



14TH JACQUES POLAK ANNUAL RESEARCH CONFERENCE

NOVEMBER 7-8, 2013

Goal Dependence for Central Banks: Is the Malign View Correct?

Kenneth N. Kuttner
Williams College

Adam S. Posen
Peterson Institute

Paper presented at the 14th Jacques Polak Annual Research Conference
Hosted by the International Monetary Fund
Washington, DC—November 7–8, 2013

The views expressed in this paper are those of the author(s) only, and the presence of them, or of links to them, on the IMF website does not imply that the IMF, its Executive Board, or its management endorses or shares the views expressed in the paper.

Goal Dependence for Central Banks: Is the Malign View Correct?

Ken Kuttner

Williams College, PIIE and NBER

Adam Posen

Peterson Institute for International Economics

IMF Fourteenth Jacques Polak Annual Research Conference

November 7-8 2013

Introduction

Why another paper on CBI?

- Independence is unanimously seen as a prerequisite for good monetary policy...
- ...but recent monetary policy decisions have become politically salient.

Starting point is the important distinction of DeBelle & Fischer (1994):

- **Goal** versus **instrument** independence.
- Most of current controversy centers on changes in and disputes over the former.

Instrument non-independence

Colombian President Juan Manuel Santos said on Tuesday that the government, which is represented by the finance minister on the central bank's seven-member board, **will ask the monetary authority to lower the benchmark interest rate next week.** 'I believe the central bank can continue reducing interest rates,' Santos told a meeting of the textile industry in Medellin, Colombia's second-largest city. **'They should meet next week for the first board meeting of this year and we're going ask the board to continue lowering interest (rates) to be able to also give additional stimulus to the economy,'** he said. (Reuters, January 22, 2013.)

Another example: Argentine President Kirchner's 2010 seizure of \$6.6 billion of the central bank's FX reserves.

Goal non-independence

The Hungarian central bank has been independent and will remain independent. But it is part of the Hungarian nation-state so it is not independent from the Hungarian nation.”

-- Hungarian Central Bank Governor Gyorgy Matolcsy

“It would be necessary to proceed with revising the BOJ law if the central bank cannot produce results under its own mandate.”

-- Japanese Prime Minister Shinzo Abe

Inflation targets and accountability

Both practice (BOE '97) and research (Bernanke et al. 1999) advocated goal **dependence**.

It was thought this would increase discipline, transparency and popular legitimacy.

DeBelle & Fischer suggest a central bank can be **too** independent.

Emerging market and developing countries are especially wary of goal dependence, however.

Evidence

Does goal independence matter? Look at differences across inflation targeters.

- Definition and level of the inflation target.
- Size & direction of deviations from target.
- Persistence of deviations from target.
- Anchoring of inflation expectations (hard to pin down).

Who sets the target?

Target set by government:

- UK, Iceland, Mexico, Serbia

Target set jointly by government and CB:

