Volatility and Crisis:
Three Lessons for Developing Countries

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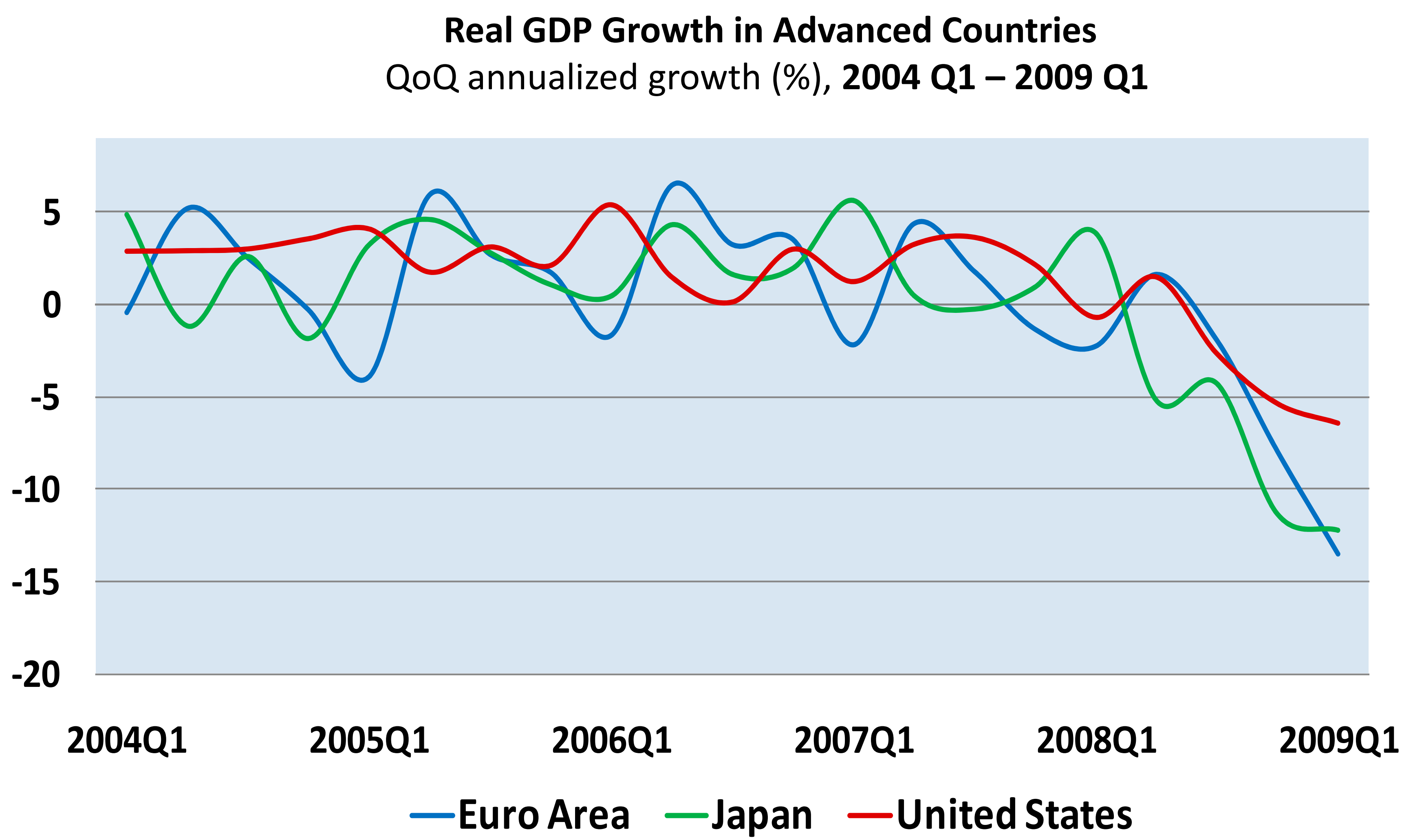
The Big Scare…

- ***Just one year ago,***
  - Developing countries faced **collapsing,**
    - world production
    - world trade
    - remittances
    - capital inflows
    - investor confidence

