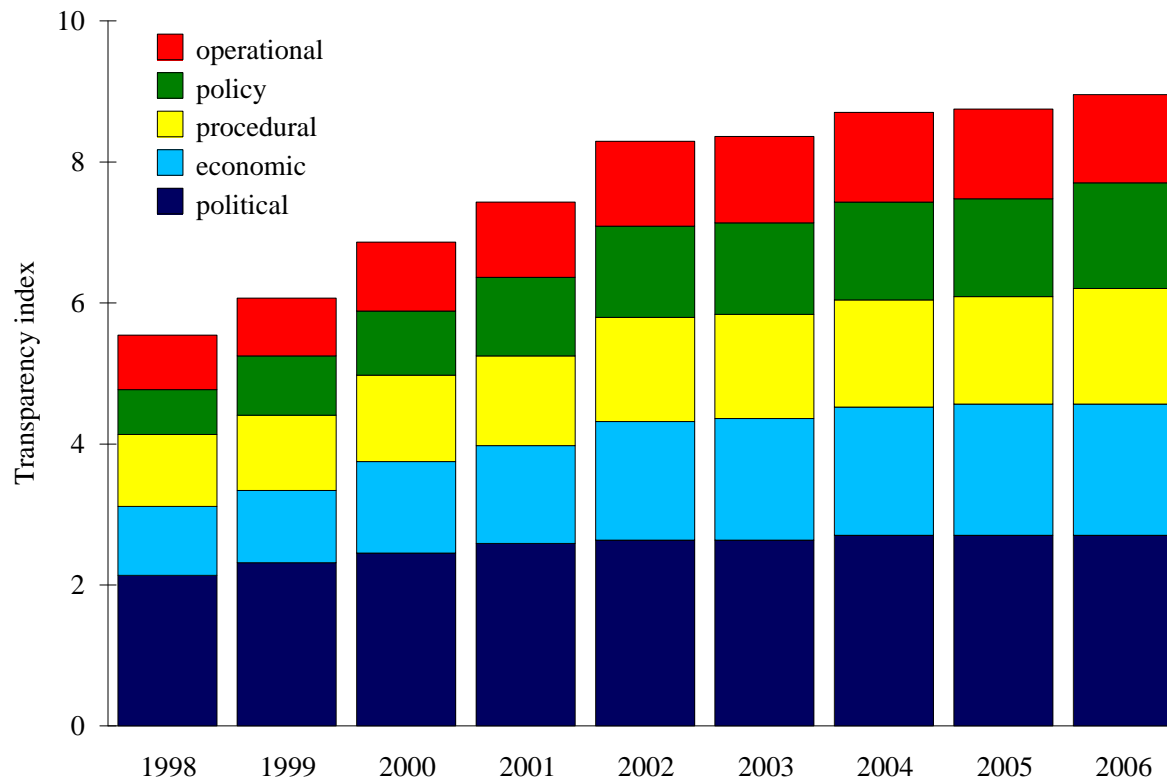
# Transparency Trends for Monetary Targeters

Strongest increases in policy and operational transparency.



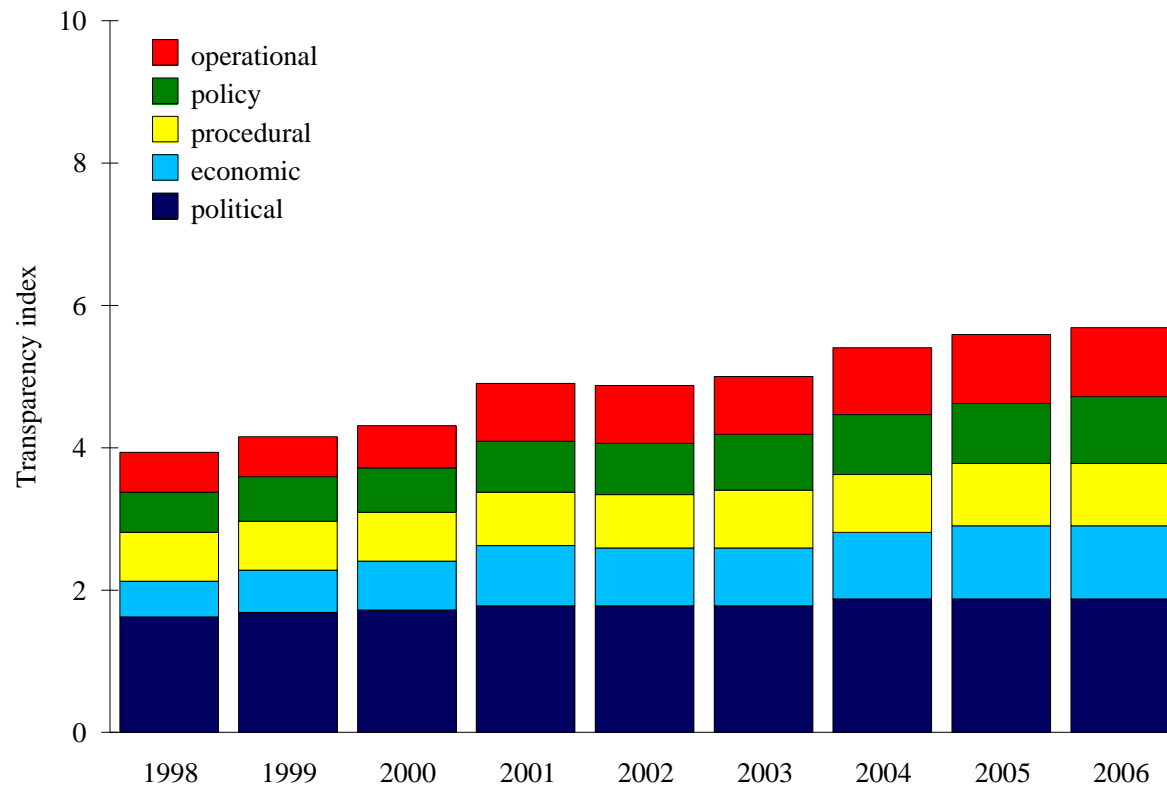
# Transparency Trends for Inflation Targeters

