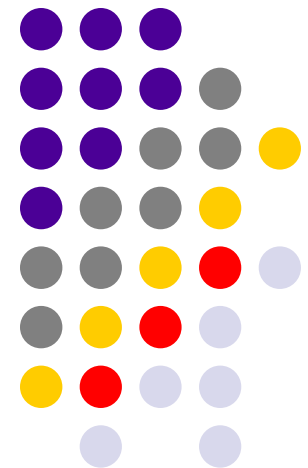# Will Traditional Monetary Policy Suffice for Current Global Financial Market Challenges?

Pierre L. Siklos

Department of Economics, WLU

Viessmann European Research Centre
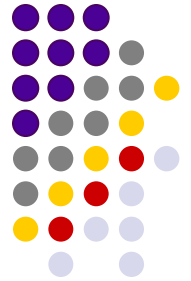
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The Pillars of Monetary Policy

- Central bank independence: **Institutional**
- Inflation Targeting: **Monetary Policy Regime**
  - Coupled with a <u>floating exchange rate</u>
- *<u>Financial system stability?</u>*

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CBI: The State of the 'Policy'

- Like the proverbial 'product cycle', the CBI phenomenon has had its ups and downs
  - Currently, in the downturn phase in academic circles
  - Currently, still in the upward phase in policy circles (has it peaked?)

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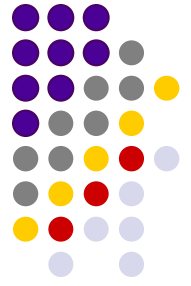# Theoretical Themes: "Majority" or "Consensus" View?

- <u>Academics</u>: Time inconsistency **is** a problem and <u>monetary policy's goals need to be clear and 'independent' of political influence</u>
  - No consensus view of how best to achieve this as it is dependent on ER regime, political system, banking system, among possibly other considerations

- <u>Policymakers</u>: Time inconsistency **is not** a problem but <u>monetary policy's goals need to be clear and should not be 'independent' of political influence [Blinder (1998)]</u>
  - Consensus exists that low and stable inflation is the most desirable goal and that monetary policy should be conducted autonomously (instrument independence) but political masters/public should dictate goals of monetary policy (goal dependence) – [Debelle and Fischer (1995)]

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CBI:
Do We Know What it Stands For?
Should We Care?

- Academic circles:
  - YES: instrument independence but not goal independence. An 'understanding' of who does what is required and needs to be communicated to the public.
  - NO: We can't agree on how to measure it in a summary fashion
    - BOTTOM LINE: De facto more important than de jure autonomy BUT laws don't tell the whole story (perhaps not even part of the story, according to some)
- Policy Circles
  - YES: Its what helps keep inflation low and stable
  - NO: It is a 'state of mind' that need not require legislation to make it a fact
    - BOTTOM LINE: De facto more important than de jure autonomy BUT laws can make a difference

Bottom Line

- Agreeing on what CBI is and how it affects inflation over time are crucial ingredients
  - We still search for a way to succinctly measure the value of CBI

# CBI: A Critical Ingredient in the Mix?

- YES: there must be certain core or principal elements in a CBI regime but the combination or weight of the relevant characteristics can differ across countries. No one regime is 'right' for all countries
  - CORE ELEMENTS: a 'directive', instrument independence, a concordat of some kind between MP and Govt
- CONCLUSION: It is still be worth trying to marshall international evidence on the CBI-Inflation nexus rather than relying on piecemeal evidence
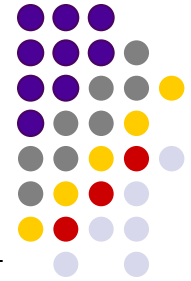
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The Inflation Record


Inflation Around the World: 1990-2004
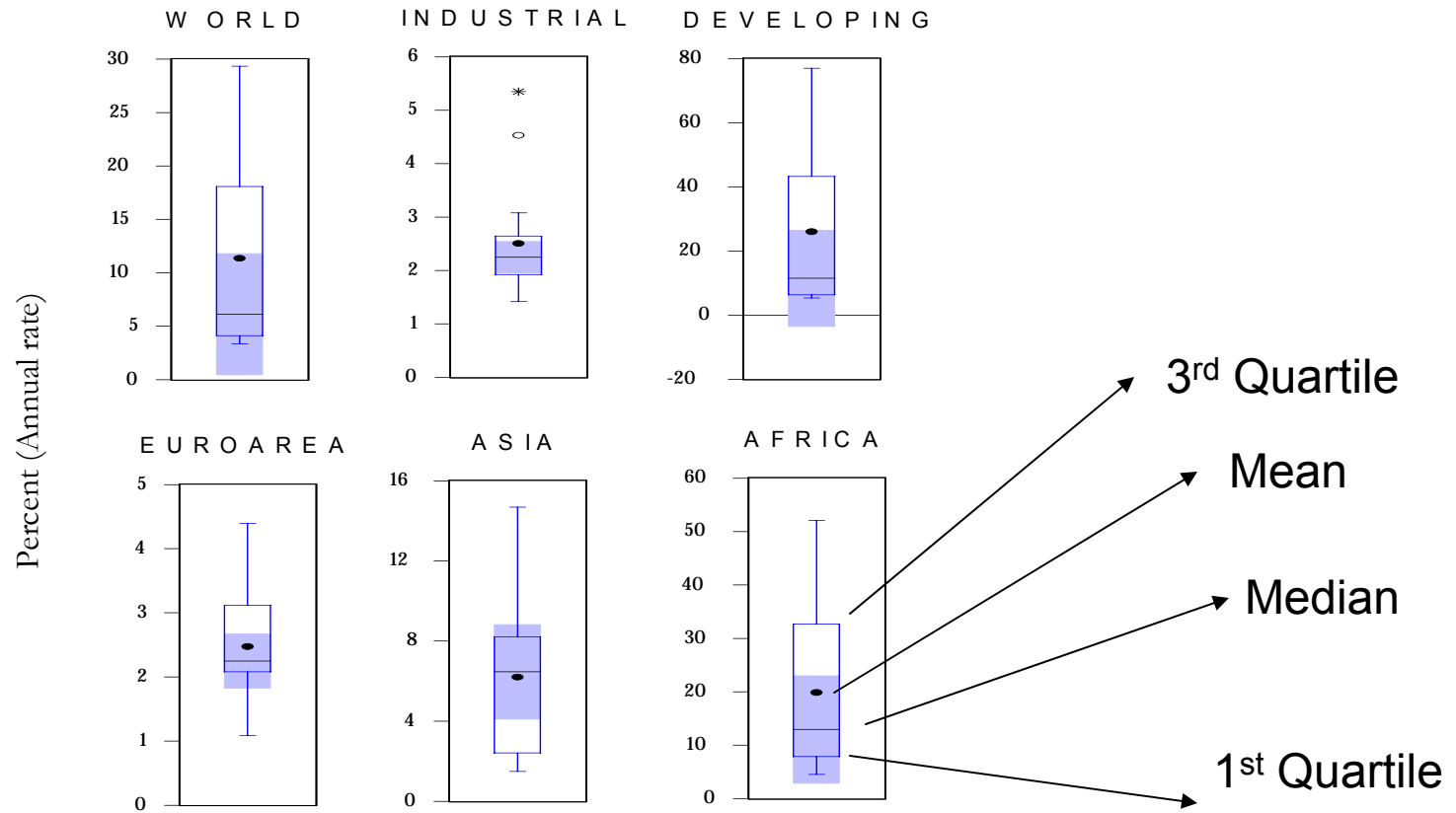
What Do We Learn?