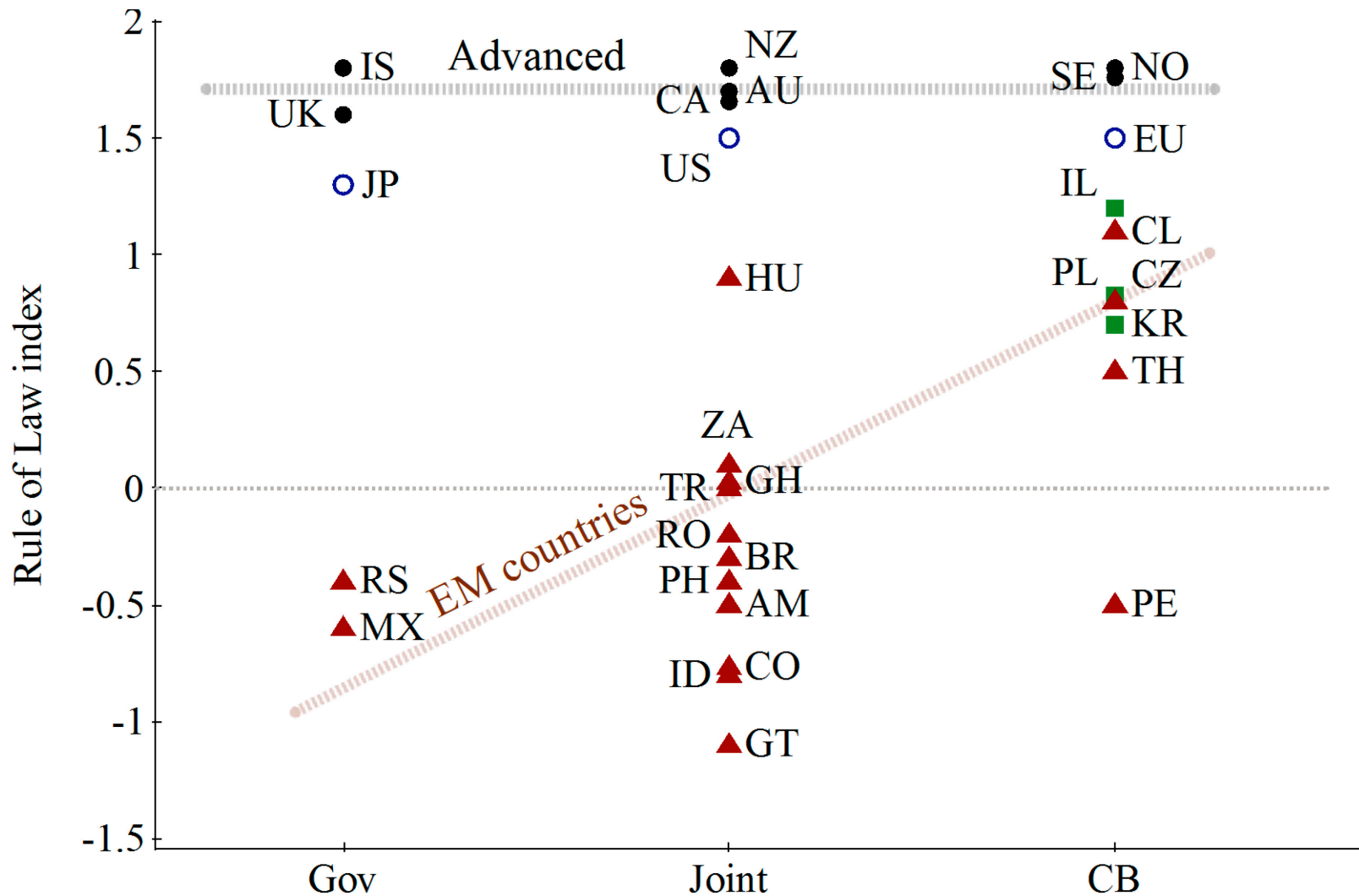
- Canada, NZ, Australia, Romania, Colombia, Hungary, Armenia, Philippines, Brazil, Guatemala, Indonesia, South Africa, Turkey

Target set unilaterally by CB:

- Czech Republic, Peru, Sweden, Israel, Norway, Poland, Chile, Korea, Thailand.