Strongest increases in economic and policy transparency.



# Transparency Trends for Other Frameworks

Strongest increases in economic, operational and policy transparency.



## Trends in Information Disclosure

Information disclosure	1998	2006	Change
Political transparency			
- Monetary policy objectives	90	93	3
with prioritization	38	46	8*
- Quantification primary objective	43	62	19***
- Explicit instrument independence	36	48	12**
Economic transparency			
- Numerical macroeconomic forecasts	18	56	38***
quarterly, medium term for inflation and output	4	17	13***
- Macroeconomic policy model	6	19	13***
Observations	98	98	

Asterisks indicate change significant at \* 10%, \*\* 5% and \*\*\* 1%.

Information disclosure (cont'd)	1998	2006	Change
Procedural transparency			
- Monetary policy strategy	51	67	16**
- Minutes	6	16	10***
- Voting records	5	10	5**
Policy transparency			
- Policy adjustment	17	53	36***
- Policy explanation	14	43	29***
- Policy inclination	0	3	3**
Operational transparency			
- Control errors operating target	10	24	14***
- Transmission disturbances	20	46	26***
- Evaluation monetary policy outcomes	38	63	25***
Observations	98	98	

Asterisks indicate change significant at \* 10%, \*\* 5% and \*\*\* 1%.

# Information Disclosure Across Monetary Policy Frameworks

Relative frequency of information disclosure (2006)	Full sample	Targeting			Other
		FX	M	$\pi$	
<b>Political transparency</b>					
- Monetary policy objectives	0.95	0.95	0.89	0.96	1.00
with prioritization	0.47	0.38	0.50	0.68	0.38
- Quantification primary objective	0.63***	0.55	0.56	1.00	0.44
- Explicit instrument independence	0.49***	0.31	0.56	0.77	0.50
<b>Economic transparency</b>					
- Numerical macroeconomic forecasts	0.57***	0.41	0.44	0.91	0.69
quarterly, medium term for $\pi$ and $y$	0.17***	0.07	0.06	0.50	0.13
- Macroeconomic policy model	0.19***	0.07	0.00	0.55	0.25
Observations	98	42	18	22	16

Asterisks indicate homogeneity rejected at \* 10%, \*\* 5% and \*\*\* 1%.

Relative frequency of information disclosure (cont'd)	Full sample	Targeting FX	M	$\pi$	Other
Procedural transparency					
- Monetary policy strategy	0.68***	0.57	0.61	1.00	0.63
- Minutes	0.16***	0.10	0.06	0.41	0.13
- Voting records	0.10***	0.02	0.00	0.32	0.13
Policy transparency					
- Policy adjustment	0.54***	0.38	0.39	0.91	0.63
- Policy explanation	0.44***	0.29	0.28	0.86	0.44
- Policy inclination	0.03	0.00	0.00	0.09	0.06
Operational transparency					
- Control errors operating target	0.25***	0.07	0.33	0.41	0.38
- Transmission disturbances	0.47**	0.33	0.44	0.73	0.50
- Evaluation monetary policy outcomes	0.64***	0.50	0.50	0.91	0.81
Observations	98	42	18	22	16

Asterisks indicate homogeneity rejected at \* 10%, \*\* 5% and \*\*\* 1%.