- Median is quite different from the mean
- 95% C.I. for median 'comfortably' includes mean only for € area and Asia, not really anywhere else
- There is still considerable diversity in inflation across regions of the world, even since 1990

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Inflation and CBI

|	Count	AVGINF				
		[0, 20)	[20, 40)	[40, 60)	[60, 80)	Total
	0.000000	28	6	2	0	36
	0.100000	0	1	0	0	1
AUT	0.500000	3	1	0	0	4
	0.750000	44	6	5	1	56
	1.000000	9	3	0	0	12
	Total	84	17	7	1	109
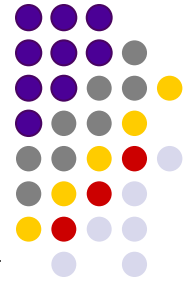
What Do We Learn?

- Several key CB characteristics with what we might associate with 'independence' are highly significant
  - More autonomous (AUT) CB deliver lower avg inflation
  - When Govt appoints Governor avg inflation is lower
  - Committee based CB governance delivers lower avg inflation
    - CORR and OBJ retain their significance as before

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Cross-Section
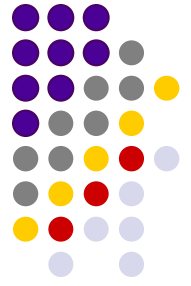
Quantile Process Estimates (90% CI)
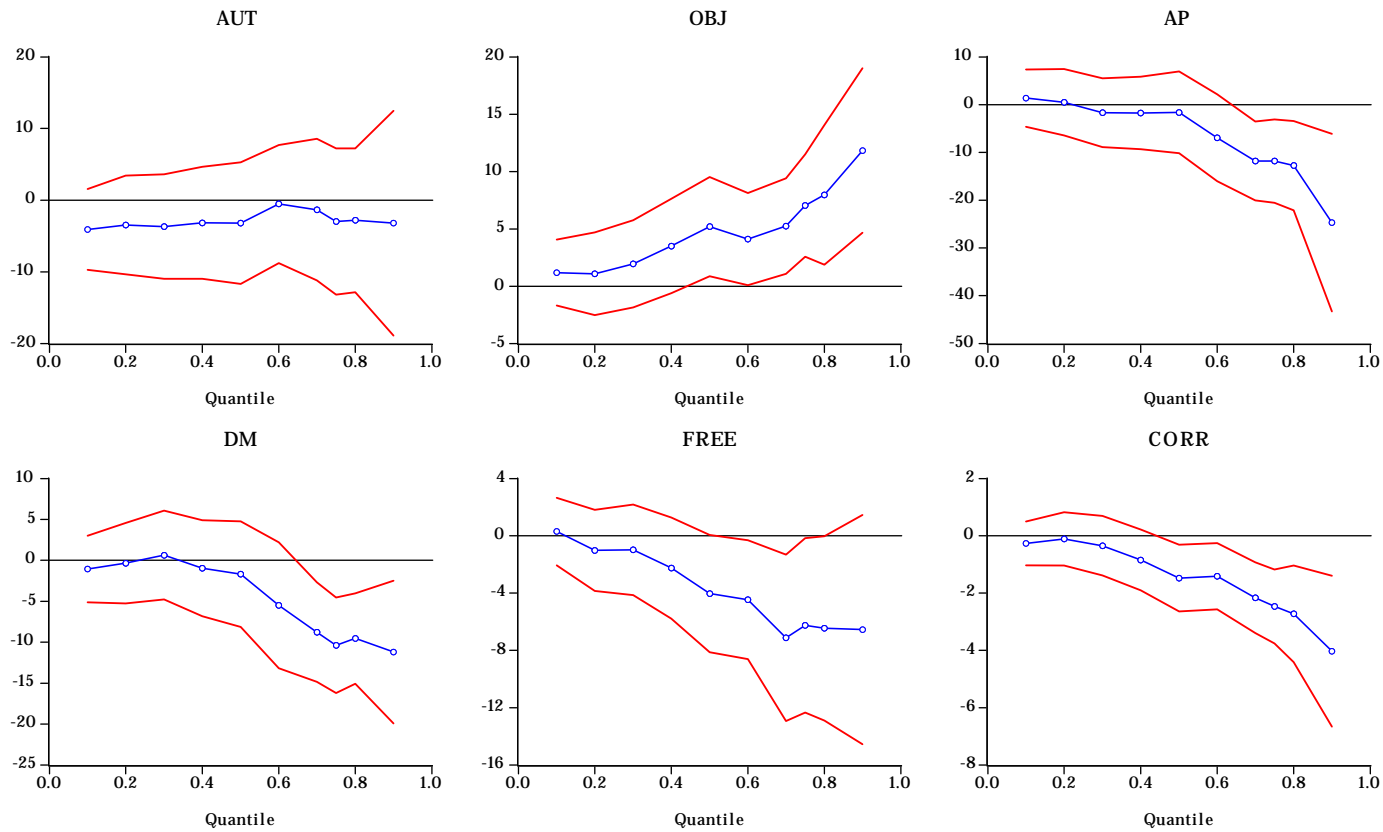
Conclusions: Same But Different

- Rather than CBI as it is often used (misused?) it is 'governance' that can contribute to improvements in average inflation

- What's Still Missing? Controls for CB turnover (maybe de Haan+Berger can help?) or Dismissal (Directive as in Siklos 2002), capital flows (Edwards data to be used)

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MP Strategies: Current State of Play
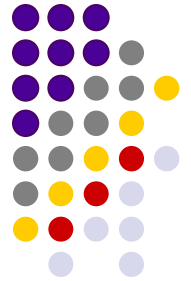
- ## Domestic Versus Foreign Influences
  - How Important are they relative to each other?
  - Examine Inflation developments over the past decade

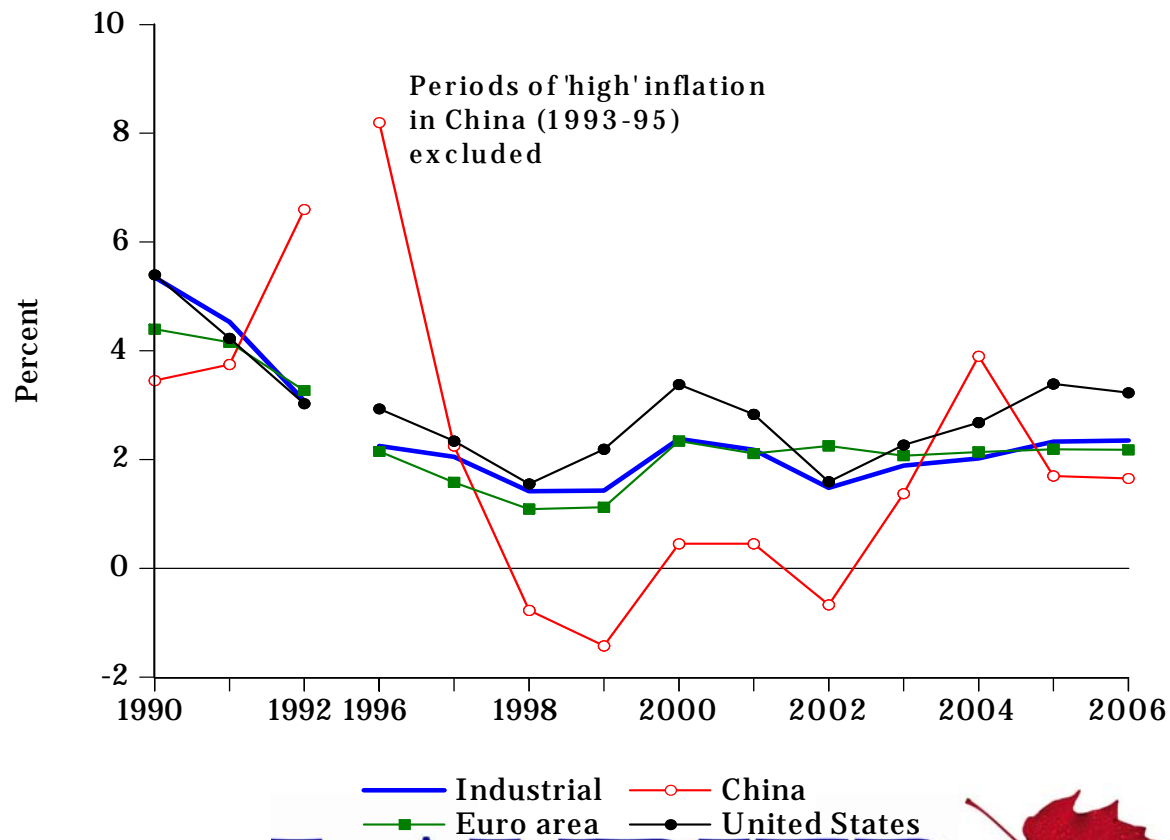# How much is Inflation Global?

