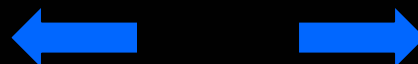




# Globalisation and monetary policy

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Frankfurt, 1 March 2007



## Introduction

★ Globalisation process **accelerated** in the last two decades, mainly for two reasons:

- IT technology boom, reduced costs of transportation
- Opening up of emerging economies (China, India and the NMS) [[go](#)]

## Introduction

Since the early nineties both the **level** and **volatility** of **global inflation** declined [[go](#)]

- Several factors are suspected behind (“good luck”, technological progress, more prudent macro-policies and structural reforms)
- What impact globalisation had on inflation in recent years?

# Content

## 1. What does theory and empirics tell us about the link between **globalisation** and **inflation**?

- Possible channels
- Empirical evidence

## 2. What are the implications for **monetary policy**?

- Should central banks commit to maintaining price stability?
- Can central banks stabilise domestic inflation?
- How should monetary policy react to the effects of globalisation on inflation?

## Channels via which globalisation affects inflation

1. Increased trade openness and stronger international competition [[go](#)]
2. Higher international competition in labour markets and ensuing wage moderation [[go](#)]
3. Reduced incentives in monetary policy-makers in more open economies to engineer inflationary shocks
4. Upward pressure on productivity growth
5. Stronger global demand for energy and raw materials

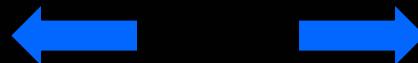
Conclusion of empirical evidence: **disinflationary impact**

## Implications for Monetary Policy



In a global economic environment,

- **Is price stability still a relevant** objective for central banks?
- **Can central banks stabilise** domestic inflation?
- **How should monetary policy react** to the effects of globalisation on inflation and asset prices?



## The Commitment to Price Stability

Inflation in the long-run is a monetary phenomenon,  
also in a global economy

**Well-anchored inflation expectations** are essential  
during the globalisation process:

- Inflation shocks are easily transmitted between countries
- Relative prices are changing dynamically

Example: Oil-price shock

## The Commitment to Price Stability

### An oil-price shock **under commitment** to price stability

- Entrepreneurs identify a shock to the relative price of energy
- Limited pass-through to consumer prices (2<sup>nd</sup>-round effects), against the risk of an erosion in competitiveness. Ensuing implications
  - Fall in price mark-ups in the oil-consuming sector
  - Fall in demand for oil
  - Fall in output and employment
- “Creative destruction” of the least competitive business in the oil-consuming sector
- Output and employment reallocated away from the oil-intensive sectors

## The Commitment to Price Stability

### Without a credible commitment to price stability

- Entrepreneurs may mistakenly identify the shock as an aggregate price increase
- They pass the increase in input prices to consumers
  - Consumer price inflation jumps, validating the mistake
- Inflation expectations upsurge
  - Unions demand higher real wages to keep purchasing power, expecting additional consumer-price increases
  - Nominal rates swell across the maturity spectrum
- Higher production costs for all firms: energy, wages and financing costs
- Stagflation: High inflation and low growth in output and employment [Theoretical rarity? The 1970s experience]

## The Ability to Preserve Price Stability

★ A commitment to maintaining **price stability** is crucial in a global economy

**But can central banks honour this commitment under globalisation?**

Two complementary perspectives

- The transmission mechanisms
- The Phillips Curve

## The Ability to Preserve Price Stability

Some monetary-policy **transmission channels** may be affected by globalisation:

- Muted response of longer-term rates
  - Weaker interest-rate channel
- Increased international flows
  - Stronger exchange-rate channel
- Increased access to financial markets
  - Stronger (households') wealth channel, and
  - Stronger (firms') balance-sheet channel