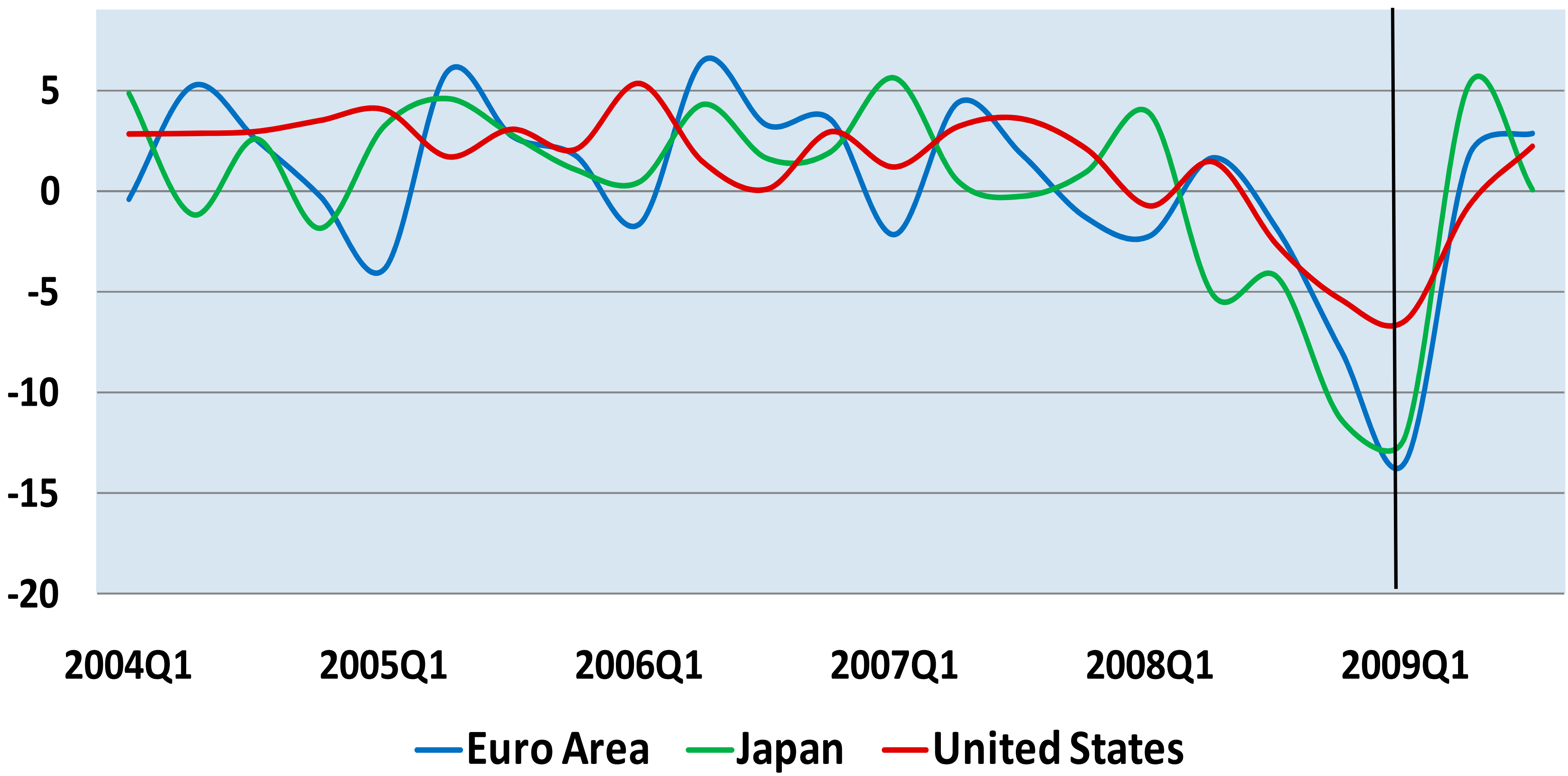
Collapsing world demand



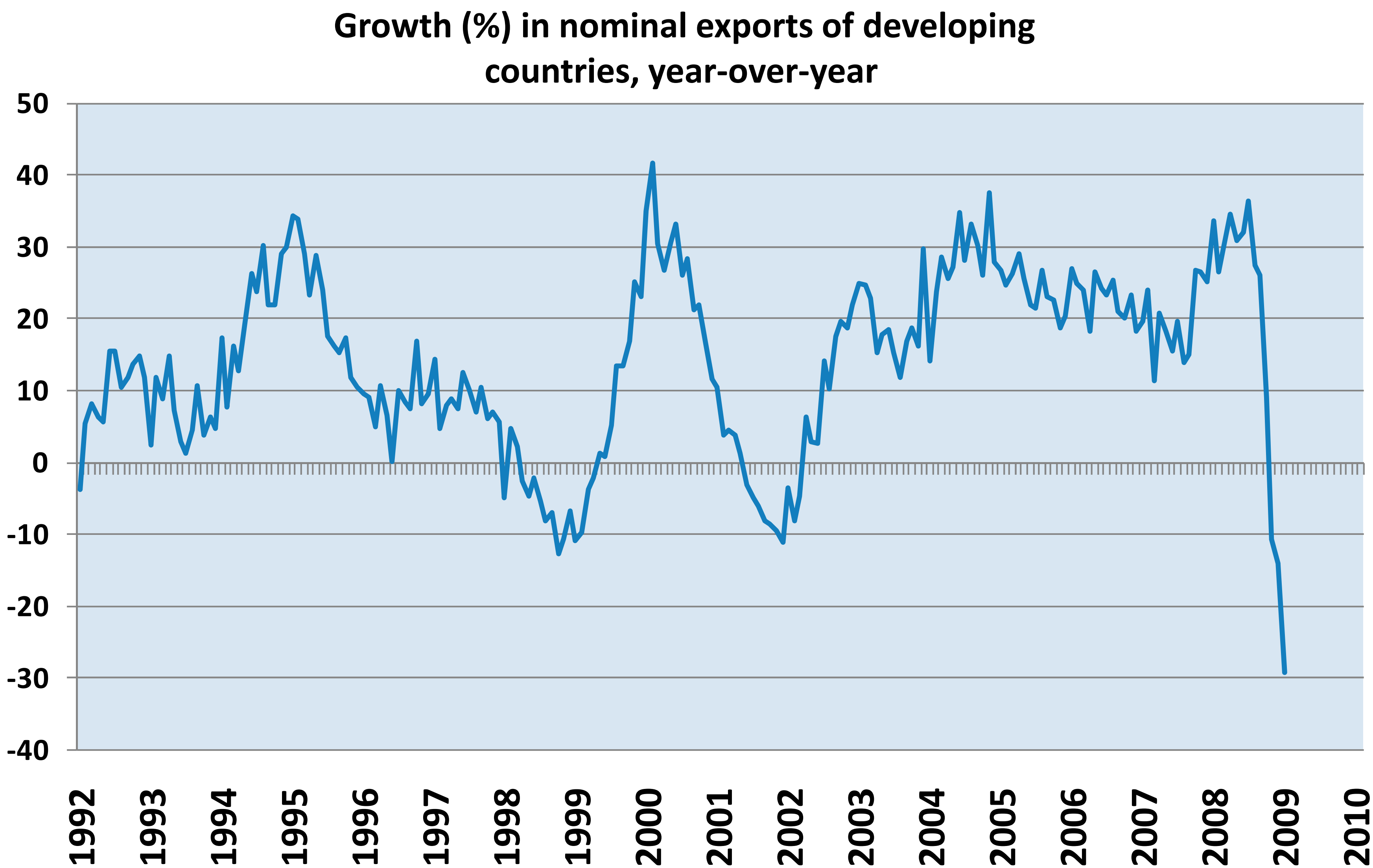
Collapsing world demand… and recovery

Real GDP Growth in Advanced Countries

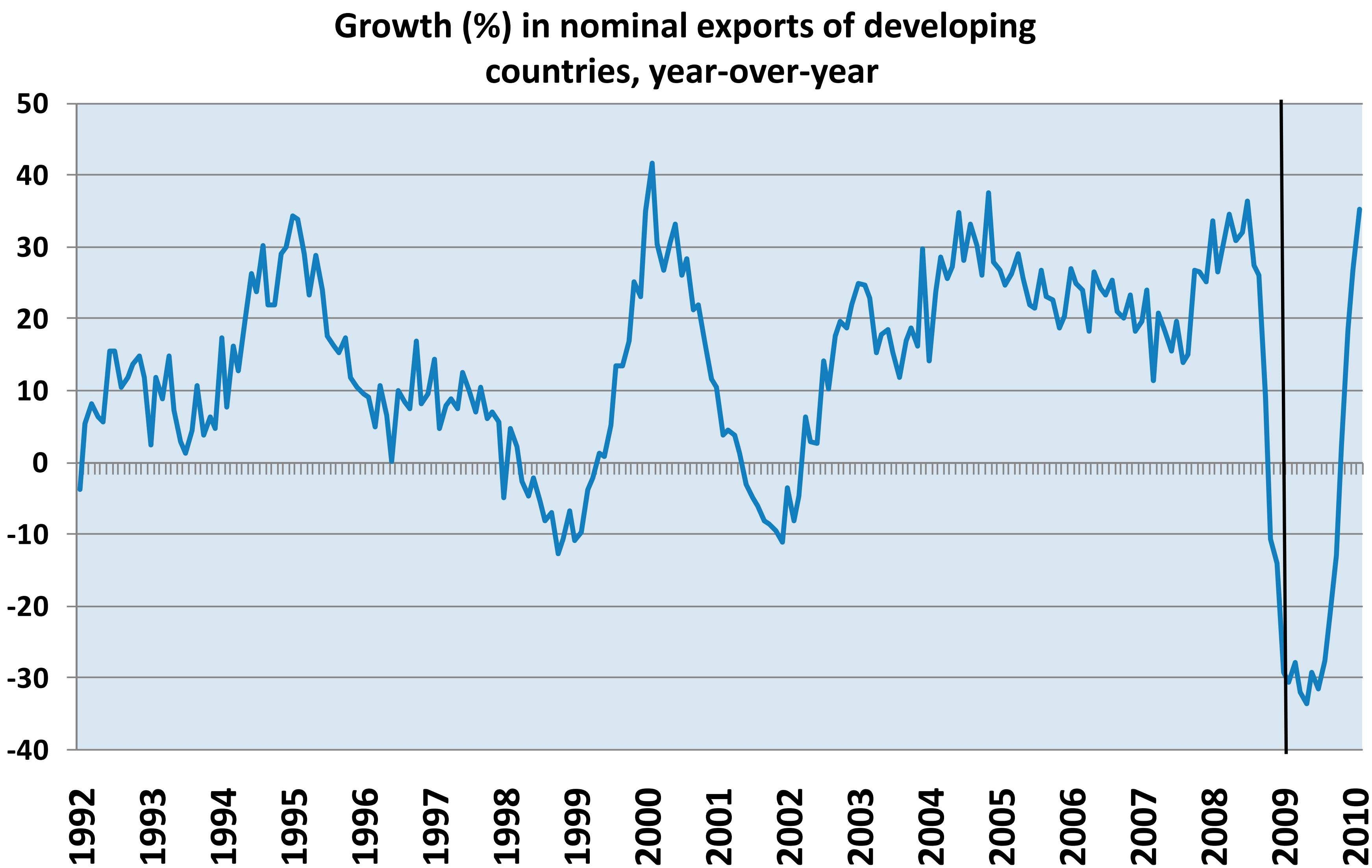