“Rule of law” & goal independence

correlated for EM economies, not for advanced



Regression results confirm the plot

Dependent variable = degree of goal independence {1,2,3}

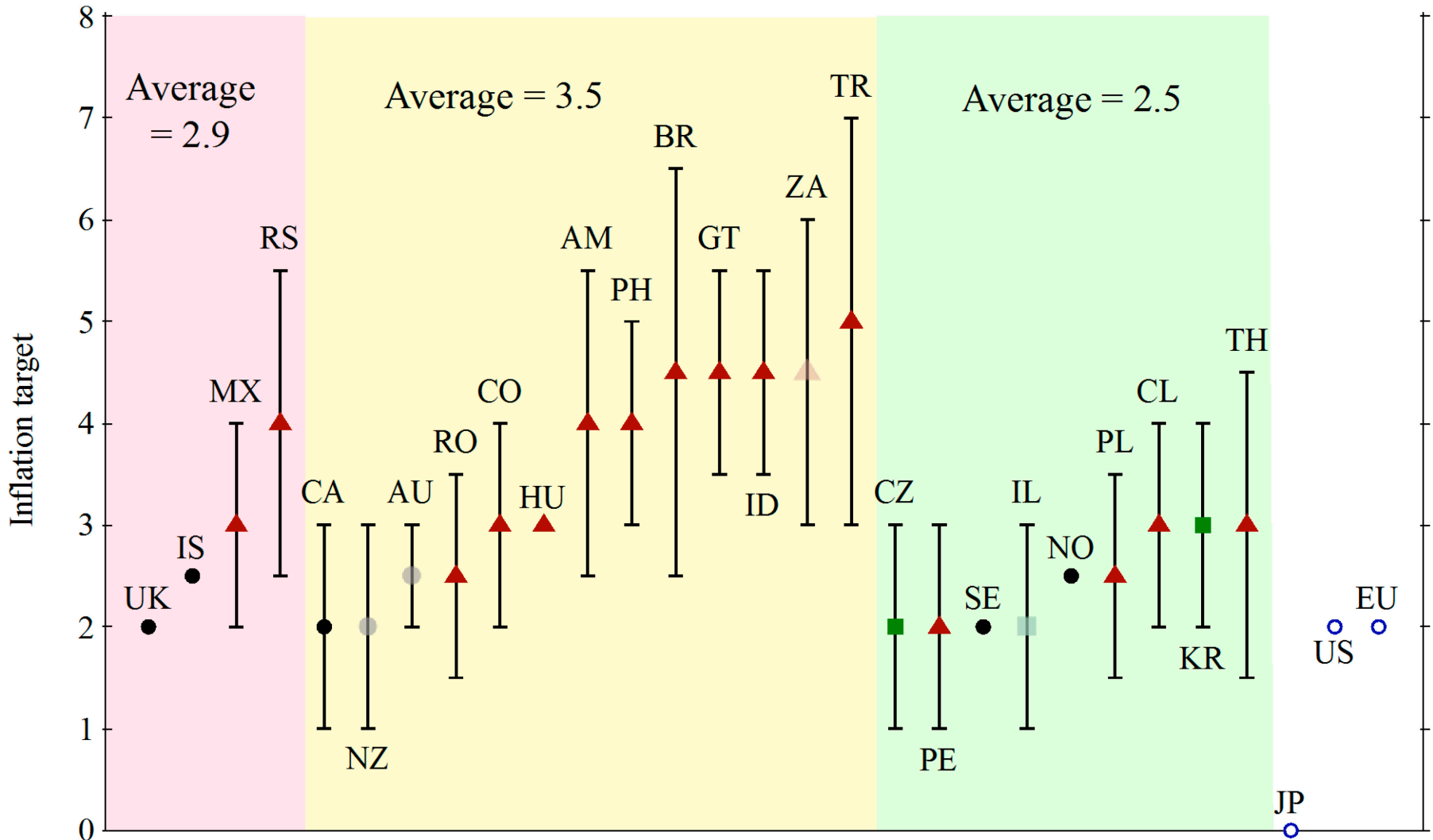
Intercept	Rule of Law	Rule of Law × EM	Adjusted R-squared
2.12 (13.9)	0.14 (0.99)		0.00
2.24 (16.1)	-0.13 (0.83)	0.72 (2.87)	0.23

t statistics in parentheses

- The rule-of-law × emerging-market interaction variable is highly significant.