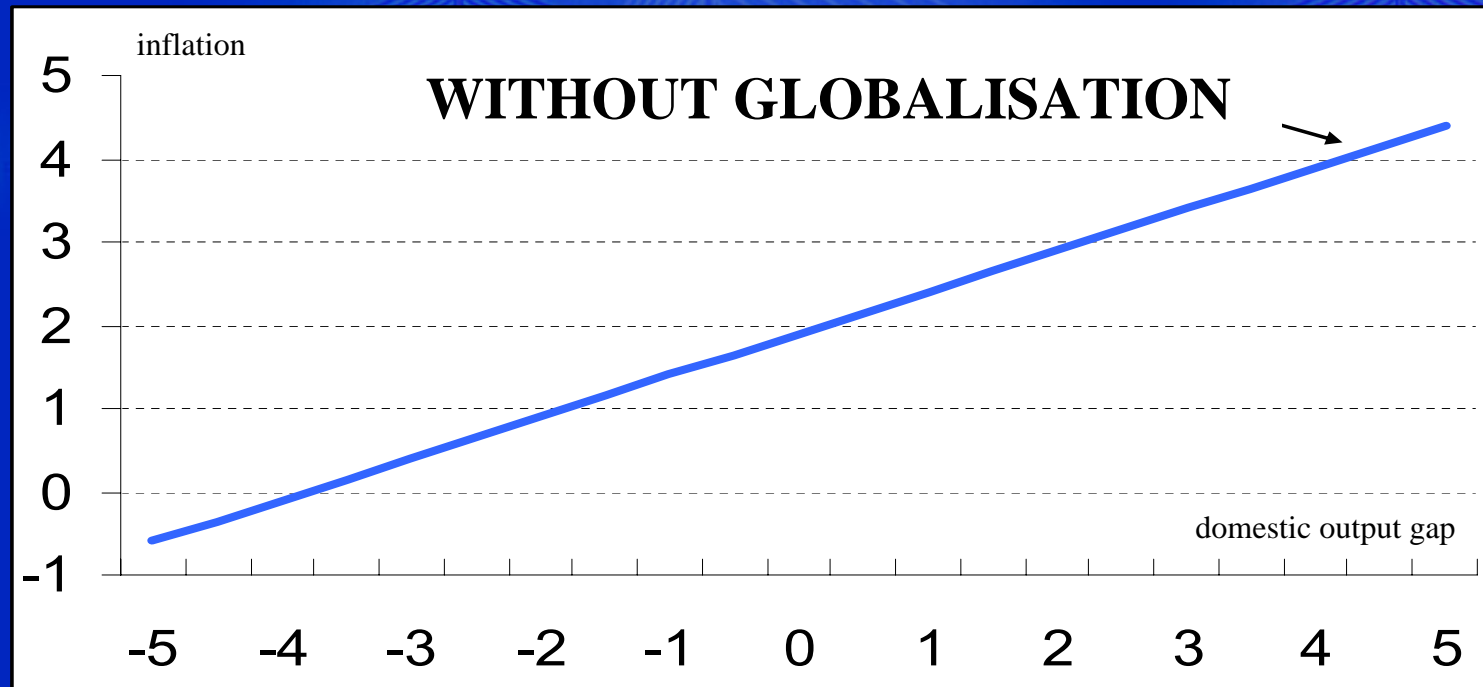
## The Ability to Preserve Price Stability

★ Thus **central banks can honour their commitment** to price stability under globalisation upon recognition that

- The relative importance of transmission mechanisms may be changing
- More research is need