QoQ annualized growth (%), **2004 Q1 – 2009 Q3**



Collapsing developing country exports



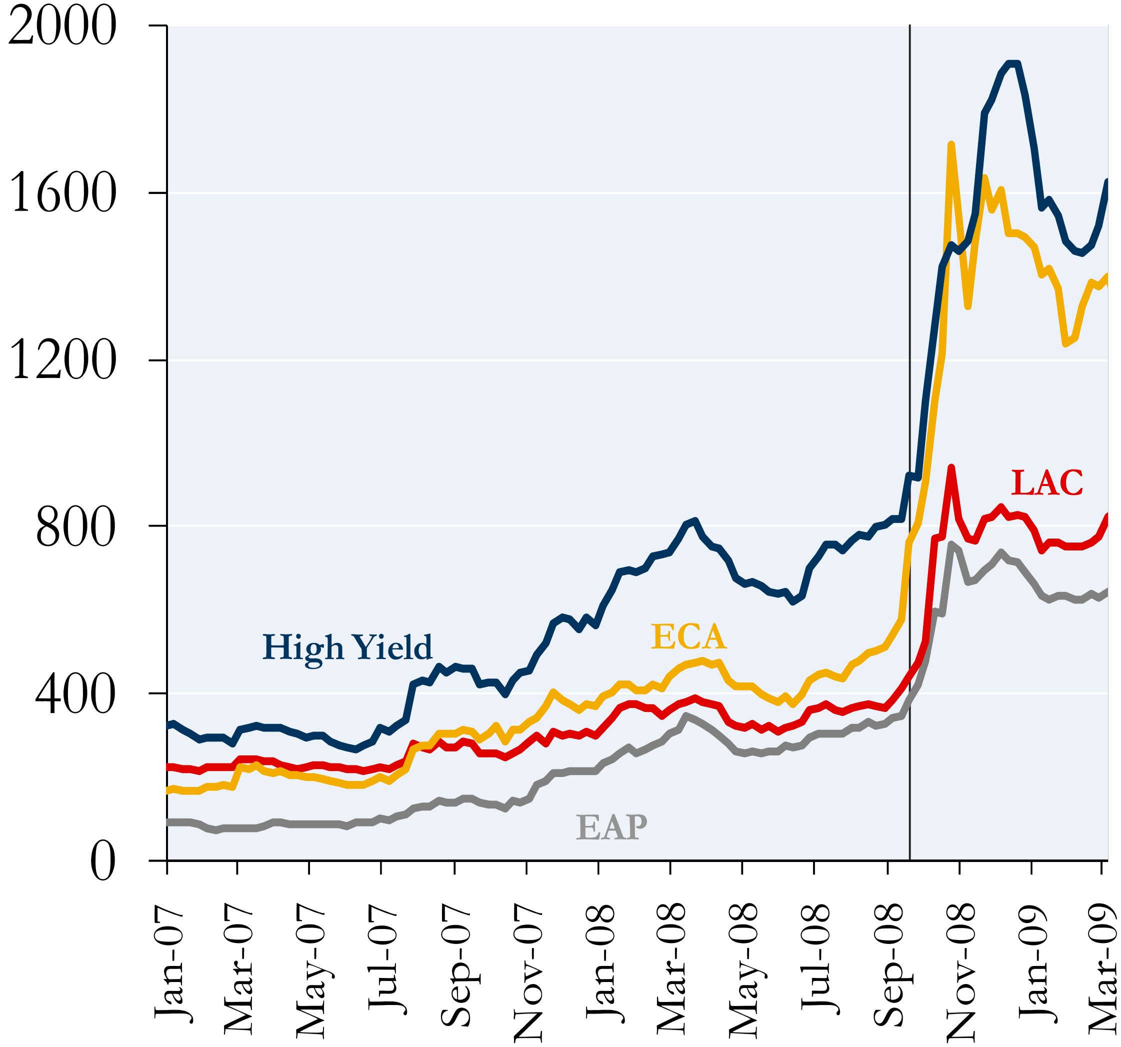
Collapsing developing country exports… and recovery