Inflation target levels

somewhat lower for those w/o goal independence



Targets are sometimes relaxed

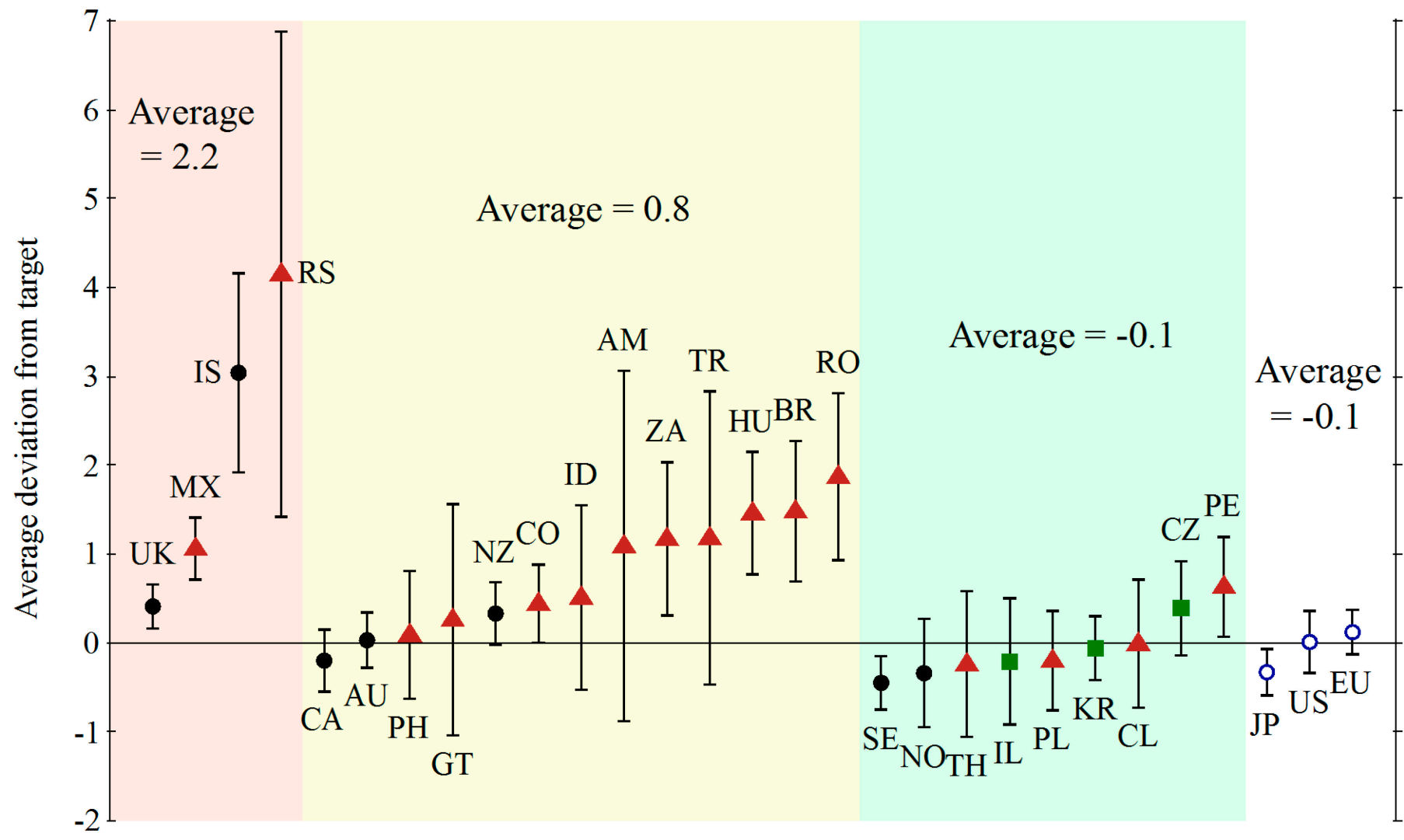
Changes to target or midpoint of range:

- Poland, 2001: from 6% to 7%
- Brazil, 2003: from 3.5% to 8.5%
- Hungary, 2005: from 3.5% to 4%
- Philippines, 2005: from 4.5% to 5
- Guatemala, 2008: from 5% to 5.5%
- Turkey, 2009: from 4% to 7.5%
- Indonesia, 2010: from 4.5% to 5%

Of these, only Poland has full goal independence

Average deviation of inflation from target

significantly positive for those w/o goal independence



Regression results confirm the plot

Dependent variable = average deviation from inflation target

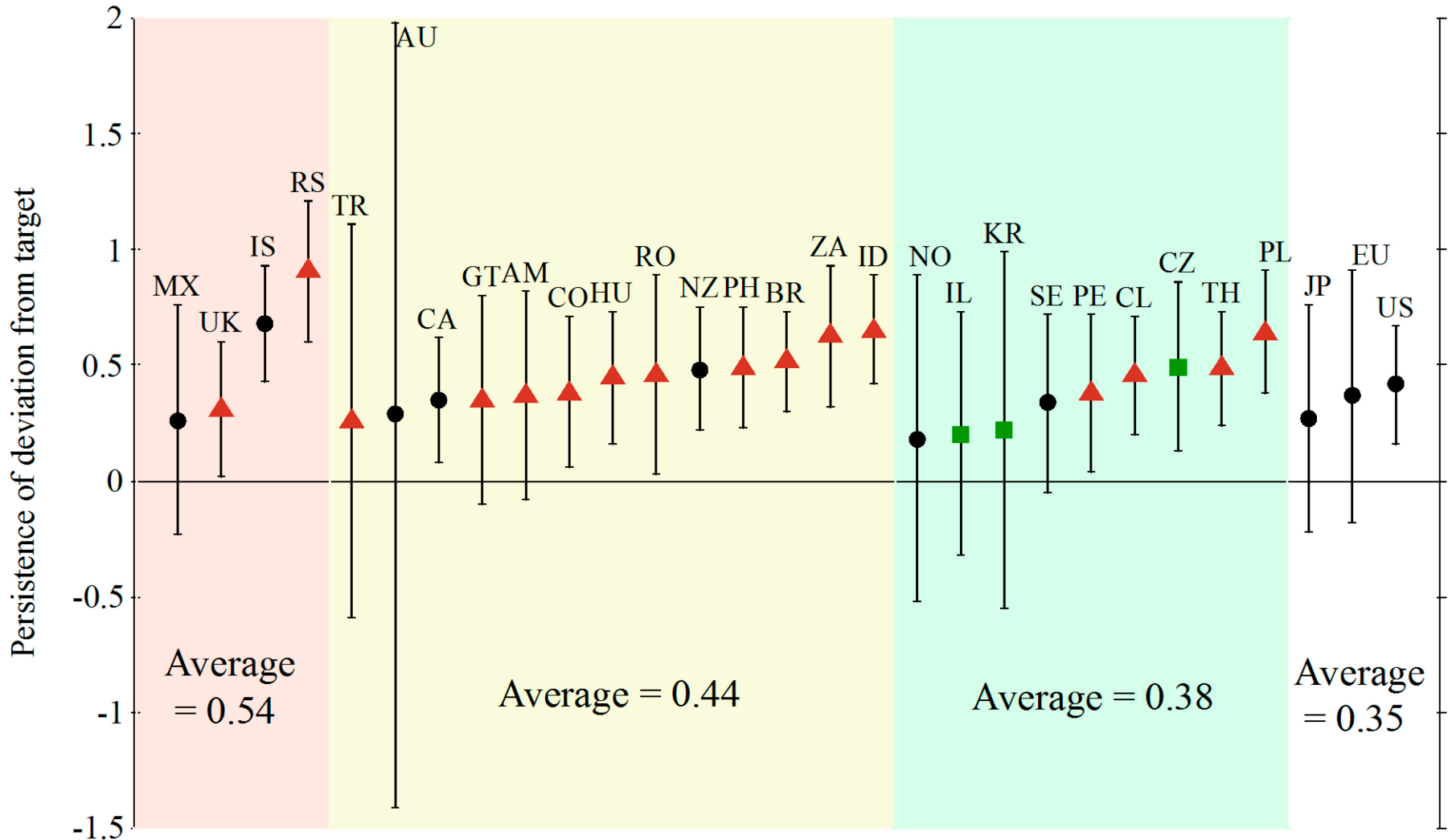
Intercept	Joint goal setting dummy	Government goal setting dummy	Emerging market dummy	Adjusted R-squared
<i>Ordinary least squares</i>				
-0.63	0.81	2.43	0.75	0.51
(1.74)	(2.48)	(5.25)	(2.19)	
<i>Weighted least squares</i>				
-0.51	0.62	1.03	0.63	0.43
(3.08)	(3.23)	(4.69)	(3.74)	