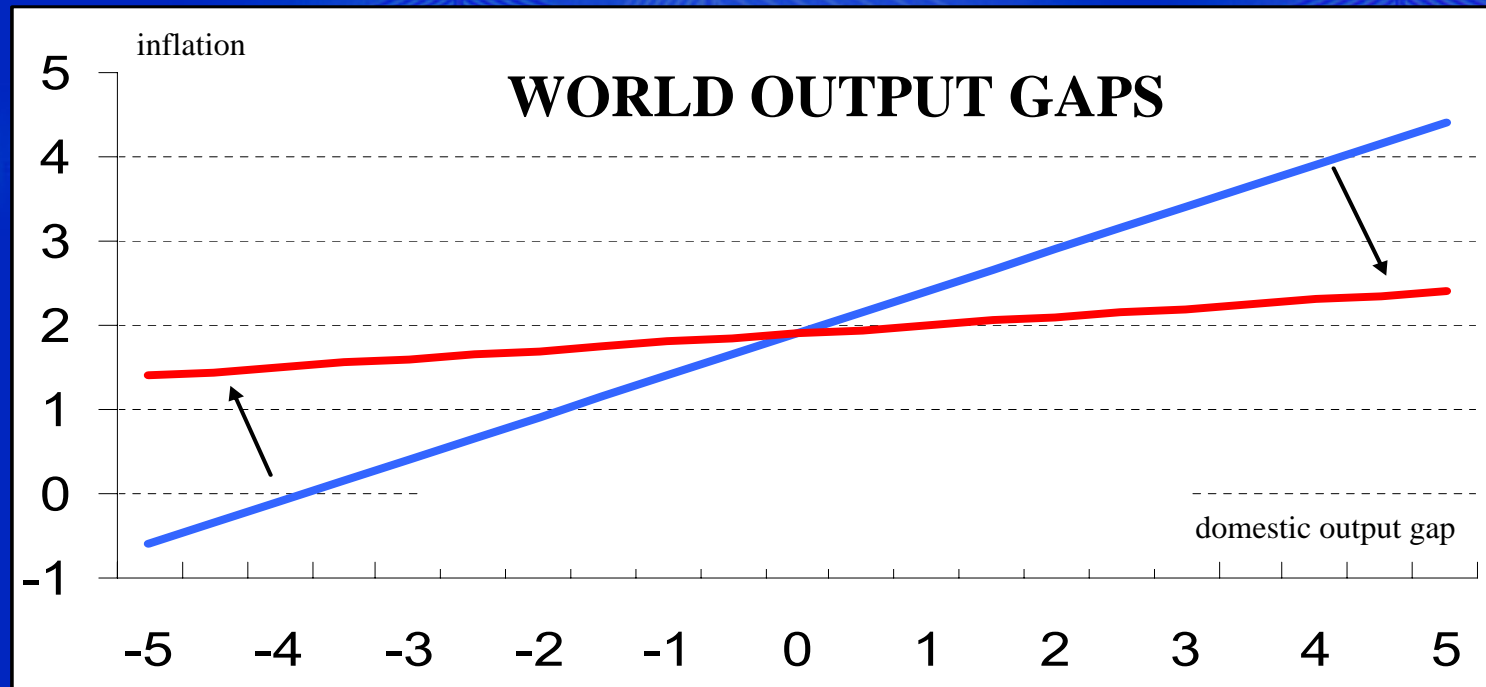
## The Ability to Preserve Price Stability

The Phillips curve may also be affected...

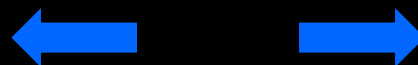


# The Ability to Preserve Price Stability

... by increasingly relevant global demand ...