- Recent flurry of interest in whether inflation has <u>global determinants</u> (viz., whether inflation is China-driven, Maastricht-driven)

- Still largely unresolved question of the contribution of the <u>chosen MP strategy</u> to explaining inflation performance (e.g., frequent adoption of IT MP strategy across the industrial world)

- A lingering debate about whether <u>institutional constraints (or 'factors')</u> such as CBI, greater accountability + transparency, have also contributed to the downturn on global inflation

  - Clearly, a related literature is the one that deals with <u>inflation convergence</u>

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Data and Some Stylized Facts:

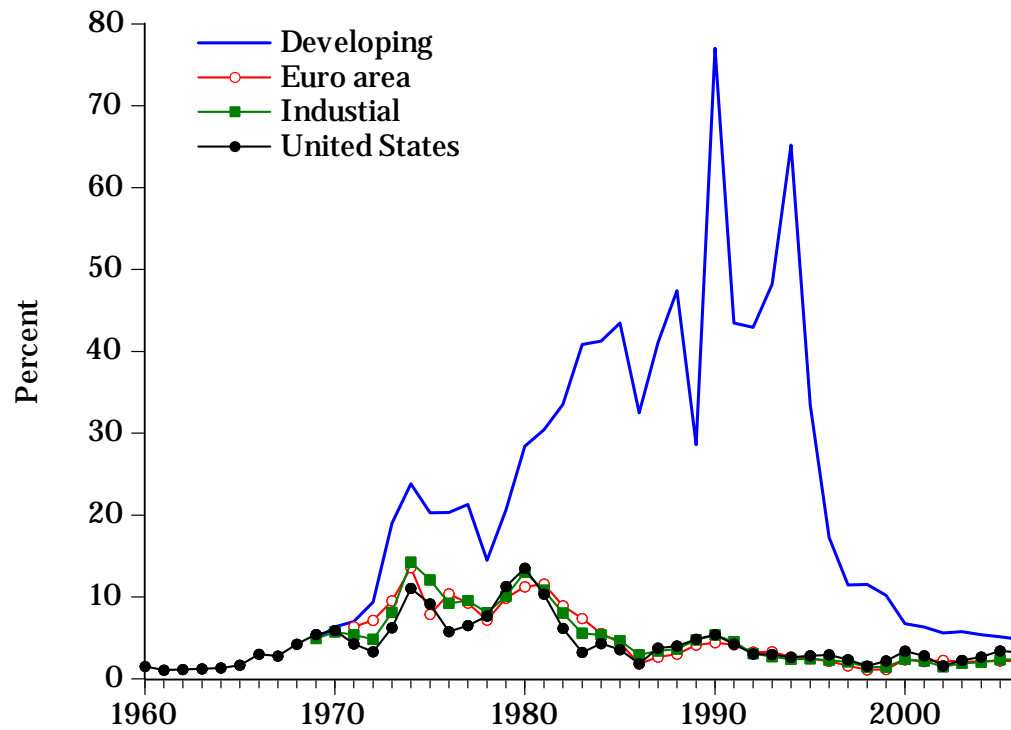# Low Inflation seems to have gone global

Inflation in Four Regions: 1990-2006

Data and Some Stylized Facts:

But is this really new or different from before?
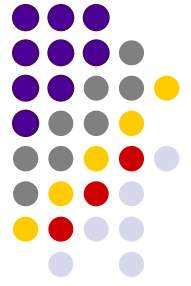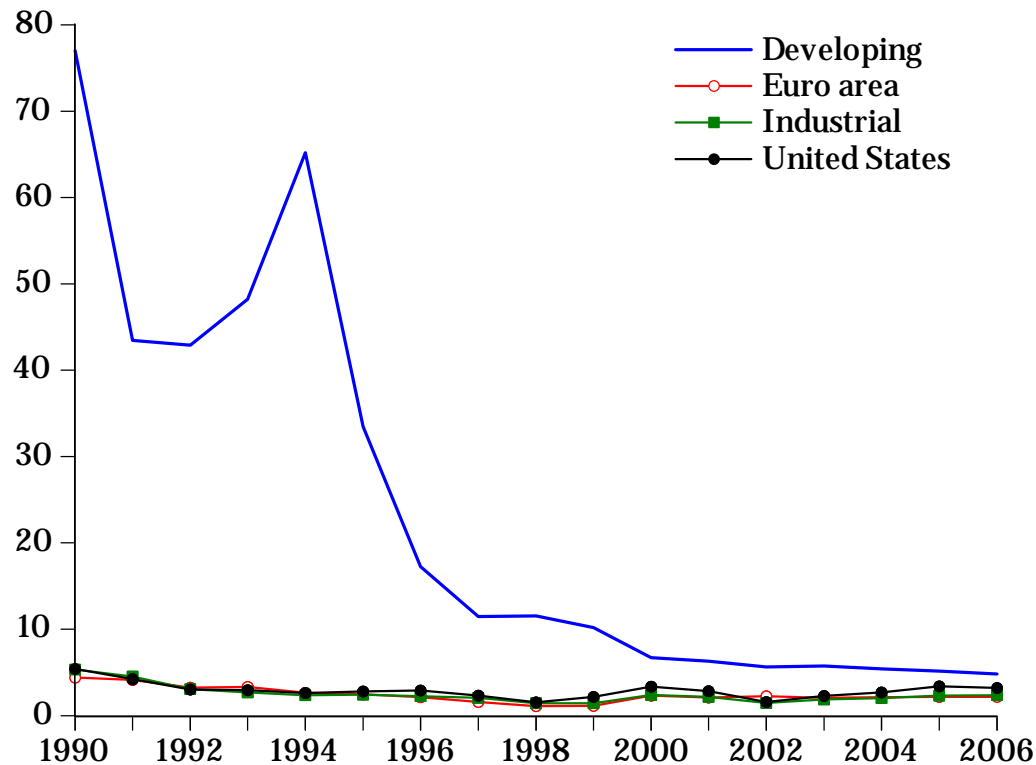
Inflation in Four Regions: 1960-2006

Data and Some Stylized Facts:

Something does happen in the 1990s

Inflation in Four Regions: 1990-2006

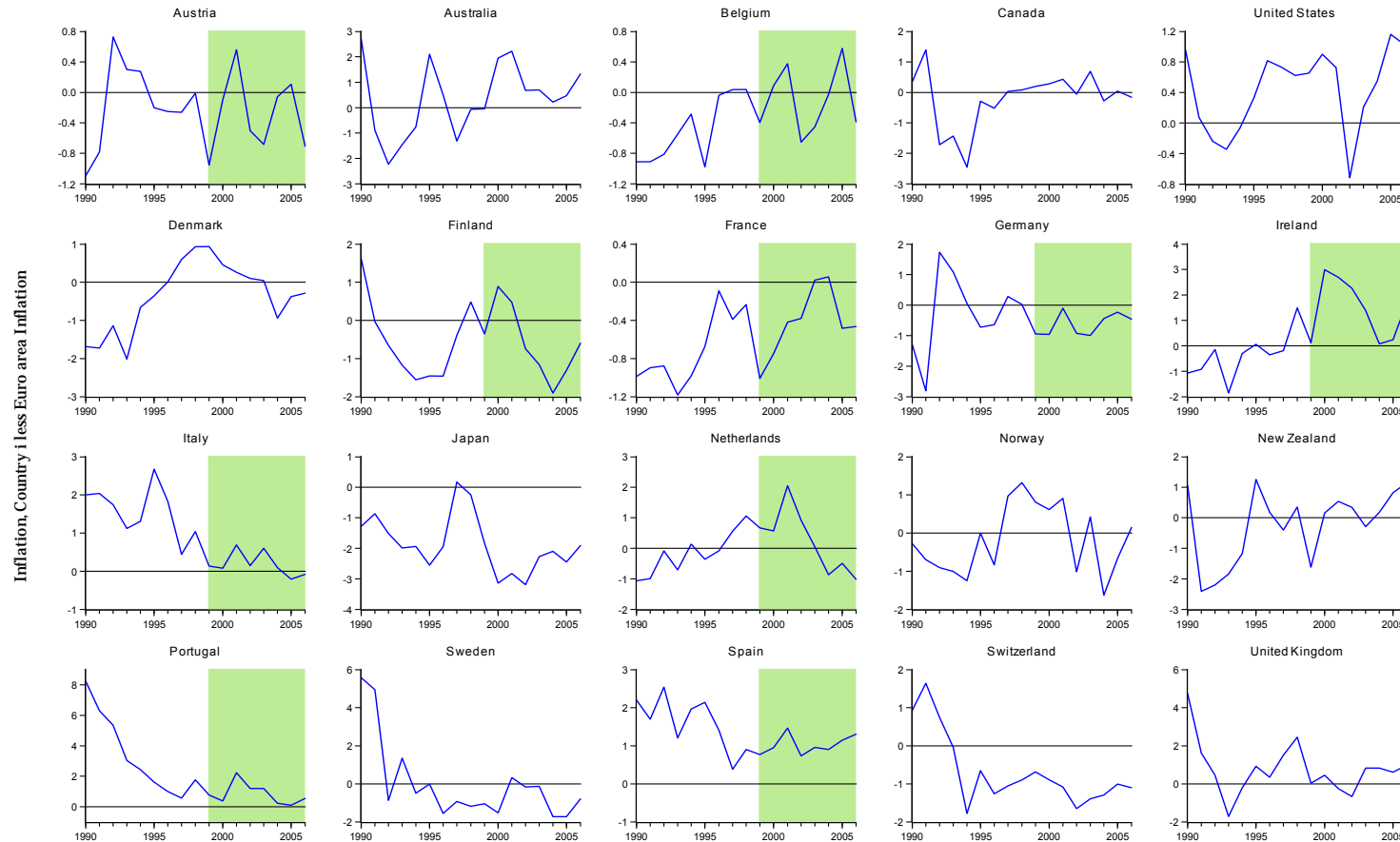# What do raw inflation differentials look like?

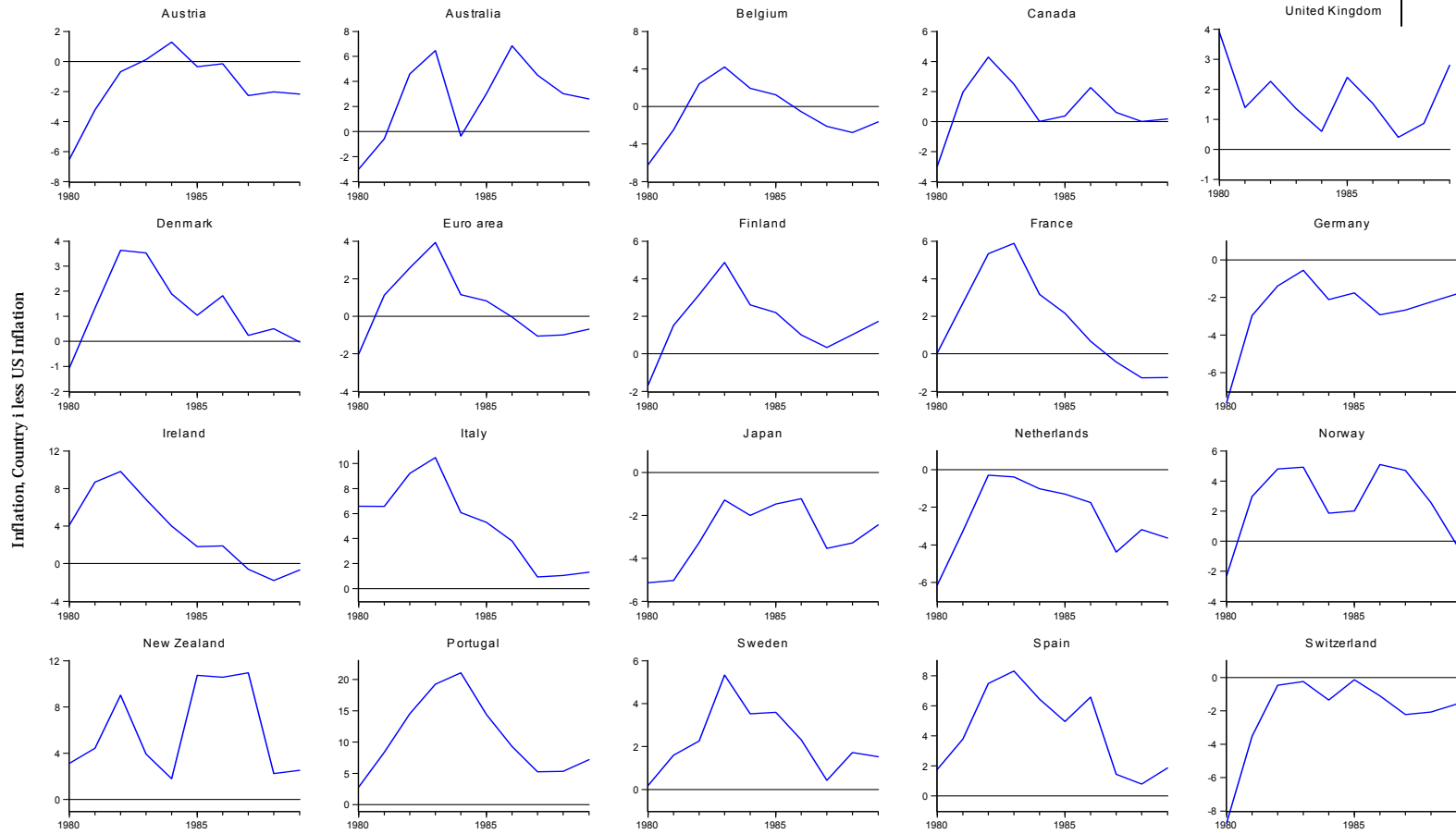

Inflation Differentials vis-a-vis Euro area: 1990-2006

What do raw inflation differentials look like?
What should we compare these to?