# Transparency Features of Inflation Targeting

## Political:

- prioritized monetary objectives and quantified primary objective
- explicit instrument independence

## Economic:

- quarterly, numerical, medium forecasts for inflation and output
- macroeconomic policy model

## Procedural:

- monetary policy strategy
- minutes and voting records

## Policy:

- policy adjustment and policy explanation

## Operational:

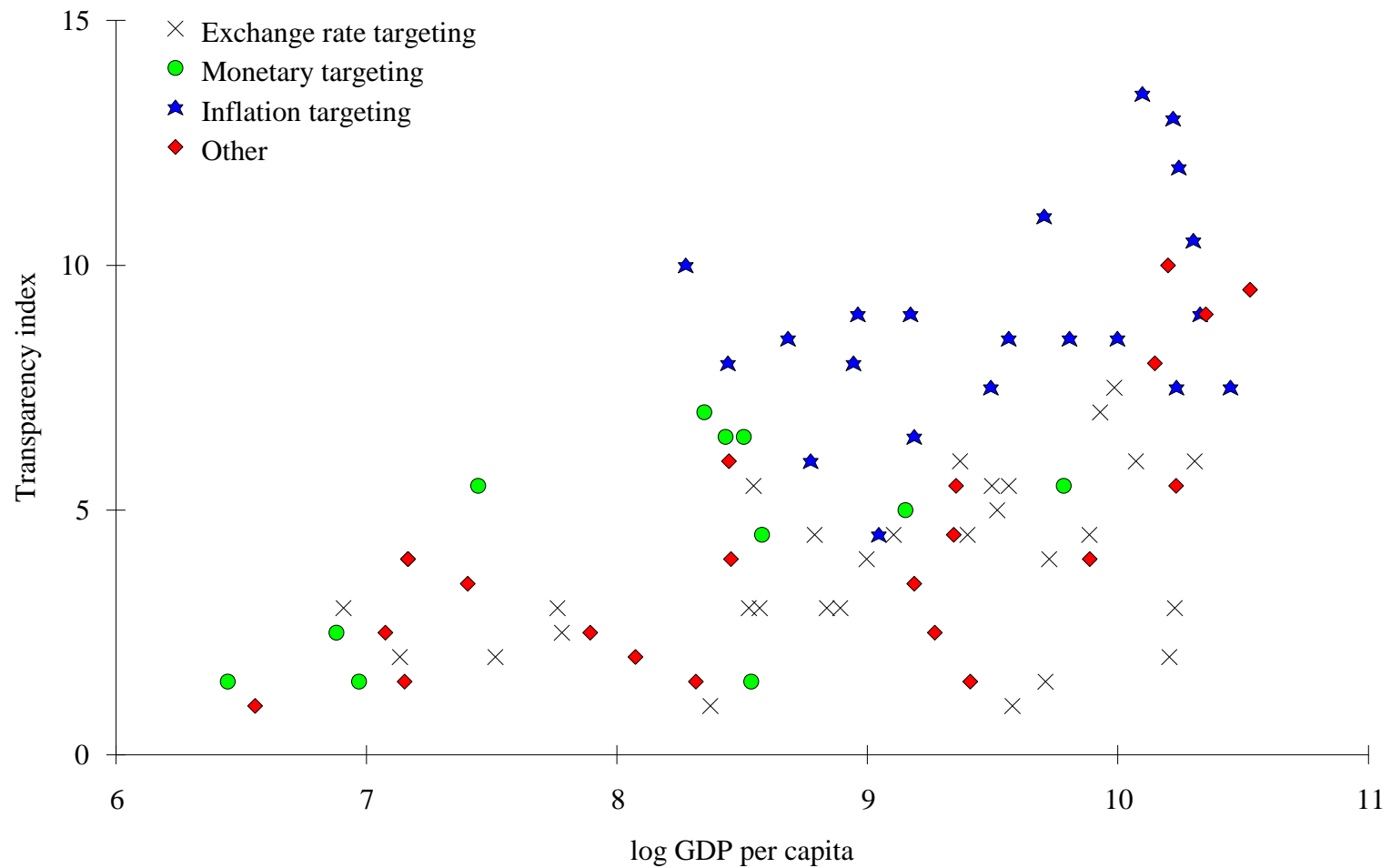
- transmission disturbances



# Institutional and Macroeconomic Environment

- Central bank independence:  
generally no strong correlation with transparency (except political).
- GDP per capita:  
significant positive correlation with (economic) transparency.