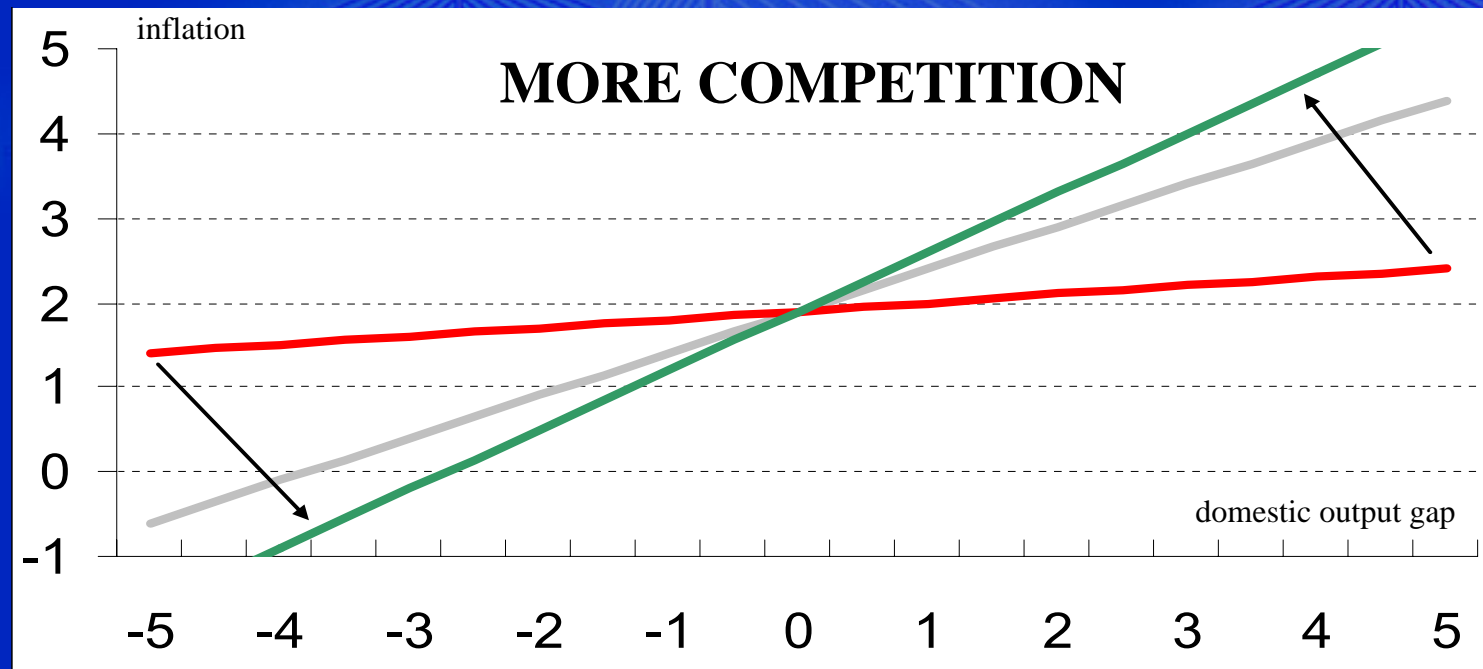


→ Weaker effect of monetary policy on inflation

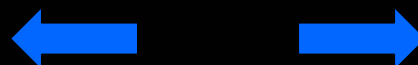


# The Ability to Preserve Price Stability

... by more competition in domestic markets ...

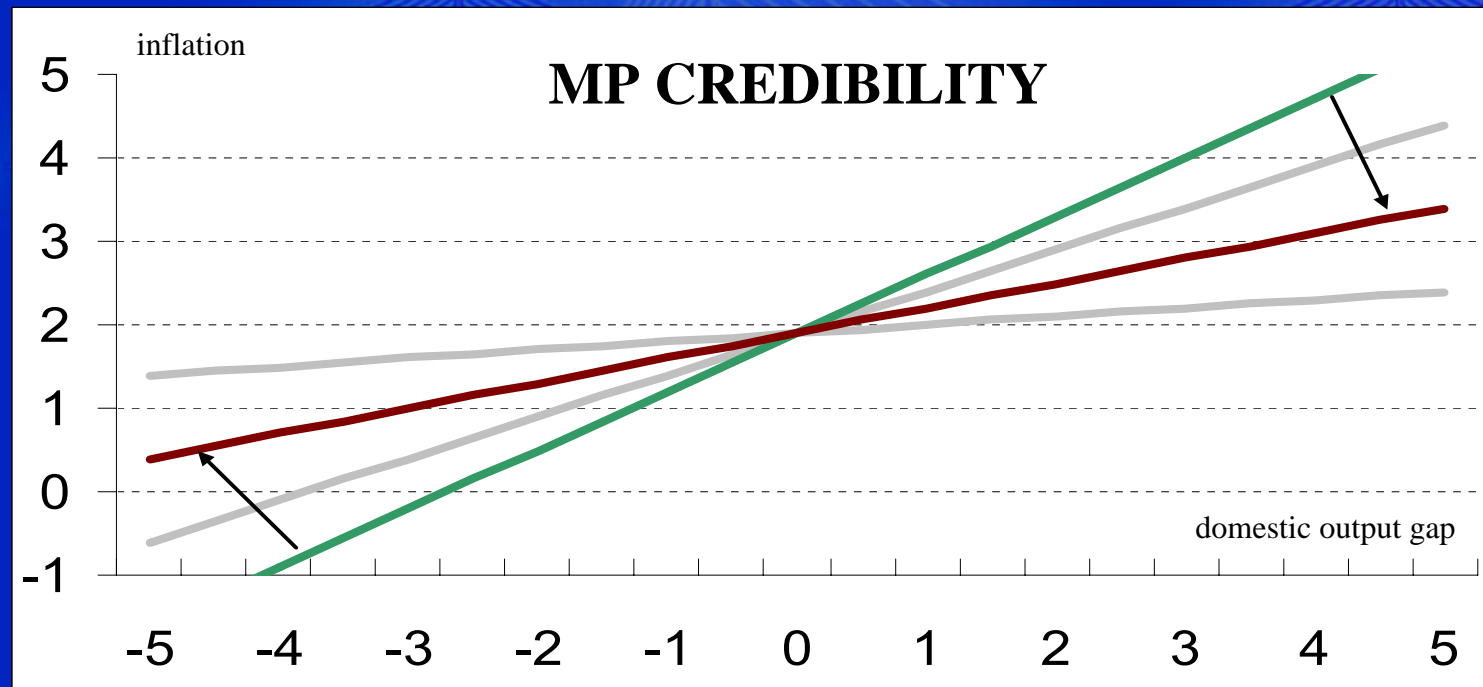


→ Stronger effect of monetary policy on inflation



# The Ability to Preserve Price Stability

... and also by stronger monetary-policy credibility



→ Weaker effect of MP on inflation? NO

## The Ability to Preserve Price Stability

★ The analysis of the Phillips curve confirms that **central banks can honour their commitment to price stability** under globalisation. However:

- The uncertainty on the size of the sacrifice ratio has increased...
- ... albeit the central bank's leverage would not decrease in the face of flatter Phillips curve resulting from higher credibility
- More research is need

## Monetary Policy Responses to the Effects of Globalisation

★ Globalisation may affect inflation for two **reasons**:

- The economy is gradually moving from an equilibrium without globalisation to an **equilibrium** with globalisation
- But globalisation may also contribute to create **disequilibria**

## Monetary Policy Responses to the Effects of Globalisation

Globalisation may lead the economy to a **new equilibrium**

- With a different set of relative prices
- The **transition** may affect inflation

Examples:

- Increase in the price of oil
- Fall in mark-ups in the tradable sector

## Monetary Policy Responses to the Effects of Globalisation

### Example: Increase in the relative price of oil

- Strong demand from fast-growing emerging economies for a limited endowment of oil
- Upward pressure on inflation
- Monetary policy response:
  - No mechanistic reaction to first-round effects on inflation
    - Otherwise, the rest of the economy would suffer from inefficiently low price increases, or even deflation
  - Tighter policy if significant risks of second-round effects

## Monetary Policy Responses to the Effects of Globalisation

### Example: Fall in the relative price of tradables

- More competition from foreign producers forces domestic producers of tradables to cut mark-ups
- Downward pressure on inflation
- Monetary policy response:
  - No mechanistic reaction to first-round effects on inflation
    - Otherwise, the welfare gains from a move to a more efficient economy could be delayed
  - Readiness to loosen policy if significant risks of second-round effects (i.e. widespread price cuts leading inflation expectations to levels below the definition of price stability)

## Monetary Policy Responses to the Effects of Globalisation

Globalisation may also push the economy **away from its equilibrium path** due to

- Structural rigidities

Example:

- Gains in productivity but sluggish demand

## Monetary Policy Responses to the Effects of Globalisation

### Gains in productivity but sluggish demand:

- Globalisation increases competition
- More incentives for innovation and R&D to enhance productivity, raising potential output
- If real rigidities make domestic demand sluggish, a negative output gap may appear.
  - Downward pressures on domestic inflation
- Monetary policy response:
  - In the short to medium term, decrease the policy rate to mitigate first-round effects
  - In the medium to long term, tighter policy in line with the (possibly higher) rate of productivity growth

## Monetary Policy Responses to the Effects of Globalisation

Summing up: **Inflation may be affected by globalisation** because

- Globalisation leads the economy to a **new equilibrium**
  - MP response: Mitigate second-round effects
- Globalisation may also contribute to move the economy **away from the new equilibrium**
  - MP response: Mitigate first-round effects
- **Difficult to disentangle** in real time
  - Monitor all available indicators

## Concluding remarks

★ Theory suggests that there are **several channels** through which globalisation may have an impact on inflation...

... but

- the empirical evidence is scarce
- the size of the impact is uncertain

Possible explanations:

- The impact of globalisation is too recent
- Too complex
- Tools are inadequate

## Concluding remarks

★ **Should central banks commit to maintaining price stability?**

- Yes

**Can central banks stabilise domestic inflation?**

- Yes

**How should monetary policy react to the effects of globalisation on inflation?**

- Depends on the assessment (transition to new equilibrium vs. movements away from equilibrium)



## Concluding remarks

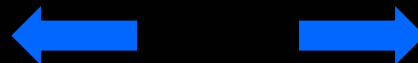


Our role and responsibilities as central bankers  
are unchanged...