Inflation Differentials vis-a-vis US: 1980-1989

Measuring & Evaluating the Impact of Institutional Change in MP

- The Success of any Institutional Change Or Adoption of a Different MP Strategy Should Translate into Greater Credibility + <u>Anchoring of Inflation Expectations</u>
- One should therefore also consider the behavior of inflation forecast errors.
  - Attached graphs show different measures with +/- .5 % bands. Why?
  - After 10 years a .5% forecast error translates into a 5% cumulative error (approx.) so anchoring must be important
- Bottom Line: More diversity in inflation + MP performance among OECD than you might think
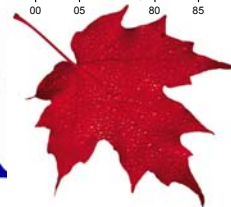
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Inflation Forecast Errors I

Inflation Forecast Errors Based on WEO Estimates: 1980-2006
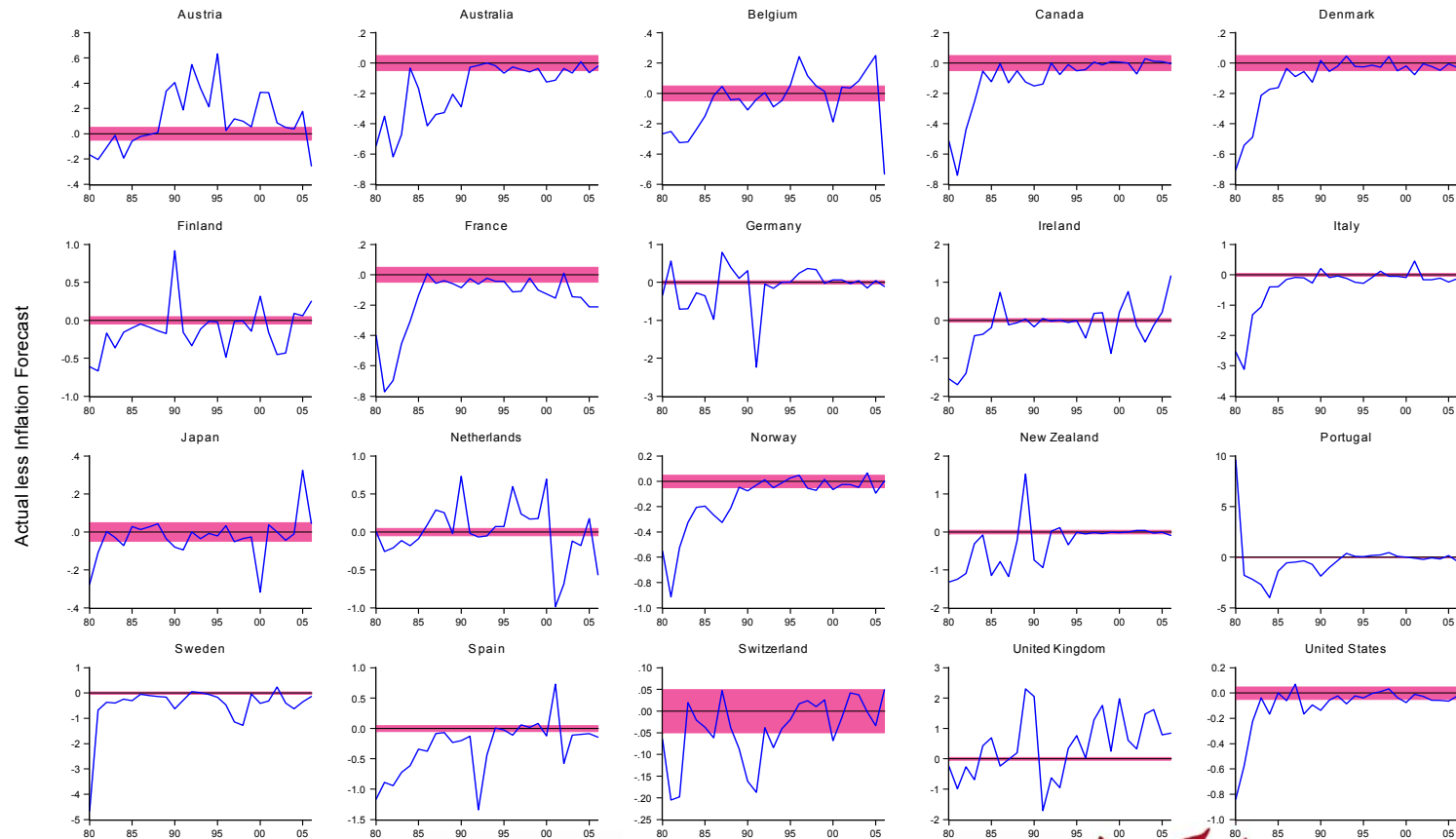
What can we say VERY tentatively so far?

- Economic distance matters for some but not all countries: greater distance reduces inflation differential
  - May be a period specific result as inflation performance superior to that of the US in many countries since the early 1990s;
  - May also indirectly capture other influences that have yet to be properly isolated
- More independent CB and transparent ones do have inflation rates closer to that of the US
- Inflation forecast errors may serve as a disciplining device by reducing the inflation differential
  - Story line: as cumulative forecast errors rise ► attempt to control inflation improve…conditional on greater transparency + accountability

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From CBI to Governance

- Existing emphasis of institutional structure of CB misplaced
  - Requires we think of governance principles rather than just CBI

Definitions

- 'Good' Governance means "the process required to build **trust** in the central bank" (World Bank, Knight, and others)

- $\therefore$ GOOD GOVERNANCE$\leftrightarrow$TRUST
  - If the public trusts the CB then this should translate into good monetary policy performance. This could be a *vector* but, in a cross-country setting, empirical evidence is not feasible
  - $\therefore$ a function of *inflation surprises*

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What Are the Elements of TRUST?
Elements that influence the "interior" environment

- *Appropriate allocation of ultimate responsibility for monetary policy*
- Joint recognition/decision about the choice of monetary policy strategy
- Procedures to resolve government-CB conflicts
- *Committee VS Single decision-making structure*
- *Scope of CB responsibilities*
- Appointment procedure(s) for senior central bankers
- Timeliness & Quality of Data disseminated to the public

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Are there Other Elements to Consider?
"External" factors that influence the CB

- YES: The Overall Political & Economic Environment
  - State of democracy: voting system, type of government
  - Corruption
  - Legal Origins
  - Neighbors
  - Exchange Rate Regime
  - Overall economic Performance

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The Institutional Variables

Code and Expected Sign	Explanation
obj = *Objective* **−**	The principal mandate or objective of the central bank: <u>CASE 1 - SINGLE</u> target consisting of: inflation exclusively (explicitly mentioned with/without a numerical target) or a monetary target of some kind, or an exchange rate target of some kind = 1. <u>CASE 2 – MULTIPLE OBJECTIVES</u> consisting of: inflation and some other economic variable = .5; other goals, namely monetary, financial stability as well as other objectives (e.g., economic growth/stability) = .1; other goals, namely exchange rate, financial stability, as well as other objectives (e.g., economic growth/stability). Source: Individual central banks through BIS's central bank hub, http://www.bis.org/cbanks.htm
aut = *Autonomy* **−**	Is the central bank independent/autonomous in making day to day monetary policy decisions? YES but this is NOT constitutionally mandated (i.e., not 'organic' or part of the country's Constitution) = .75; If the answer is is YES to the organic part of the previous case = 1; If the answer is that the central bank is not explicitly autonomous = 0; the central bank is NOT autonomous but its role/functions are defined in the country's Constitution = .50 Source: Individual central banks through BIS's central bank hub, http://www.bis.org/cbanks.htm

The Institutional Variables

dm = *Decision-Making* –	<u>Single</u> decision maker (e.g., Governor/President) = 0; Group or <u>Committee</u> decision making = 1 (if committee size is 6 or less); = .5 (if committee size is 6 or more). NOTE: decision making refers to MONETARY POLICY decisions and NOT decisions by an Executive or Senior Board (that may make appointments or other decisions). NOTE: Please record committee size, and whether Finance Minister (or a representative) is on the committee, or whether there are outsiders (i.e., individuals who do NOT work for the central banks such as industry officials or academics). Source: Individual central banks through BIS's central bank hub, http://www.bis.org/cbanks.htm
ap = *Appointments Procedure* –	Who appoints the CEO (i.e., Governor/President) of the central bank: President/Head of State of the country = .5; Minister of Finance, Head of Government (e.g., PM) = 1; Other (i.e., a committee of some sort defined in the central bank legislation) = 0. Source: Individual central banks through BIS's central bank hub, http://www.bis.org/cbanks.htm