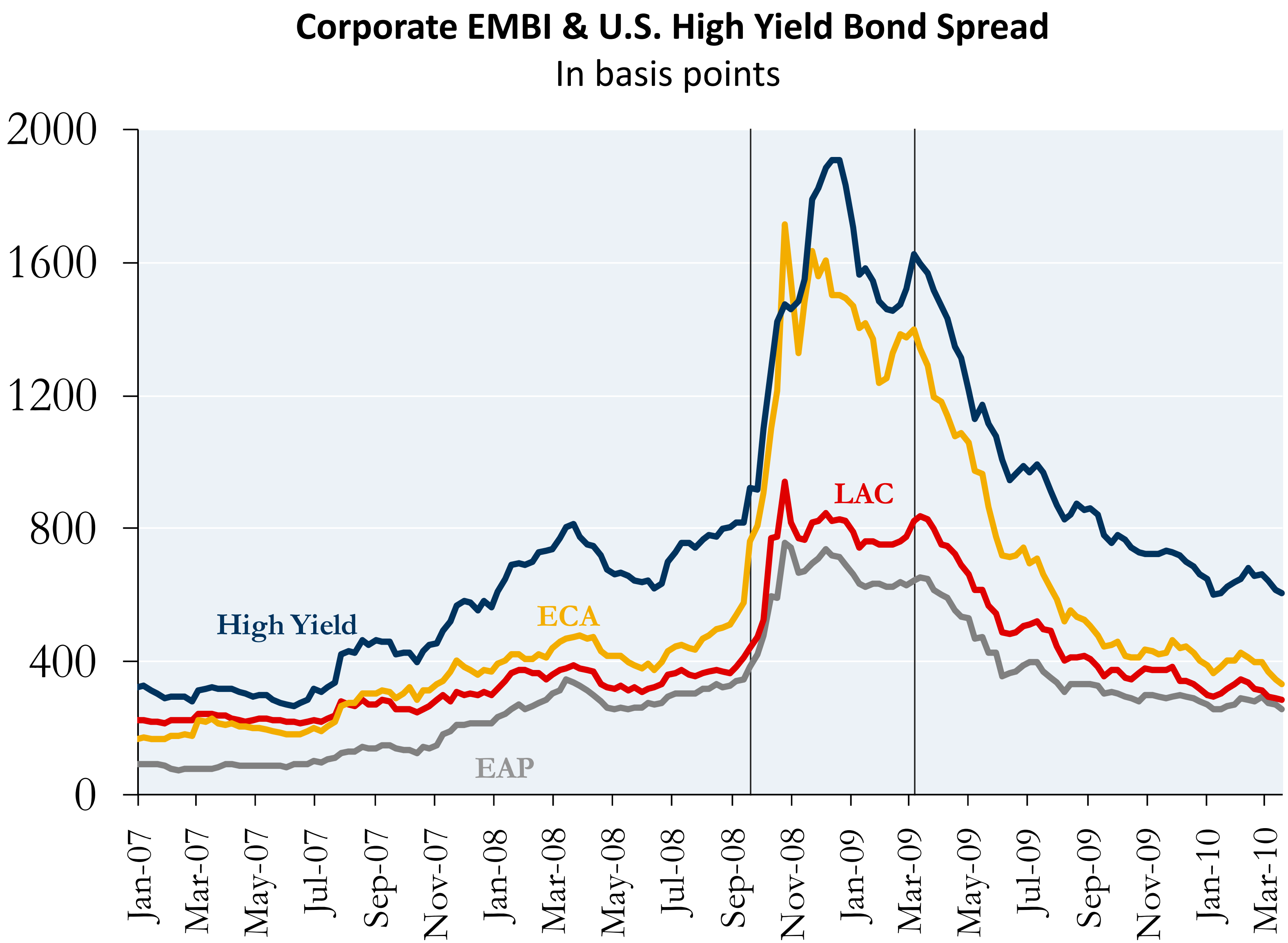
Collapsing investors' confidence

Corporate EMBI & U.S. High Yield Bond Spread

In basis points



Collapsing investors' confidence… and recovery



A remarkable recovery…

- In almost all dimensions of the crisis
- Most developing countries showed notable resilience

What have we learned?

- Contrary to popular claims,
  - The 2008 world financial crisis was **not so unique** that it invalidated our knowledge
  - In fact, it **confirmed the lessons** drawn from years of experience and research
    - *especially on volatility and vulnerability*

1. Self-inflicted crises are the worst

(or, stop blaming globalization…)

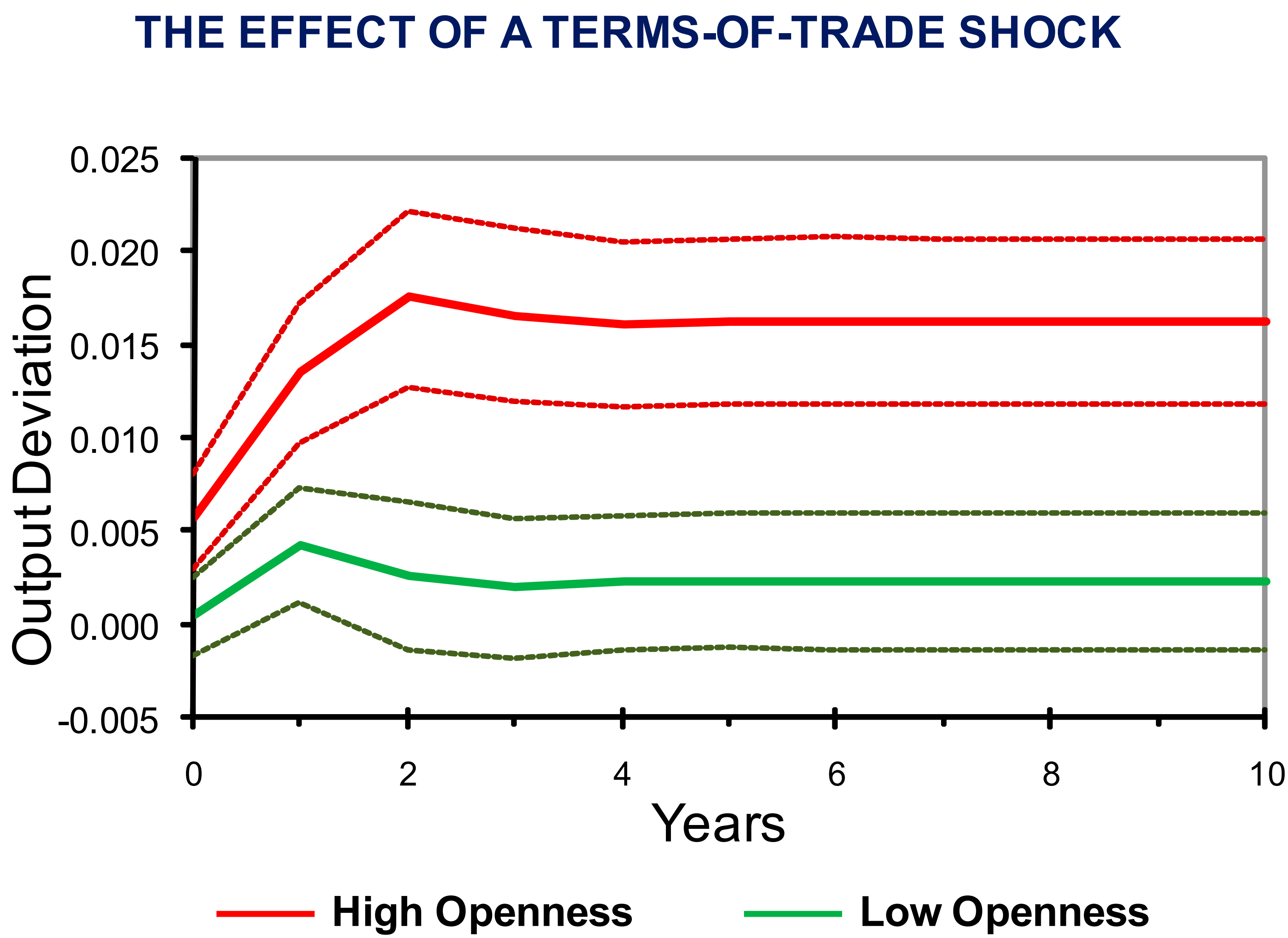
Openness and vulnerability (I)

