## Globalization and Monetary Policy

Riksbank Seminar on Globalization Stockholm, August 15, 2006 Kenneth Rogoff, Harvard University

### Overview

- The Backdrop: Globalization has provided a healthy milieu for monetary policy
- Important impacts
  - Is China exporting deflation (for now)?
  - Effects of Greater Flexibility, Competitiveness
- Output volatility is down dramatically
- But financial volatility persists. Why?
- Has financial globalization helped emerging markets?

### PRESENTATION DRAWS ON

- Rogoff, Kenneth, 2006. The Globalization of Monetary Policy, Manuscript prepared for Yale University Okun Lectures, August.
- Kose, Ayhan; Prasad, Eswar; Rogoff, Kenneth and Shang-Jin Wei, 2006. "Financial Globalization: A Reappraisal." International Monetary Fund Working Paper, August, forthcoming.

Globalization has proceeded at an accelerated pace the last two decades, especially post 1995, and especially financial globalization

#### Figure 1. Gross International Financial Assets and Liabilities: 1970-2004 (trillions of U.S. dollars) Advanced Economies

🖩 Debt 📲 FDI 📓 Equity 🔳 Other



#### Source: Kose, Prasad, Rogoff and Wei, 2006

The globalization era, especially the last fifteen years, has coincided with spectacular outturns for inflation (well known) and output stabilization (less well known)

#### **The Great Moderation in Inflation Levels**

	80-84	85-89	90-94	95-99	00-04	2005-06
World	14.1	15.5	30.4	8.4	3.8	3.6
Industrial economies	8.7	3.9	3.8	2.0	1.9	2.3
<b>Developing countries</b>	31.4	48.0	53.2	13.1	6.3	5.4
Africa	16.8	17.9	39.8	20.6	10.6	8.8
Asia	9.0	11.5	10.5	7.3	2.7	3.7
<b>Central/E. Europe</b>	20.8	31.6	84.5	36.5	14.4	4.5
<b>CIS and Mongolia</b>	2.8	1.4	383.9	66.8	16.1	11.3
Latin America	82.4	185.9	232.6	17.2	7.7	6.0
Middle East	18.6	22.5	30.4	29.6	6.6	8.6

# Output Growth Volatility by Decade: The Great Moderation



Standard deviation of quarterly log output changes. Source: Rogoff, 2006 8

# Output Growth Volatility by Decade: The Great Moderation



Standard deviation of quarterly log output changes.. Source: Rogoff 2006

# Many factors have contributed to the moderation in output volatility

- Improved inventory techniques (McConnell and Perez-Quiros, 2000)
- Better Monetary Policy, More Independent Central Banks (Bernanke, 2004)
- Dumb luck (Stock and Watson, 2002)
- Better Financial Regulation, Deeper Financial Markets (Dynan, Elmendorf and Sichel, 2006)
- Demographics (Jaimovich and Sir, 2006)
- Lower rate of war and civil war, end of cold war (Rogoff, 2006).

# But has asset price volatility come down as fast as uncertainty in the real economy?

# Monthly Stock Market Return Volatility, 1932-2005 Great moderation?



**Dow Jones** 

Source: Rogoff 2006

#### BREAKS IN STOCK MARKET VOLATILITY



Note: Volatility is measured as the st. dev. of the deviation of the natural log of the stock market index from its HP-filtered trend. Results from Bai-Perrson test for multiple structural breaks of unknown timing, see Rogoff, 2006

#### Source, Rogoff 2006

### Housing Price Volatility: Is this Moderation?



Source: Rogoff, 2006

#### Volatility of Monthly Returns on 10-year US bonds



10-year Government Bonds Volatility - US

Source, Rogoff 2006

#### Estimated Euro/Dollar Volatility, 1980-2006: No significant break (Bai-Perron test)

Real EUR/USD



#### No obvious break in trade weighted real dollar volatility



US - Real Major Currencies Index Volatility

Rolling 36 month standard dev.of log exchange rate changes; Rogoff 2006<sup>17</sup>

# But clear breaks in terms of trade volatility for most trade weighted exchange rates

US Terms of Trade Volatility



Source, Rogoff 2006

### ISSUES FOR MONETARY POLICY

- Is China exporting deflation or inflation?
- Globalization's Deeper and More Durable
  Impact on Inflation: Rogoff (2003)
- Should Central Banks Be Focusing More on Global Excess Capacity when Forecasting Domestic Inflation Trends?
- What if Globalization goes into reverse?
- Global Real Interest Rate and Asset Price
  Convergence

### Other issues

- Should central bank include exchange rate in monetary targeting rule? Continuing academic debate. (Likely answer: No, it behaves too much like an asset price, too little information content.)
- What about including terms of trade in the inflation targeting rule? Academic debate shifting towards **yes**, but many technical issues, still difficult to make systematic.)

### How to handle real economy asset price volatility disconnect

- Many causes, of which central bank policy is only one. A larger reason is inflated asset prices due to great moderation.
- PS: What about global imbalances?

# Wage and Income Trends: A worrisome and important caveat

### Top 10% Total Income Share for US



Source: Rogoff, 2006, from Piketty and Saez data set

### Pattern Similar for English Speaking Countries, Differs Elsewhere



- Around Great Depression, top income shares declined significantly in most large countries; Ireland and Switzerland did not see similar decline at that time (not pictured)
- Only some of developed countries, however, have seen increase in top income shares since 1980s (Netherlands, France, Japan, etc. all look same)

Source: Rogoff, 2006

# What about financial globalization and emerging markets?

- Overwhelming weight of evidence suggests that trade integration is beneficial (Rodrik 2002 is a contrarian view)
- More debate on financial globalization
- New view: Indirect POTENTIAL benefits far outweigh direct benefits Kose, Prasad, Rogoff and Wei (2006), Gourinchas and Jeanne (2006)

### The Traditional View



The traditional view focuses on the importance of channels through which capital flows could directly increase GDP growth and reduce consumption volatility.

Taken from Kose, Prasad, Rogoff and Wei, 2006



Newer perspective (e.g., Kose, Prasad, Rogoff and Wei, 2006) sees main role of financial globalization as a catalyst for certain collateral benefits that increase GDP/TFP growth and reduce consumption volatility only indirectly, and only if certain preconditions are met. Short run pain, long run gain?<sup>27</sup>

### Conclusions

- Globalization has generally provided a very healthy milieu for monetary policy, to which strong independent central banks have contributed.
- Challenges: How to deal with continuing asset price sensitivity, how to incorporate terms of trade shocks into monetary rules.
- Question: How important are policies to reduce asset price volatility as opposed to volatility in underlying real economy and inflation?

### Caveats

- Issues are more subtle and complex for emerging markets and developing countries though direction of change needed is clear
- Pressure on wages and worker's shares of income may last for another decade – or more --placing pressures, raising important equity questions and placing pressures on political support for continuing globalization.