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The Institutional Variables

numt = *Numerical Target* _	Is there are numerical target the central bank aims for, whether in the central bank law or as part of a publicly announced quantitative objective? If YES, and its inflation = 1; if YES and it's a monetary target = .25; if YES and its an exchange rate type objective = .50. If NO or there is NO target = 0. Source: Individual central banks through BIS's central bank hub, http://www.bis.org/cbanks.htm
sands = *Financial System Responsibility*	Is the central bank responsible for maintaining 'financial system stability', financial soundness', 'banking system soundness' or 'stability' and/or supervision of the financial/banking system? STABILITY only? YES = .5/ NO = .25 SUPERVISION only? YES = .25/ NO = .75 STABILITY and SUPERVISION = 0 Source: Individual central banks through BIS's central bank hub, http://www.bis.org/cbanks.htm
SDDS	Does the country in question adhere to the IMF's Special Data Dissemination Standards? YES =1; NO = 0 http://dbbs.imf.org/Applications/web/sddshome

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Trust

$$\left| cumsurp_i \right| = \left| \sum_{t=1991}^{2004} (\pi_t - \pi_{t|t-1}^{WEO}) \right|$$

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Analysis of Inflation Forecast Errors

| Country	No. of Observations	Mean (S.D.)	CORR (breaches, forecast errors)
Industrial			
Australia	50	-.28 (1.39)	.01
Canada	46	-.25 (1.06)	-.26
Korea	29	-.50 (1.58)	.54
New Zealand	61	-.07 (1.22)	-.30
Norway	18	-.41 (1.08)	0
Sweden	46	-1.01 (1.14)	.37
United Kingdom	51	-.19 (.81)	-.29
Emerging			
Brazil	25	2.06 (3.59)	.02
Chile	49	-.50 (1.06)	-.34
Colombia	24	-.72 (1.11)	.37
Mexico	26	-.72 (1.49)	-.60
Peru	14	.12 (.98)	-.45
South Africa	22	-.10 (3.13)	-.39
Czech R.	30	-1.69 (2.2)	-.68
Hungary	18	.02 (1.23)	-.57
Poland	27	-.78 (2.43)	-.13
Israel	42	-1.19 (2.51)	-.32
Philippines	14	.96 (2.07)	.49
Thailand	21	.26 (1.72)	.37
Indonesia	22	2.10 (4.24)	-.07
Non-IT			
United States	50	-.07 (.85)	-.14
Euro area	50	-.36 (.71)	-.23
Switzerland	46	-.62 (.79)	-.29
Japan	50	-.25 (.64)	-.22
Argentina	46	-1.34 (10.99)	-.68
Malaysia	47	-.87 (1.17)	0
Singapore	47	-.95 (1.10)	.40
Hong Kong	47	-2.51 (2.12)	-.86
Slovenia	39	-.10 (1.59)	0

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Choosing the Monetary Policy Strategy

- Evolution from ER based regimes to 'Monetarist' strategy to the current fashion of IT
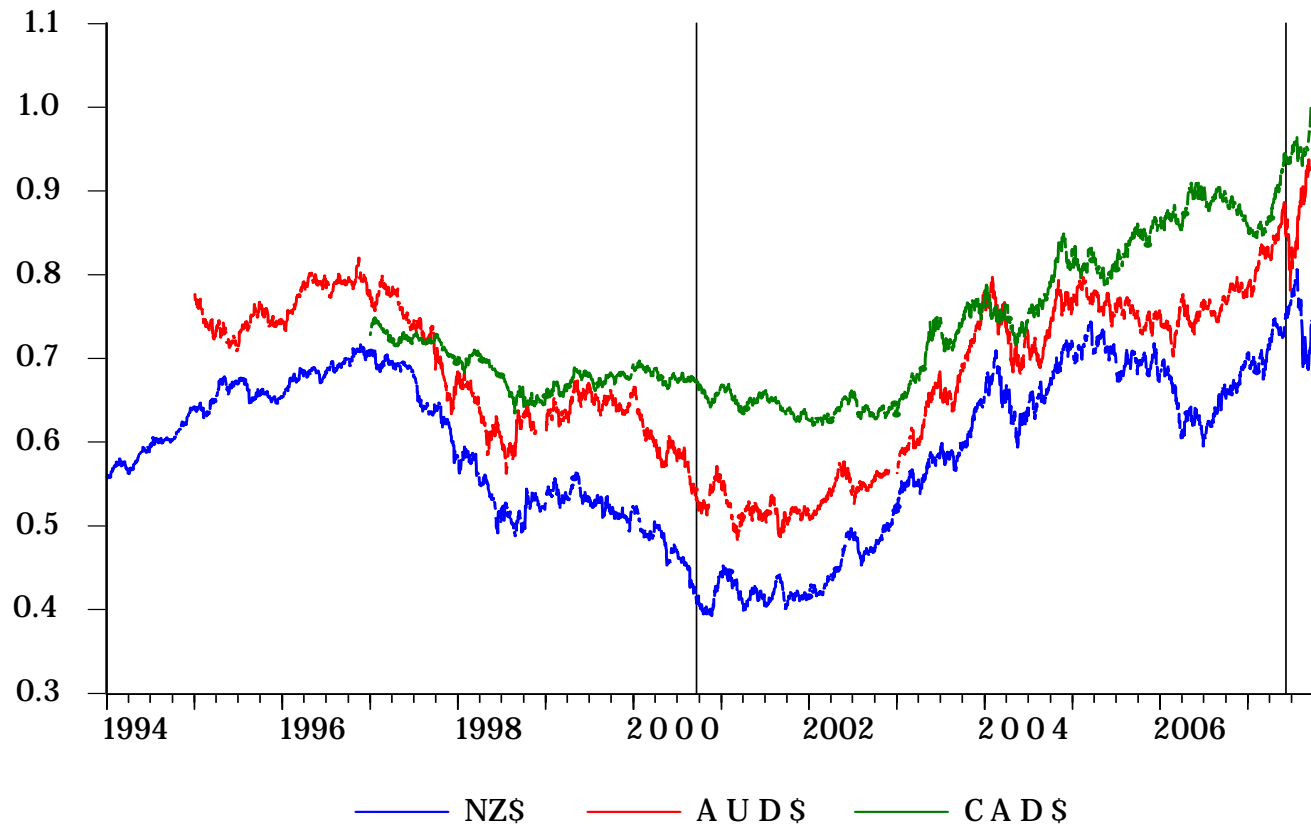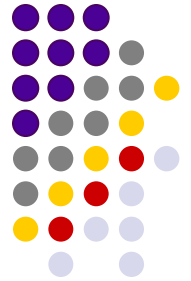 - Have we reached the Holy Grail of MP strategies?
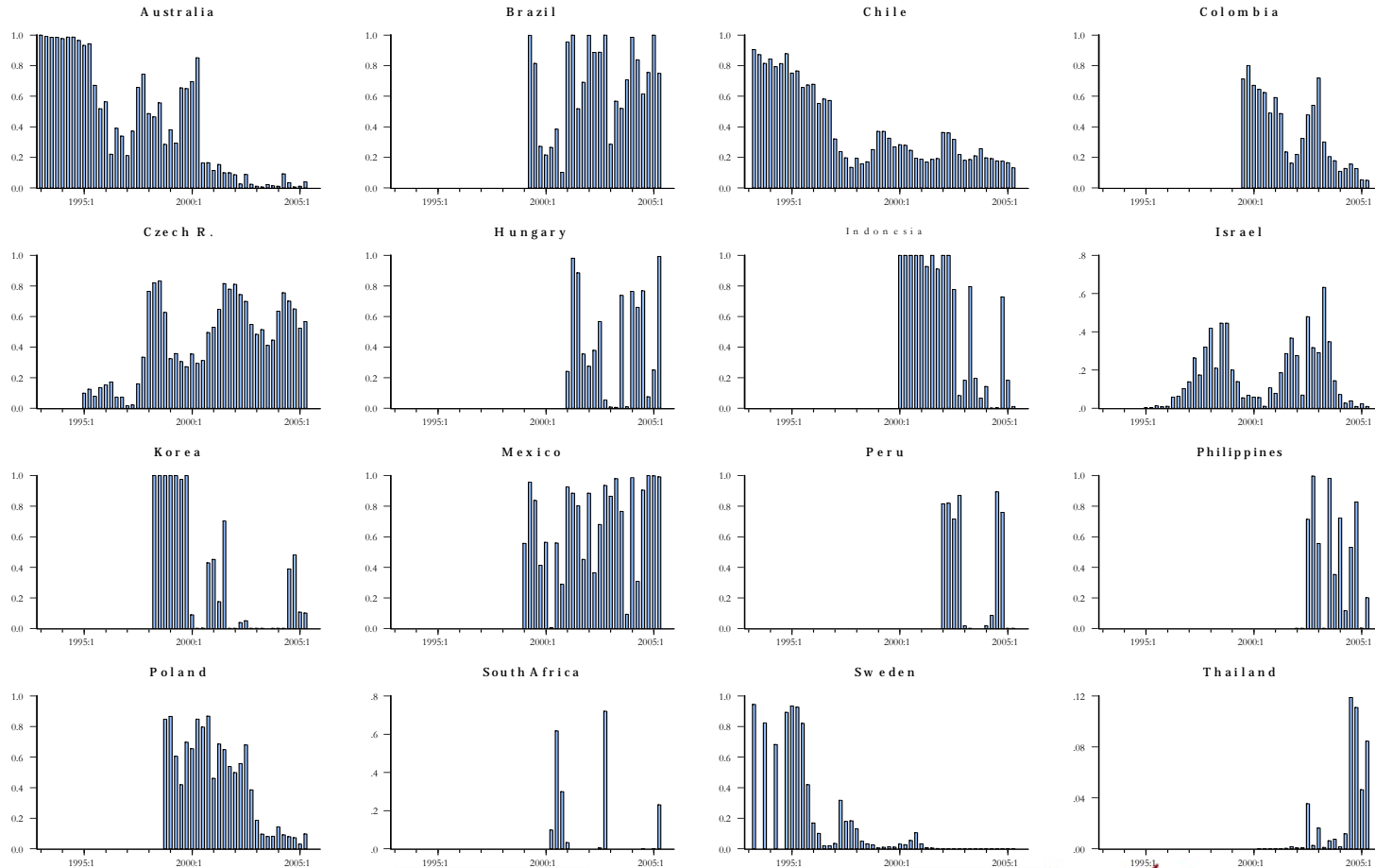
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# Are IT Fragile?