- Does openness lead to more vulnerability to external shocks?

  → **YES**

  - Evidence from the aftermath of this crisis:
    - Lane and Milesi-Ferretti (2010)
    - Calderón and Didier (2009)

Loayza and Raddatz (2007):



Yes, openness leads to vulnerability, **but…**

- Vulnerability to external shocks is the **cost of doing business** in the modern world
  - *Victimization research analogy:*
    - *Who are most likely to suffer from crime?*

The real sources of volatility…

- Raddatz (2007): In low income countries,

Variance of GDP per capita	
Exogenous Shocks	Endogenous Shocks
- Commodity price changes - Aid shocks - Climatic disasters - Famines and epidemics - Volatility of high-income countries - Interest rate shocks	- Inflation - RER overvaluation - High public deficits - Political instability - Violent conflict
?	?

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11%	**89%**

So, should we just ignore external shocks?

- **No!**

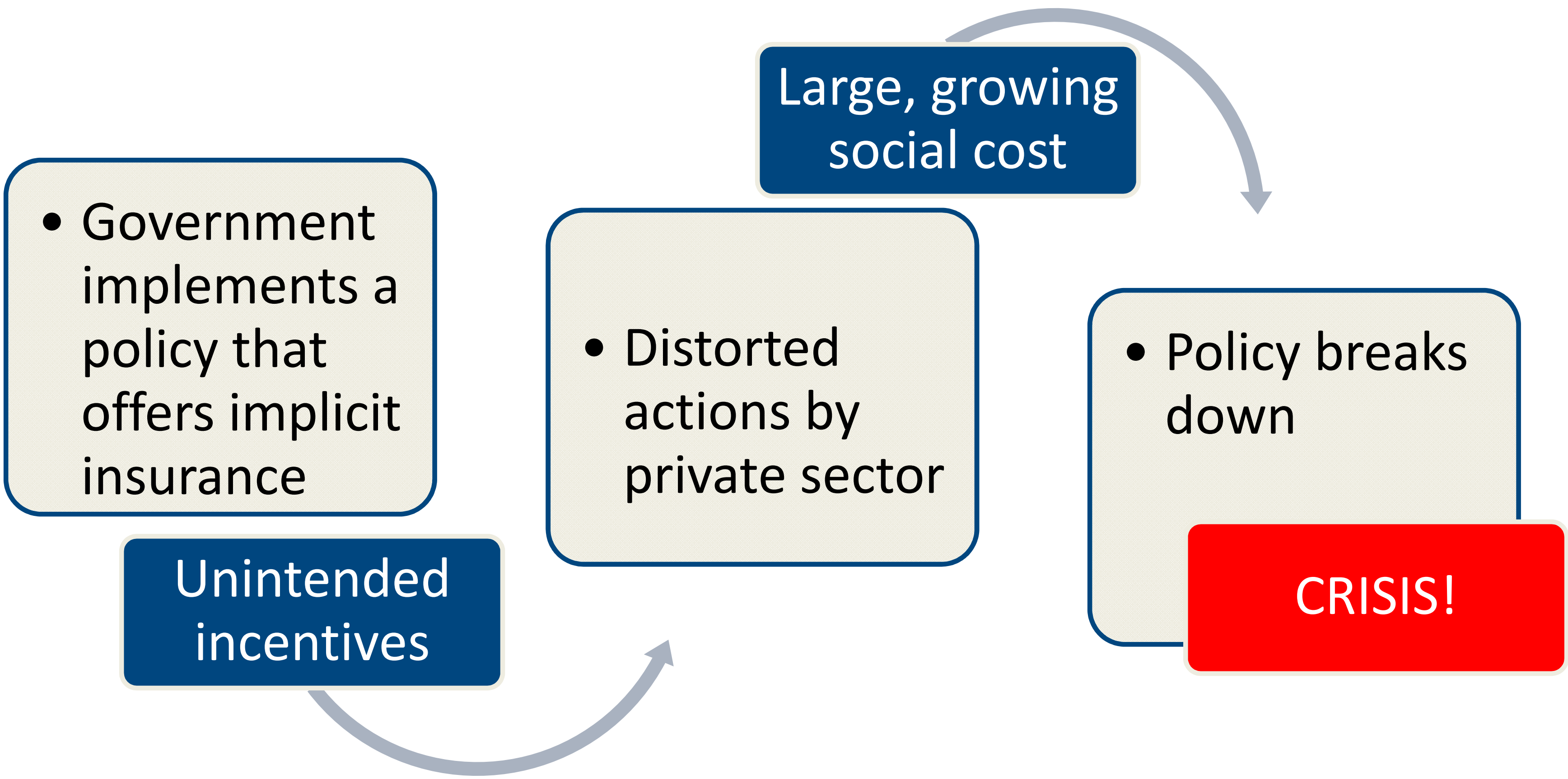
- If the economy is well-prepared, the harm from negative shocks can be **mitigated**
  - Prudent macro policies
    - » Blanchard, Faruqee, Das (2010)
    - » Calderón and Didier (2009)
  - Political stability
    - » Malik and Temple (2009)
    - » Loayza, Rancière, Servén, and Ventura (2007)