...Admittedly, though, globalisation is making  
our work more demanding

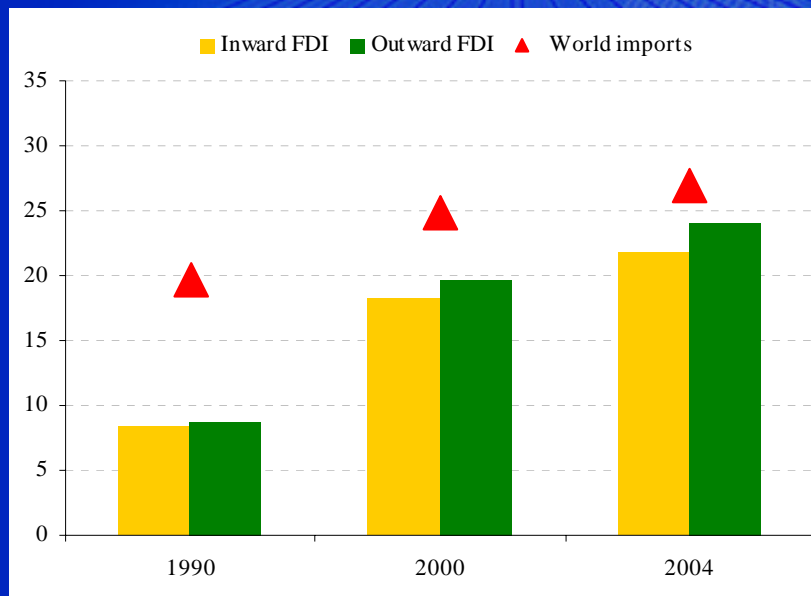
## Concluding remarks

Thank you for your attention!



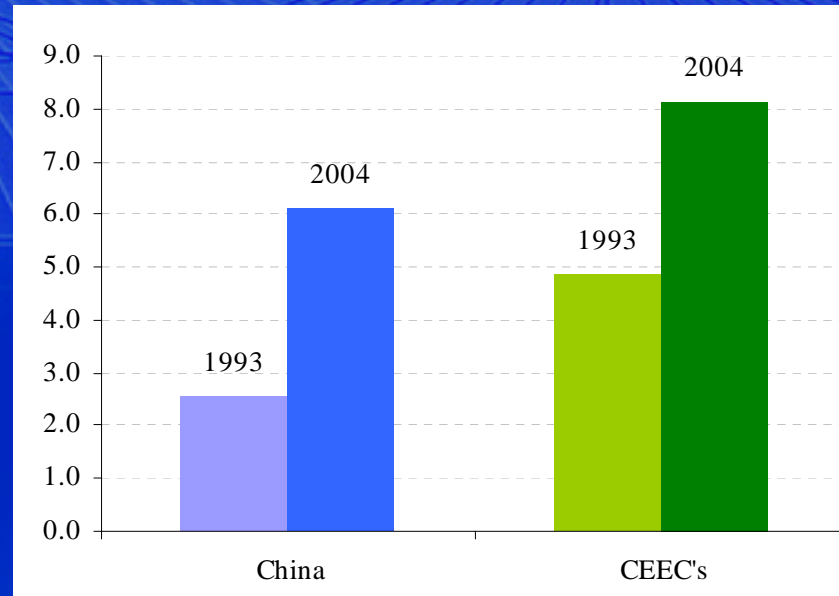
# Globalisation and the opening up of emerging countries

**Chart 1. World imports and global stock of inward and outward FDI**  
(as percent of GDP)



Source: UNCTAD, WIR 2005, 2006

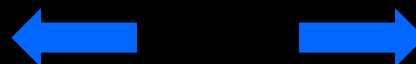
**Chart 2. Integration of China and the CEEC's into world trade**  
(Exports + imports by country / region divided by world exports + imports, in percent)



Source: CHELEM, ECB calculations

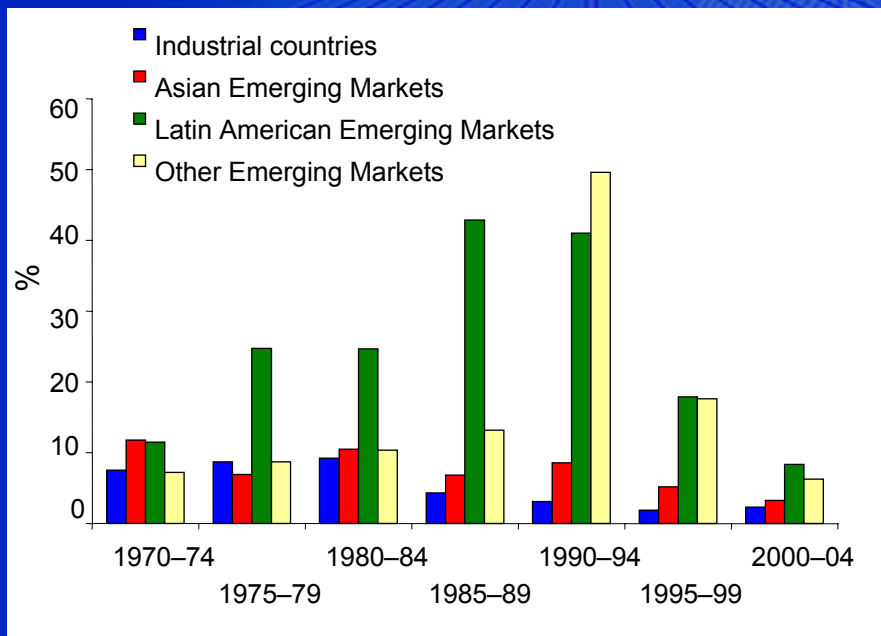
Note: Trade flows are in values and only include goods