The Floating Question

NZ$ — AUD$ — CAD$

Country Key & ER

Country code	Country Name	Type of Exchange Rate Regime*	Type of Exchange Rate Regime**
HK	**Hong Kong**	**931-054: Currency board**	**93-04:5**
IN	Indonesia	931-972: Crawling peg 973-054: Floating	93:5,94-97:4,98:3,99:4,00:2,01:4,02-04:2
J	**Japan**	**931-054: Floating**	**93-04:2**
K	Korea	931-054: Crawling peg	93:4,94:5,95:3,96:5,97-98:4,99-04:5
MA	Malaysia	931-972: Crawling band 973-983: Floating 984-053: Pegged	93:3,94:5,95:2,96:4,97:2,98:4,99-04:5
PH	Philippines	931-952: Crawling band 953-972: Pegged 973-054: Managed float	93:5,94-95:3,96:5,97-03:2,04:4
SI	**Singapore**	**931-984: Crawling band** **991-053: Managed float**	**93:5,94-95:3,96:4,97-98:2,99-01:5,02:3,03-04:5**
TH	Thailand	931-972: Pegged 973-053: Managed float	93-95:4,96:1,97-98:4,99-04:2

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Inflation Targeting

Country	Adoption Date
CZ	**1998Q1**
H	**2001Q3**
PL	**1999Q1**
SL	NA
HK	NA
IN	NA
J	NA
K	**1998Q2**
MA	NA
PH	**2002Q1**
SI	NA
TH	**2000Q2**
AR	NA
BR	**1999Q2**
CH	**1999Q3**
MX	NA

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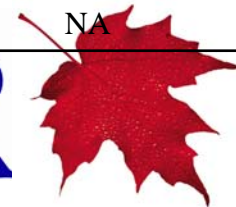
Economy/Region	Ineffective Interventions	Effective Interventions		Correlation	Reserves Growth (s.d.)
	% of total sample	Reversals (%)	Same Direction (%)	$(\Delta q, \Delta PICE)$	
Industrial	26	48.7	25.3	-.04	14.7 (14.7)
Asian 'Tigers'	5.6	59	35.4	-.13	15.5 (23.1)
Latin & S. America	6.9	35.1	58	-.03	22.2 (59.6)
Europe	4.6	56.9	38.5	-.06	21.3 (25.9)
HK	32.5	40.5	27	-.06	9.6 (11.9)
IN	0	77.8	22.2	-.59*	22.0 (34.8)
J	22.5	42.5	35	-.17	18.7 (12.6)
K	2.7	91.9	5.4	.63*	22.2 (20.4)
MA	0	55	45	.10	14.4 (23.9)
PH	17.5	52.5	30	-.07	14.4 (14.9)
SI	47.5	32.5	20	-.05	8.2 (4.6)
TH	21.6	56.8	21.6	.08	10.0 (9.2)
AR	0	57.9	42.1	.17	14.4 (29.8)
BR	5.6	38.9	55.5	.15	47.6 (105.6)
CH	0	29	81	.53*	7.1 (11.3)
MX	20	15	65	-.06	19.7 (40.0)
CZ	0	75.7	24.3	.10	19.4 (28.4)
H	19.4	63.9	16.7	.11	15.9 (22.7)
PL	0	75	25	.03	24.9 (29.0)
SL	0	15	85	-.41*	25.1 (22.3)

PICE: SUMMARY STATISTICS

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Financial System Stability: The New Frontier?

- No theory of the Determinants of Financial System Stability

- Greater policy concern over Finansial System stability as 'fight' against inflaiton has been won

  - Should CB stick to their knitting?