- *Another victimization research analogy…*
  - *For people in the streets, who are most likely to be victims of a crime?*

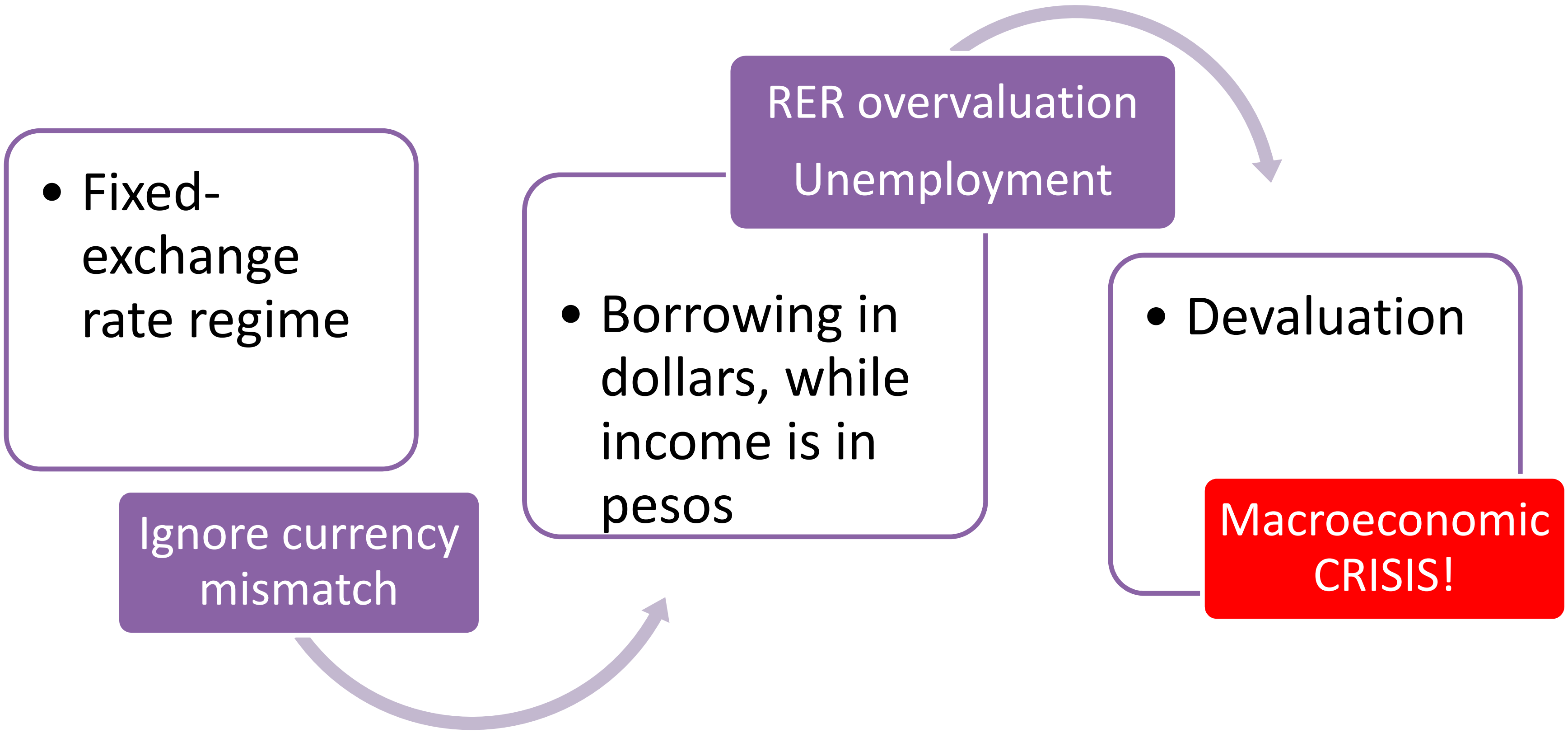
2. Implicit insurance is
seldom sustainable, always distortionary, and usually catastrophic

(or, don’t promise what you can’t deliver…)

Chronicle of a Death Foretold…



A Death Foretold: Argentina's currency board 1990-2000



Another Death Foretold: U.S. current financial crisis

- A history of banking bail-outs

Ignore corporate responsibility

- Excessive risk taking
- “Too big to fail”

Loss of asset value

Large public deficits

- Interrupt bail-outs: Lehman!

PANIC, CRISIS!

Stop bailouts!

- Easier said than done…
- But there are good precedents:
  - *Inflations, hyperinflations, and how they were ended:*
    - Central Banks stopped bailing out governments
    - Institutional rules that gave central bank autonomy and prevented fiscal dominance
    - Ex. Inflation targeting, used now by over 30 countries
      - » Mishkin and Schmidt-Hebbel (2007)

The challenge remains…

- Develop **fiscal** institutions and rules
  - » to avoid implicit, unsustainable insurance
  - » to stop bailouts

We are in an ever-increasing cycle of risk-taking and too-big-to-fail bailouts… The [next] crisis will be bigger. Where will it come from? State and local government defaults? Pension funds? A new Asian Bubble? Default by Greece, Italy, or Ireland? ***Who knows?***

