

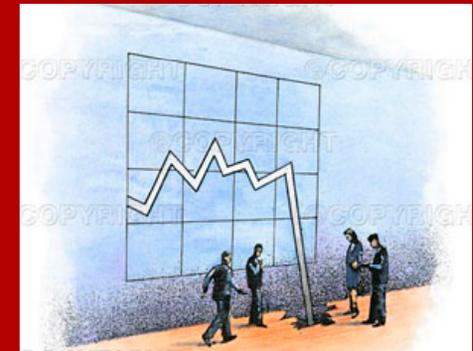
Costs of Crises and Policies for Recovery

Valerie Cerra, IMF



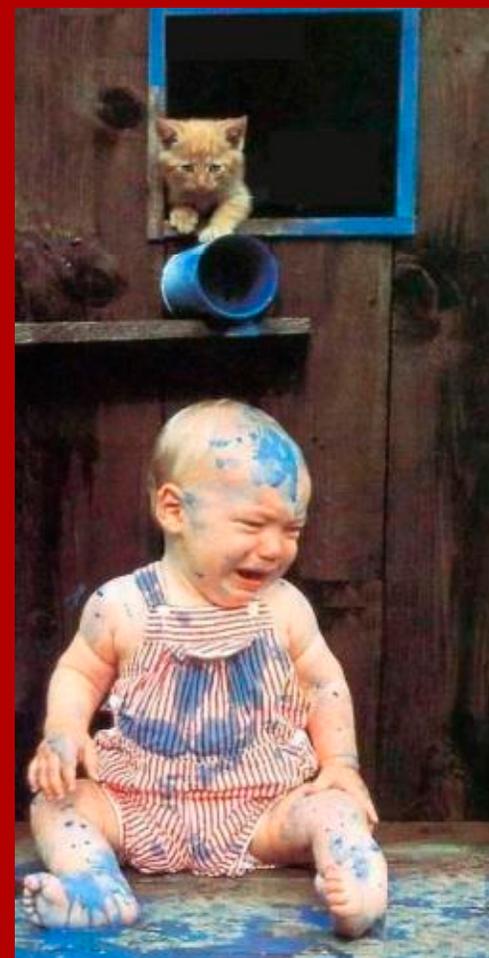
Outline

- Types of shocks important for LICs
- Costs of crises and other shocks
- Policies for recovery
- Looking ahead