t statistics in parentheses

- Goal dependence is associated with larger average deviations from the target.

Persistence of deviations from target

slightly higher for those w/o goal independence



Regression results again confirm the plot

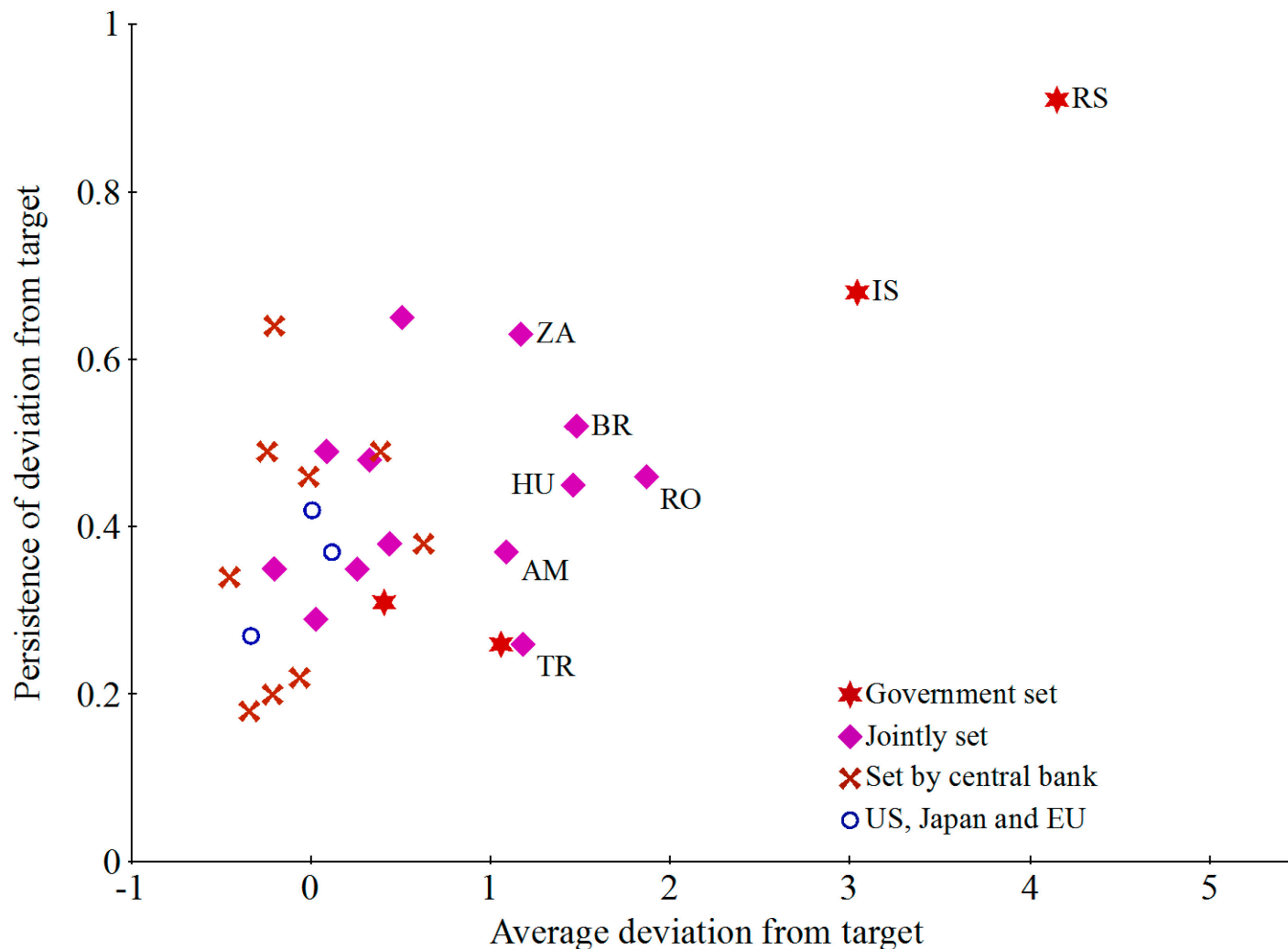
Dependent variable = largest autoregressive root