John Cochrane, 2010

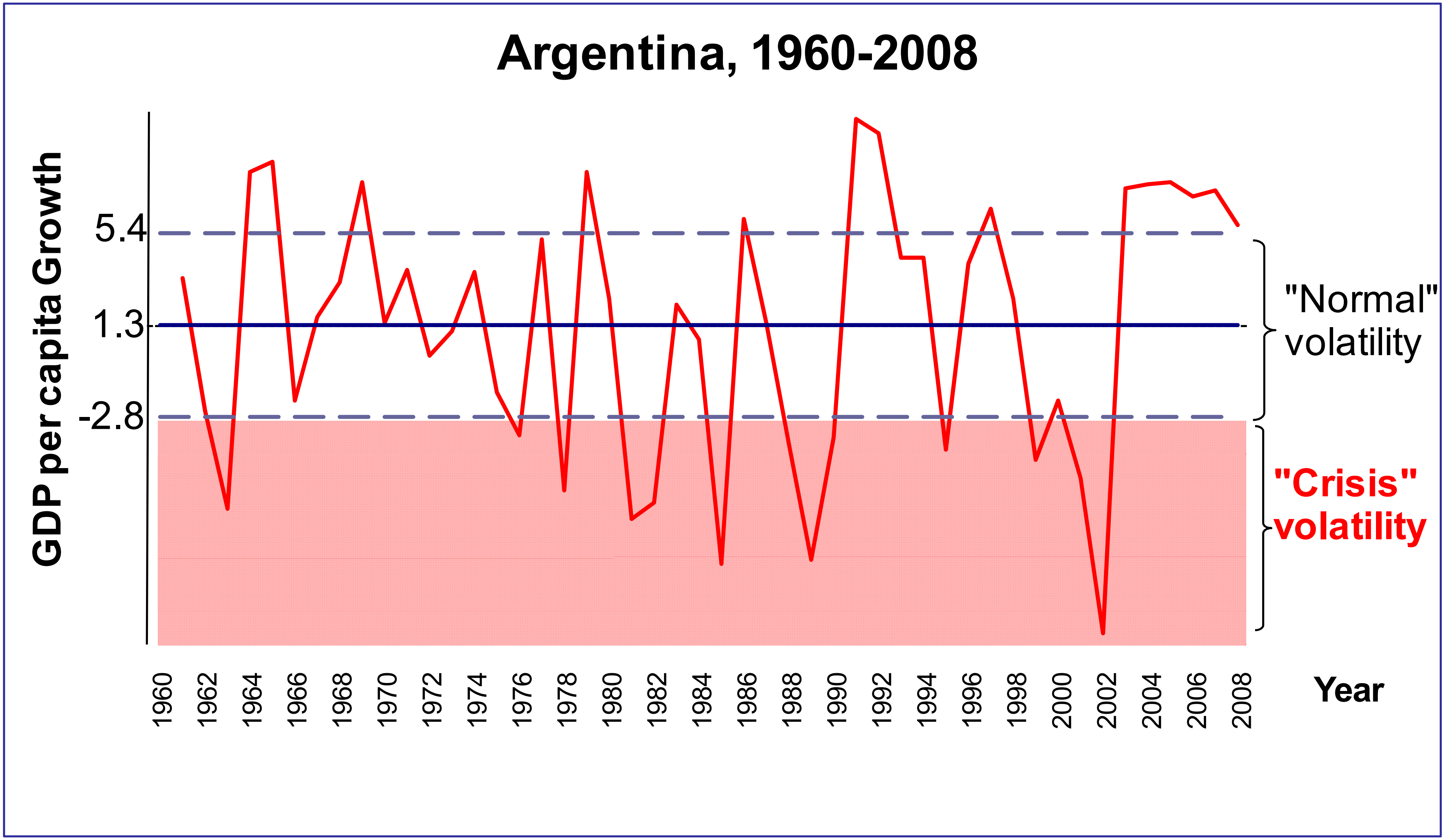
3. It’s large fluctuations, not regular volatility, which harms the economy

(or, better frequent shakes than a big earthquake…)

The effect of macro volatility on long-run economic growth

- Ramey and Ramey (1995):
  - Macroeconomic volatility exerts a significant negative impact on long-run growth
- Hnatkovska and Loayza (2005):
  - Decompose volatility into “normal” and “crisis” components
  - Only the negative effect of “crisis” volatility is statistically significant and **4 times** larger than the effect of “normal” volatility

Normal and Crisis Volatility



Good volatility?

- Small doses of certain types of volatility can serve as “vaccine” against large recessions
- When is volatility good?
  - When it reflects flexibility in the allocation of resources and the communication of information
    - Changes in relative prices
      - » *Decrease real wages to reduce unemployment*
      - » *Depreciate real exchange rate to reduce trade deficit*
    - Changes in asset values
      - » *Decrease in stock market value of failing enterprises*

The Dot Com Crisis and the Subprime Mortgage Crisis: Why so different effects?

- Dot Com Crisis:
  - Wiped out $5 trillion in market value from March 2000 to October 2002
  - But, no financial crisis and only a mild recession
- Subprime Mortgage Crisis:
  - Subprime mortgage losses around $400 billion
  - Yet, enormous financial crisis and large recession
- The difference?
    - » *No price adjustment and market breakdown!*

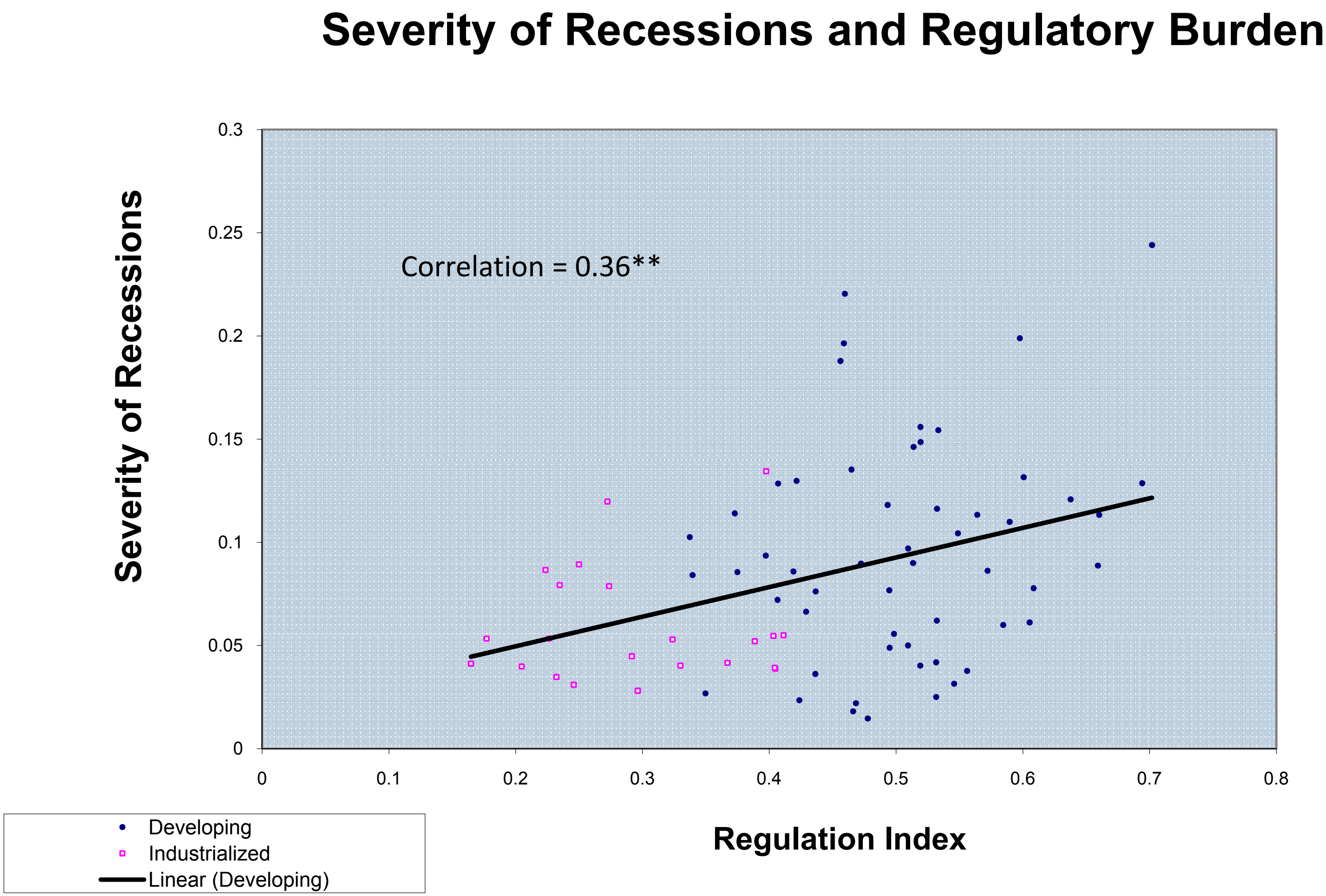
Chile and Russia: Two different reactions to the external crisis (Blanchard, Faruqee, Das, 2010)