# Analysis of relation between transparency and GDP per capita



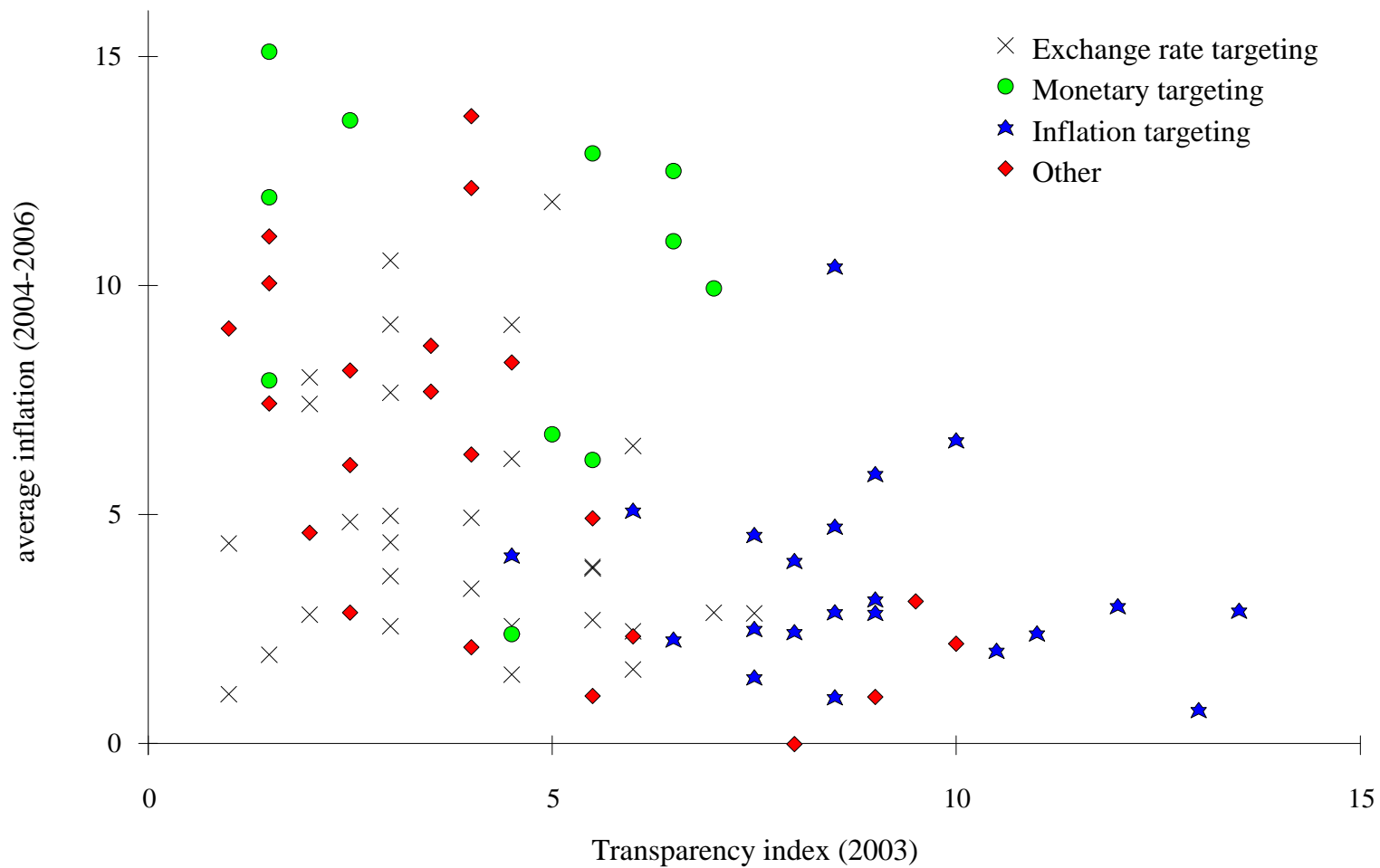
# Inflation Environment

- Initial inflation: significant positive correlation with subsequent (political and operational) transparency
- Subsequent inflation: significant negative correlation with (all aspects of) transparency (excl FX targeters)

Correlation	Average inflation, 2004-2006	
	Full sample	Excl. FX targeters
Transparency in 2003	-0.41***	-0.57***
- Political	-0.16	-0.32**
- Economic	-0.45***	-0.61***
- Procedural	-0.31***	-0.41***
- Policy	-0.37***	-0.49***
- Operational	-0.26**	-0.43***
Observations	83	54

Asterisks indicate significance at \* 10%, \*\* 5% and \*\*\* 1%.

# Analysis of relation between transparency and subsequent inflation



# Conclusion

There has been a significant increase in transparency during the last decade, especially for policy and economic transparency, and across monetary policy frameworks.

Nevertheless, there are significant differences in information disclosure across monetary policy frameworks, with inflation targeting on average most transparent in all respects, especially for economic and policy transparency.

Regarding institutional and macroeconomic environment, transparency appears largely unrelated to central bank independence, but is positively related to initial inflation and economic development, and negatively related to subsequent inflation.