Integration, growth, and policy design: lessons for EU accession countries

- **Ongoing challenge for all:**
  - **Monetary & fiscal discipline**
  - **Sustainable supply side growth**
- **Institutions affect choice of macro regime**
- **Regime affects institutional reform**
- **Need right pillars for monetary policy**

Simultaneous policy failures

- **Commitment problems in:**
  - **monetary, fiscal, structural**
- **Fixing monetary alone not optimal**
- **Integration a chance to make progress on fiscal and structural**

Post 1990 : Europe & Latin America

- Disinflation largely successful
- Episodes of monetary reversal
  - causes often fiscal indiscipline
- Growth
  - most reliable when macro discipline
  - goal of EU accession a huge help

Formal model

- Poor country has low tax capacity T
- Taxes above T distort output
- Costly structural adjustment raises T
- Baseline model takes T as fixed
- For simplicity, make coefficients unity

(1) $y = \pi^u - \tau + \varepsilon$ output equation

$\tau = t^e - T$ tax distortion

(2) $G = t + \pi$ budget financing

(3) $L = \pi^2 + y^2 + g^2$ loss function

$g = G - G^*$ g defined

(4) $g = \tau - h + \pi$ budget

(5) $h = G^* - t^+ > 0$ inherited structure

- **h indexes remaining transition ($h^* = 0$)**
- **monetary policy more flexible than fiscal**
- **Hence timing:**

  h fixed at start of period

  Then private expectations formed

  Then fiscal policy set

  Then shock ε observed

  Then monetary policy & inflation

First best (conditional on h)

Expected policy:

τ, π^e **minimise** $[\pi^{e\,2} + \tau^2 + (\tau - h + \pi^e)^2]$

- $h/3 = \pi^e = \tau$ $\qquad g^e = y^e = -h/3$

High inflation & low output BOTH caused by poor structural inheritance (large h)

Accommodation of shocks:

Assume $\pi^u = A\varepsilon$ & $g^u = \pi^u$

A minimises $\sigma^2[A^2 + (1+A)^2 + A^2]$

$\pi^u = g^u = -\varepsilon / 3$, $y^u = 2\varepsilon / 3$ (6)

Optimally exploits informational advantage of flexible monetary policy

Monetary discretion

- **Monetary policy chooses inflation**

  taking expectations as given

  but knowing π^u affects g^u

- **Everyone anticipates this,**

  hence deduce $\pi^e(\tau, h)$

- **Fiscal policy then chooses τ**

(a) π^u rule still best: Same loss from shocks

□

(b) Comparing expected levels

	Ist best	Discretion
τ	$h / 3$	$h / 4$
π^e	$h / 3$	$h / 2$
y^e	$-h / 3$	$- h / 4$
g^e	$-h / 3$	$- h / 4$
$L(\pi^e, y^e, g^e)$	$(3/9)h^2$	$(3/8)\ h^2$

Delegating monetary policy

- **Rogoff: 'conservative central banker'**

  Lower π^e but too little shock accommodation

- **Svensson** **Delegate inflation target π^***

- **Loss functions**
- **Central bank** $[\pi - \pi^*]^2 + k\, y^2$
- **Government** $\pi^2 + y^2 + g^2$

Choose fiscal policy knowing how central bank then behaves

3 key results

- **Policy design [k= 1/2 , $\pi^* = h/6$] decentralises the first best**

- **π^* offsets the inflation bias, but still need conservative central bank , now to offset fiscal externality**

- **Euroisation at $\pi = 0$ inferior to domestic monetary discretion in this model**

So why join EMU ?

- **Also affects trade, growth, and potential output (Frankel & Rose)**
- **Currency unions affect fiscal discipline**
  - ***Need fiscal commitment problems***
- **Currency unions affect reform**
  - ***Also need reform commitment problems***

Endogenising structural adjustment

- Benefit of lower **h** (higher tax capacity):
  higher **y**, lower π, higher **g**

- Assume $V^e = L^e + (h-h_{-1})^2 + \phi\,(V_{+1})^e$

- Solve for optimal rate of reform $h = \rho\, h_{-1}$

- Less discounting (larger ϕ) makes adjustment more rapid

- Costs same , benefits bigger

Distortions & structural adjustment

- **Larger distortions raise benefit of reform**
- **Hence monetary discretion speeds structural adjustment**
- **Monetary union might slow growth**
- **So far only monetary failures: now need to allow fiscal and structural too**

Fiscal failures

- Fiscal policy chosen after private expectations but before shock and monetary response

- output equation $y = \pi^u - \tau^e + \varepsilon$

  surprise taxes are lump sum taxes

- Hence choose lump sum taxes to achieve $g^e = 0$

- Private sector anticipates this

- Monetary commitment alone may make things worse – first best needs fiscal commitment too

Fiscal and reform failures

- Suppose ordering is reform, fiscal, monetary
- Suppose dollarise or join tough monetary union (exogenous low π)
- Now no contemporaneous benefit to reform:

  [π fixed, and fiscal always sets $g^e = 0$]
- Surprise reform only raises future output
- If sufficiently myopic, growth stagnates
- 3 commitment failures + 1 externality

Lessons for EU entrants

- **Inflation targeting the right ECB pillar**
- **Some kind of SGP is required**
  - ***But cyclically adjusted is better***
- **Structural reform still matters a lot**
  - ***Here EU fatigue is not helpful***
- **Current regimes fine for ERM2**
  - ***Provided they avoid exchange rate crises***