- Both countries are large commodity producers
- Both received a large trade shock
- Both are financially integrated with the world
- Russia had larger FX reserves relative to short-term debt than Chile
- *So, did Russia fare better with the crisis?*
  - » **NO!**
- Chile did better,
  - » More effective fiscal stabilization mechanism
  - » More flexible exchange rate regime
    - Early exchange rate depreciation prevented speculative outflows

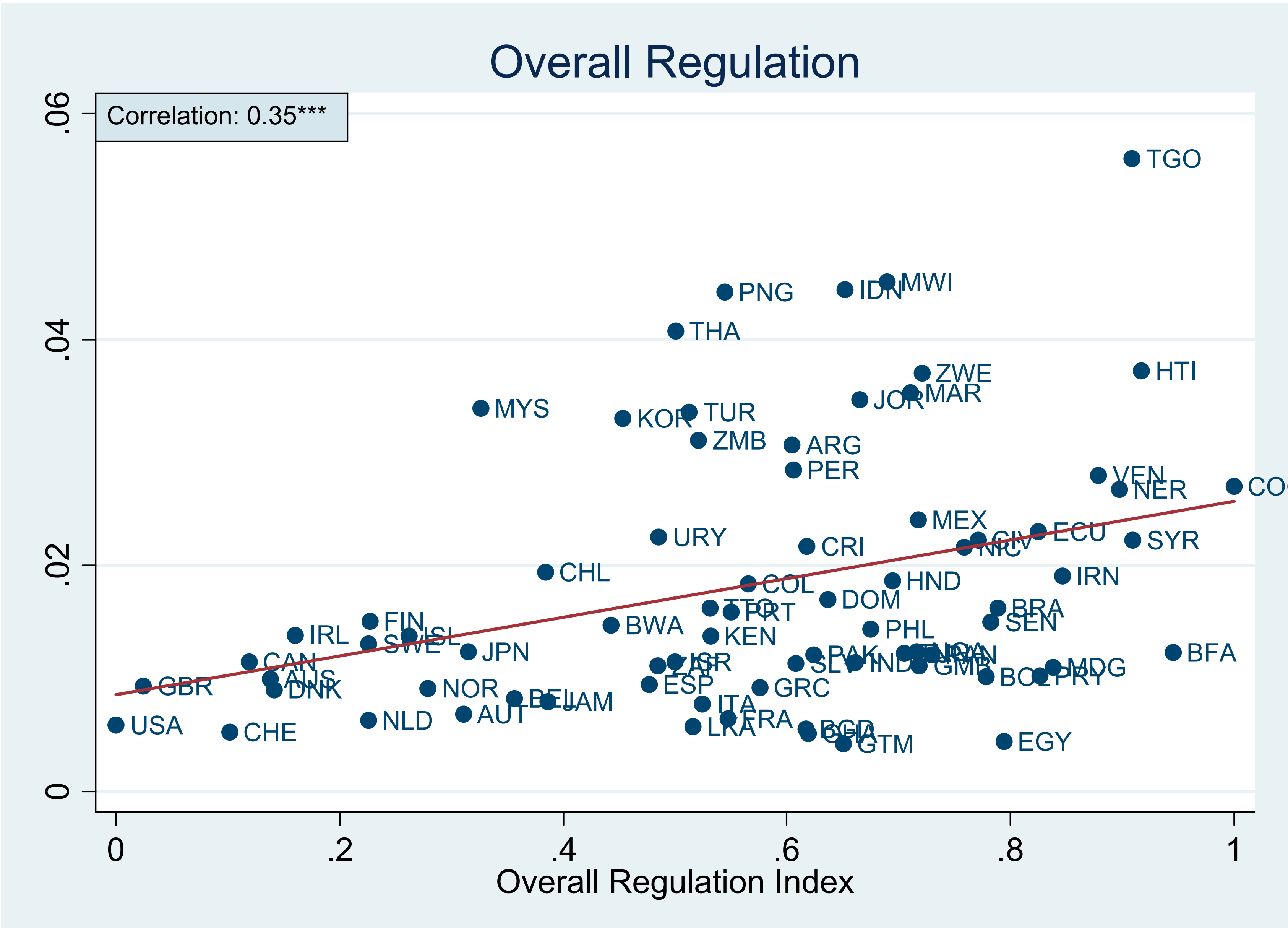
Shock absorbers, Escape Valves, Safety Switches…

- The economy needs these mechanisms to adjust continuously and grow
- Macroeconomic stabilization policies
  - » Counter-cyclical fiscal policies
  - » Responsive monetary and exchange rate policies
- Microeconomic flexibility (e.g., Collier and Goderis, 2009)
  - » Flexible entry and exit of firms
  - » Flexible labor markets
- *The quasi-paradox is that in order to avoid abrupt fluctuations, the economy needs constant movement and adjustment*

Bergoeing, Loayza and Repetto (2004):



Loayza, Oviedo, and Servén (2010):



In summary…

1. *Domestic policies and institutions continue to be the main drivers of volatility and crisis*

2. *Unsustainable implicit insurance and the practice of bailouts are usually behind the worst crises*

3. *Flexibility to adjust to new conditions is the best antidote against large macroeconomic disruptions*

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