Intercept	Joint goal setting dummy	Government goal setting dummy	Emerging market dummy	Adjusted R-squared
0.30	0.06	0.19	0.11	0.06
(3.67)	(0.84)	(1.89)	(1.41)	

t statistics in parentheses

- Government goal setting is associated with slightly more persistent inflation (only marginally significant).

Countries with larger average deviations tend to have more persistent deviations



Effect on degree of “anchoring”?

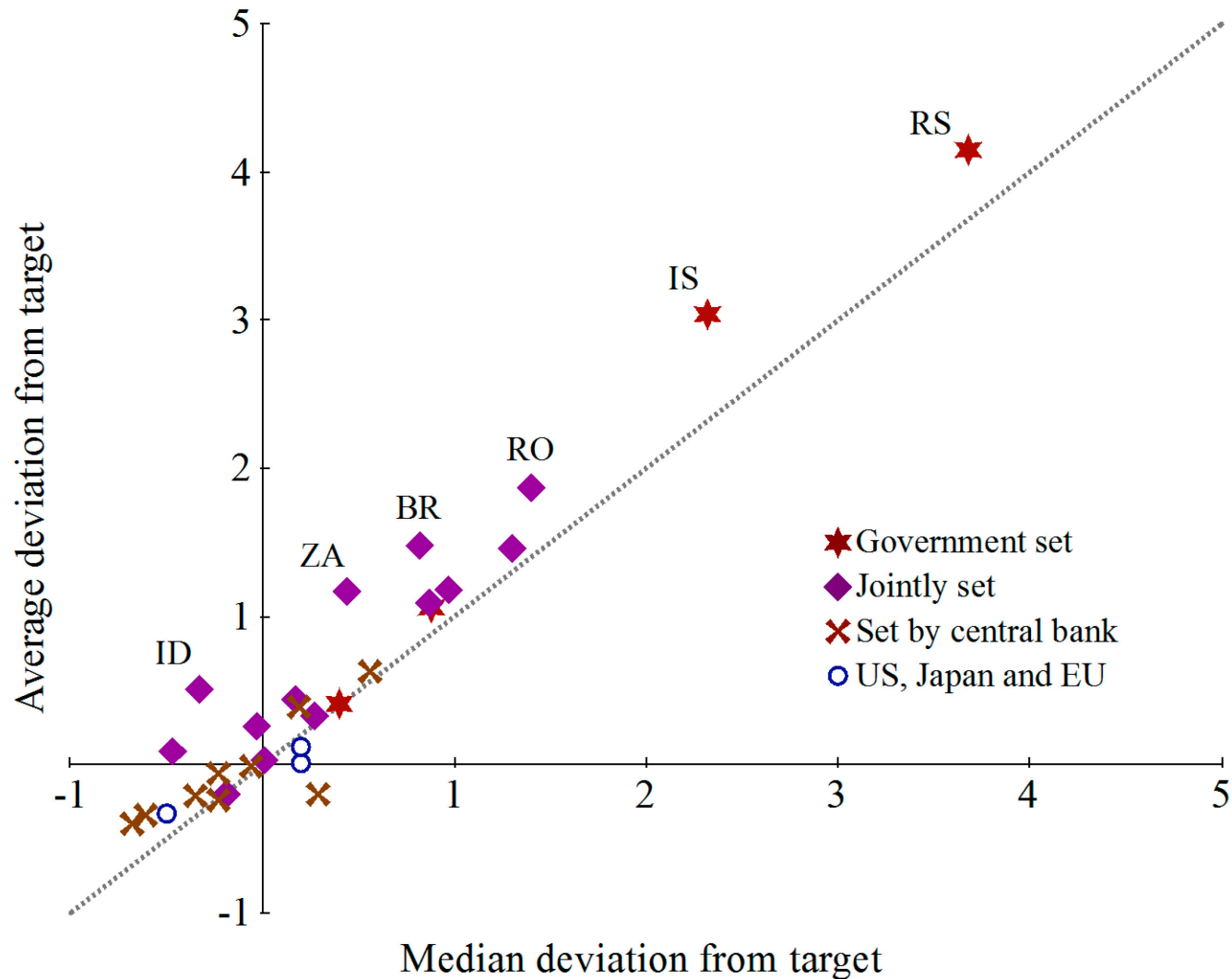
Everyone’s inflation rate is mean reverting (autoregressive parameter < 1).