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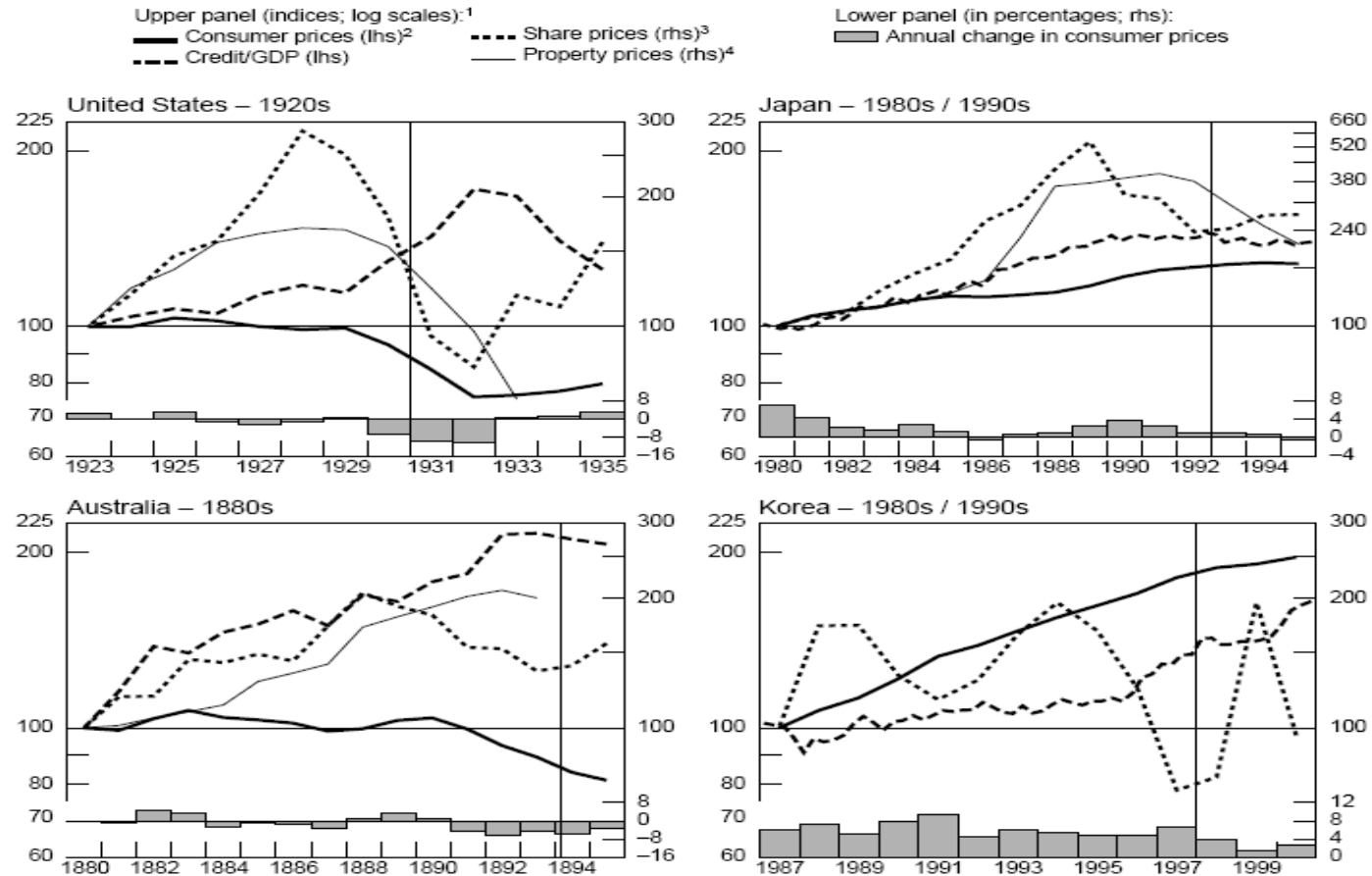# Financial System Stability: The New Frontier?

- New economic environment…
  - interaction between monetary and financial stability
  - major risk is not run-away inflation but financial imbalances
- …Calls for refinements to current policy frameworks
  - firmer long-term focus
  - greater symmetry between upswings and downswings
  - closer coordination between monetary and financial authorities

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Financial Imbalances

Graph 5

Low and stable inflation and financial instability: selected episodes

Upper panel (indices; log scales):[1]
— Consumer prices (lhs)[2]
- - - Credit/GDP (lhs)
···· Share prices (rhs)[3]
— Property prices (rhs)[4]

Lower panel (in percentages; rhs):
▭ Annual change in consumer prices

Central Bank Responsibilities
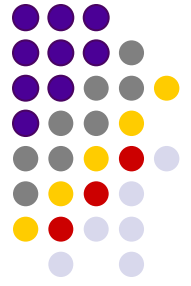
Stability and Supervision
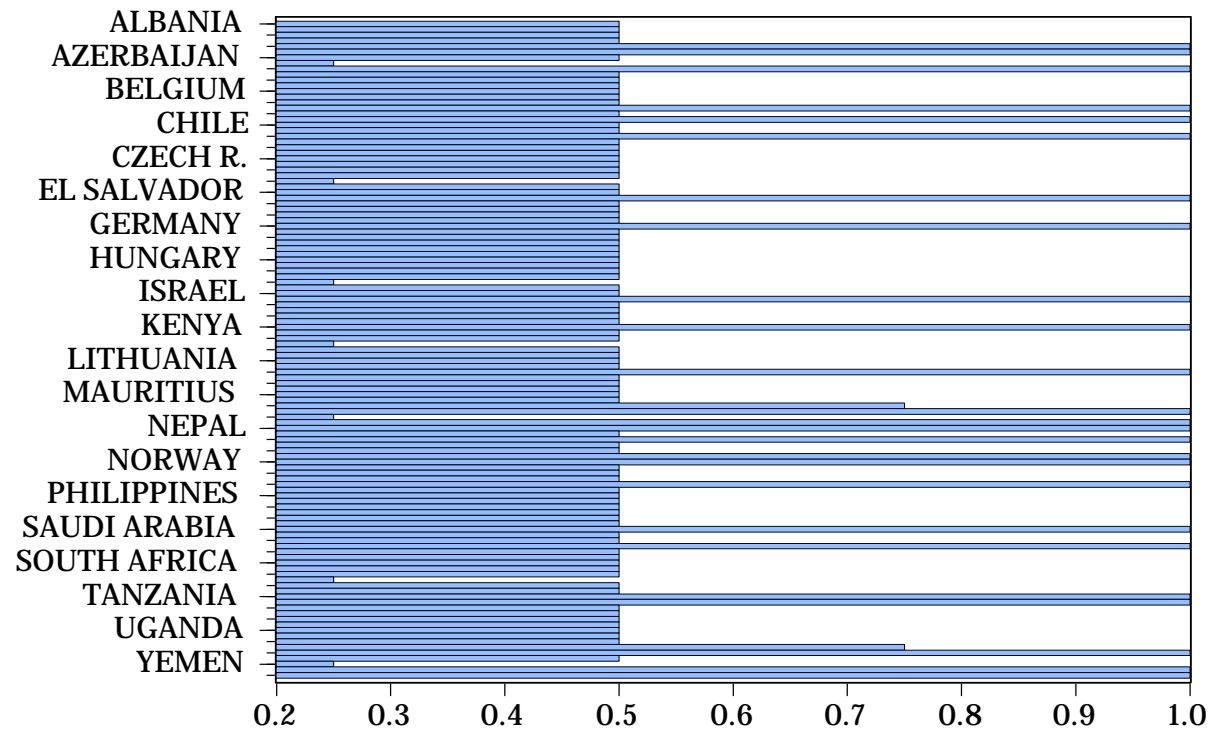
Conclusions

- What is now 'traditional' MP has yet to spread around the world
- What is considered 'traditional' in best practices defining the GOVT-CB has also yet to spread throughout the world
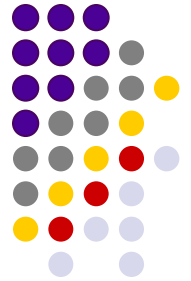 - BUT at least progress is rapid and in the right direction
- CB should downplay emphasis on FSS as a separate objective of MP
  - We have little in the way of analytics to guide us
    - Remember its scientific discovery that has contributed to IT's success
  - There is the danger of having too few instruments relative to the number of goals…an old problem
    - Besides the issues are GLOBAL while CB want to treat them as partly to largely domestic.
    - Free movement of capital is simply inconsistent with purely domestic FSS goals

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Further Reading

- "Inflation Targeting Around the World" (June 2007)
- "No Single Central Bank Independence Regime is Right for All Countries" (October 2007)
- "Is Sterilized Intervention Effective? Some New International Evidence" (with Diana Weymark; December 2006)
- "The Quality of Monetary Policy and Inflation Performance: New International Evidence" (with D. Mayes, M. Bohl; in progress 2007)
- Claudio Borio (2006) "Monetary and Prudential Policies at a Cross-Road? New Challenges in the New Century", presented at the workshop on the Architecture of Financial System Stability, Capri, Italy.

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