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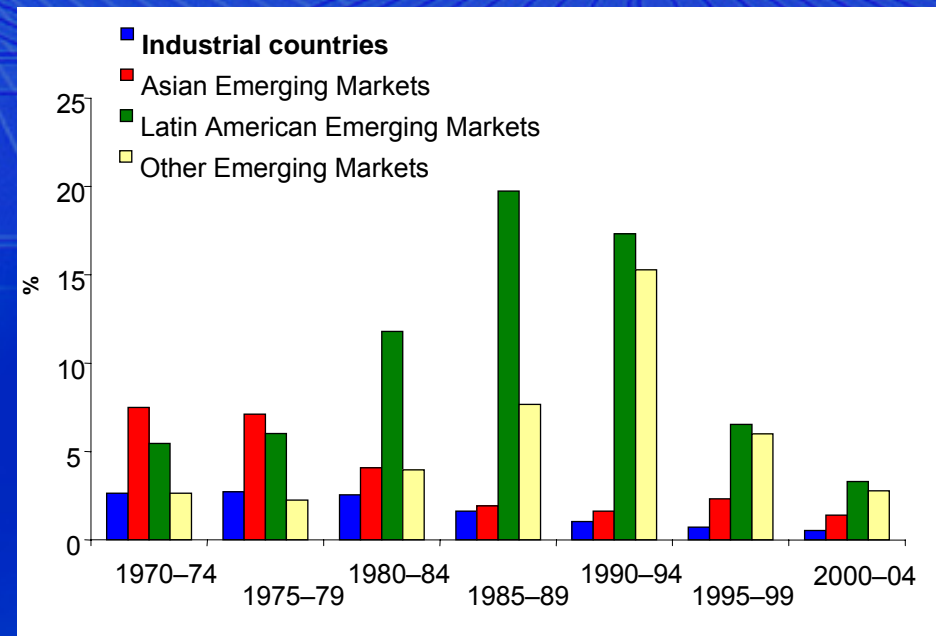
# Global disinflation

## Chart 3. Global inflation level (median CPI inflation)



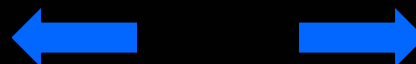
Source: IMF World Economic Outlook., April 2006

## Chart 4. Inflation volatility (median standard deviation of CPI inflation; a 5-year window)



Source: IMF World Economic Outlook., April 2006

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## Import price channel – empirical findings

### Table 1. The impact of import prices on domestic prices

Author	Approach	Trade country	Reference country	Period	Estimated impact (actual annual average)
<i>The impact of increased imports from low cost countries on import prices</i>					
ECB (2006) <sup>1</sup>	Accounting identity based on Kamin et. al (2004)	Low cost countries (15)	Euro area	1996-2005	-2 pp.
<i>The impact of increased imports from low cost countries on domestic prices</i>					
OECD (2006) <sup>2</sup>	Accounting identity	China	Euro area	1996-2000 2001-2005	0.0 pp. -0.2 pp
IMF (2006) <sup>4</sup>	Augmented Phillips curve	Total imports	Advanced economies (7) US	1998-1999	-0.5 pp. -1 pp.
IMF (2006) <sup>4</sup>	Sectoral panel, manufacturing	Total imports	Industrial countries	1978-2003	-0.3 pp.
Chen et. al. (2004) <sup>5</sup>	Sectoral panel, manufacturing	Total imports	EU countries	1988-2000	-0.25 - (-1) pp.
<i>The impact of increased commodity prices on domestic prices</i>					
OECD (2006) <sup>2</sup>	Simulation of a 40% lower oil price scenario			2000-2005	-0.1 pp.