Expectations? Look at the response of long-term bond yields to inflation shocks.

- Limited sample – not everyone has long-term local currency bonds.
- Results are inconclusive... nothing to suggest less “anchoring” among those with government or jointly set target compared with those with goal independence..

Median versus mean target deviations

inflation distribution is often skewed to the right



Explanations?

The standard time inconsistency story

Government prevails on central bank to boost output. Futile: higher inflation, no output gain.

Policy delegated to a conservative central banker attenuating inflation bias.

Independence = higher weight on central bank's objective function relative to government's.

Goal non-independence causes inflation bias, and is unambiguously bad. The **malign view**.

Adding an “override” option

Inflexibility is costly, excessive output volatility (Debelle & Fischer 1994).

When there are large shocks...

- The central bank can invoke an “escape clause,” or
- The government can exercise an option to override (Flood & Isard 1989, Lohmann 1992)

More benign, even **beneficial** – some inflation bias is the price paid for additional flexibility.

How realistic are these frameworks?

Why do central banks persist in their futile efforts to raise output above equilibrium?

Would a government really override the central bank when output exceeds potential?

- With a favorable inflation shock, a “conservative” central bank would try to keep inflation on target by allowing a rapid expansion.
- Surely government intervention would be unlikely in this case.

Towards a modified override model

Central banks tend to be conservative & inflexible.

- ITers are prisoners of their own rhetoric.
- Committees are inherently cautious & inertial.
- Central bankers represent conservative interest groups.

Asymmetric override: no intervention with high output and low inflation.

Override cost is lower for non-independent CBs...

...and more valuable in high-volatility economies.

Average inflation will exceed the target

Results from tendency for asymmetric override/relaxation of target.

Overshoot is a function of:

- Shock distribution
- Sacrifice ratio
- Relative weight on output losses

Implication: higher average overshoot in high volatility economies.

Conjecture: not necessarily a bad thing.

So is the malign view correct?

At first sight, yes...

- Inflation bias and somewhat more persistent target deviations among goal-dependent ITers.
- Less independence is associated with weak “rule of law”.

...but the beneficial view cannot be dismissed.

- No evidence of unanchored inflation or inflation drift.
- Some overshooting may be optimal.

Still to do

Extend the theory:

- Rationalizing delegation to an inertial central bank.
- Determining the optimal fixed override cost.

Look into the link between volatility and average overshoot.

Understand institutional sources of central bank inertia.