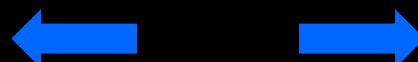
Sources: 1 ECB Box entitled ' Effects of the rising trade integration of low-cost countries on euro area import prices', MB August, 2006

2 OECD (2006), "Globalisation and inflation in the OECD economies", ECO/CPE/WPI(2006)14

4 IMF (2006) 'How has globalisation affected inflation?', World Economic Outlook, Chapter III, April

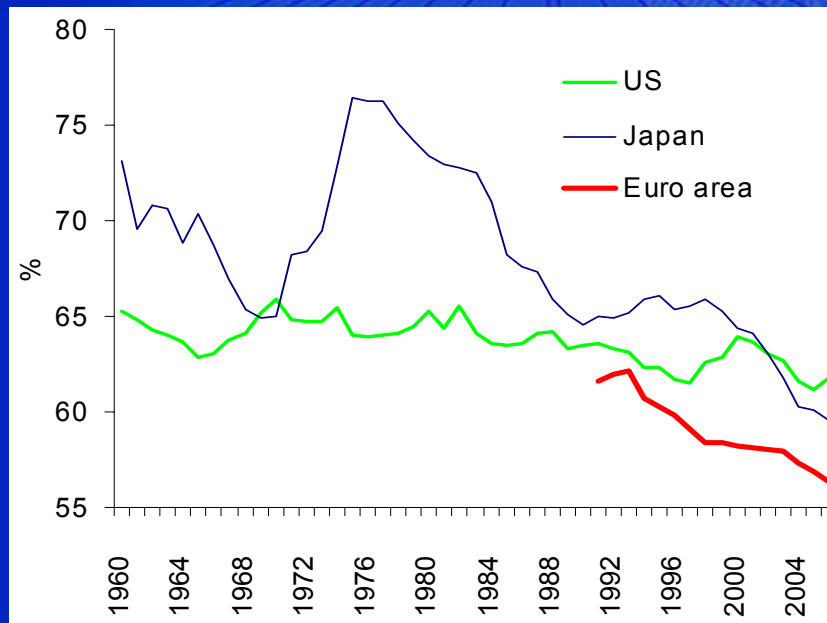
5 Chen, N., J. Imbs and A. Scott (2004), Competition, Globalization and the Decline of Inflation, CEPR Discussion Paper Series, No. 4695.

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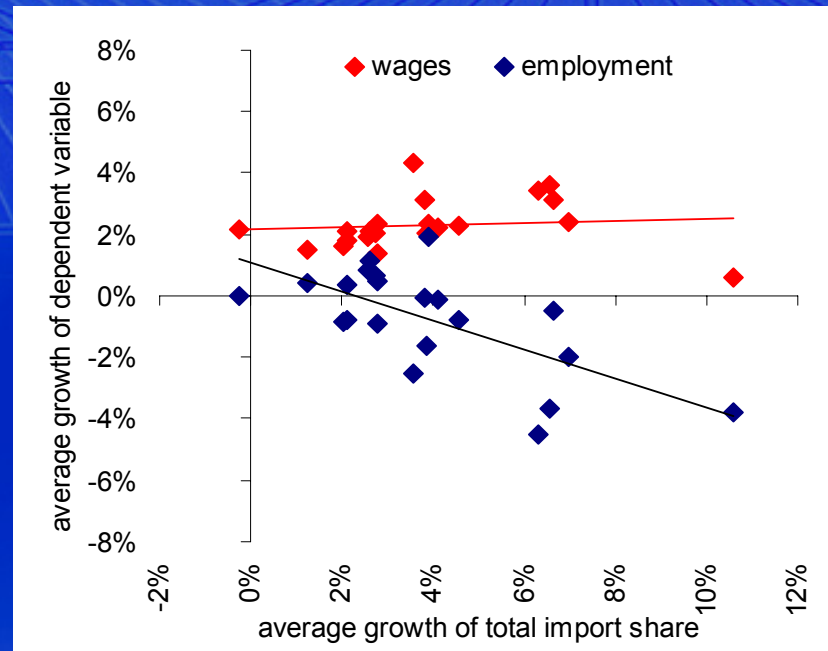
# Labour markets

**Chart 5. Wage share in the euro area and US and Japan**



Info: Adjusted wage shares of total economy  
Source: AMECO

**Chart 6. The impact of openness on employment vs. wages in the euro area (a sectoral interpretation)**



Info: Average growth of the 1995-2002 period  
Source: OECD STAN

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