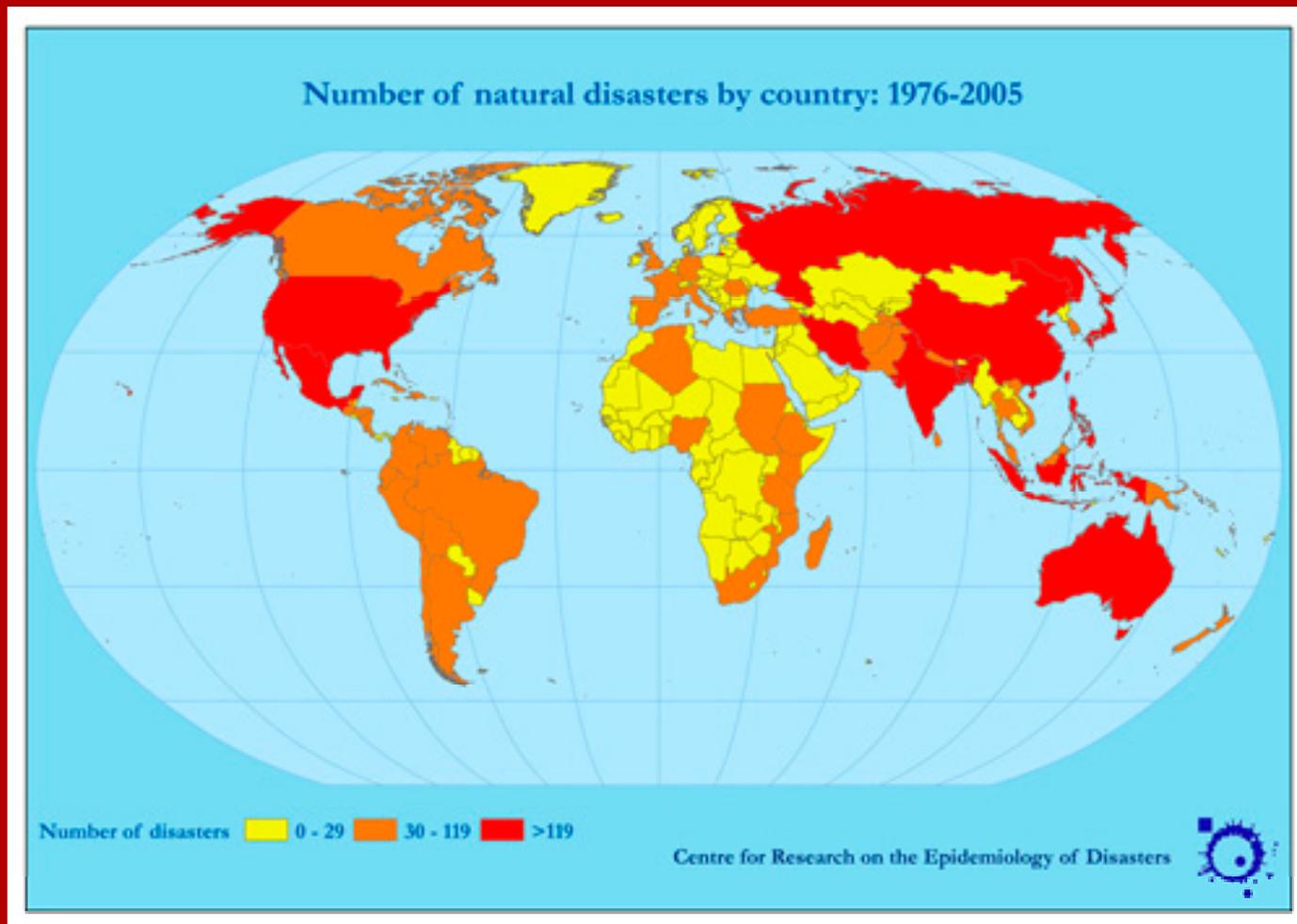


What *are* the shocks?

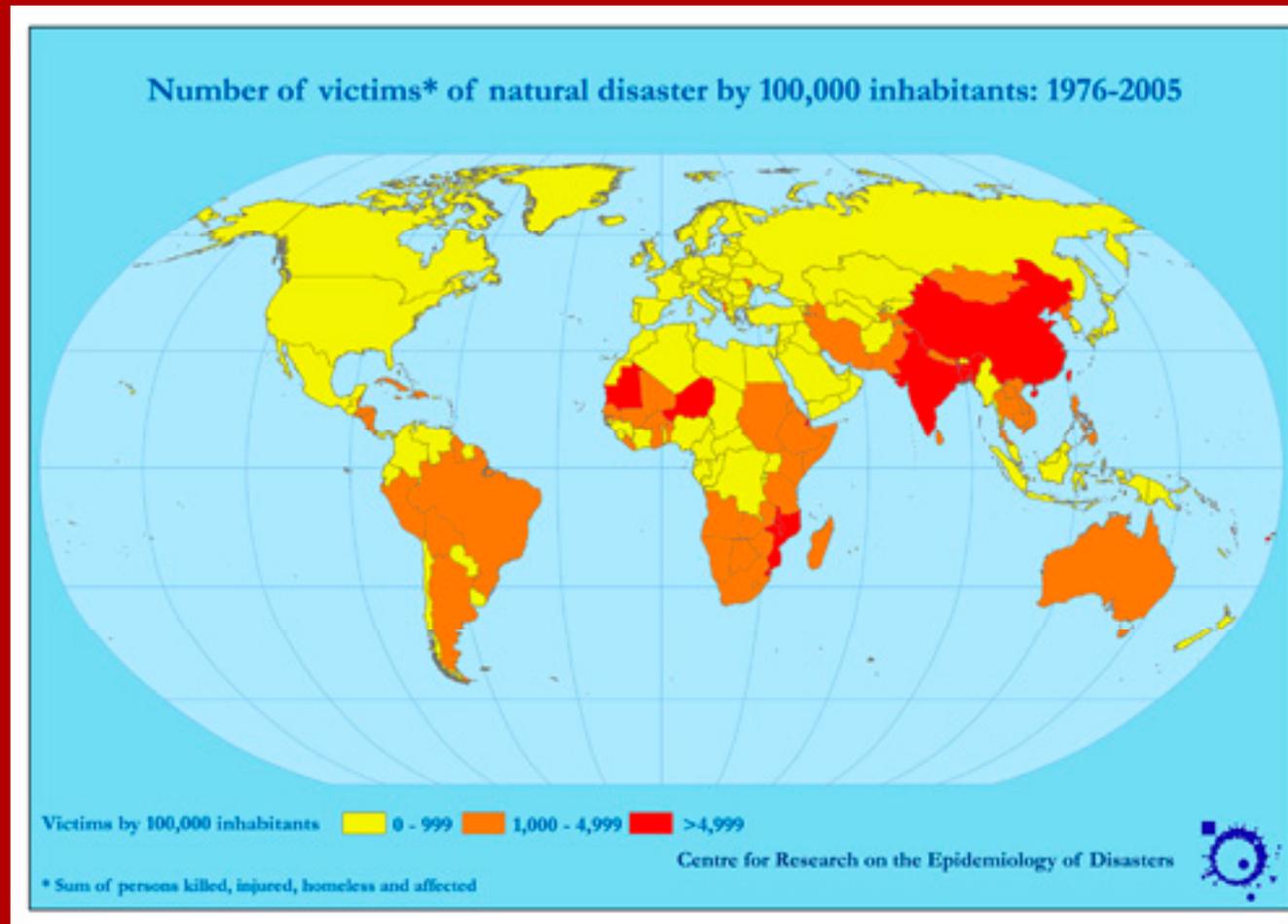
- Natural disasters
- Trade volatility
 - Prices – terms of trade
 - Quantities – world demand
- World interest rates
- Capital flows
 - Aid
 - Remittances
 - FDI
- Financial crises
- Political crises



Frequency of natural disasters



Impact of natural disasters: victims



Frequency of crises

	All available years				1992–2001			
	Financial crises		Political crises		Financial crises		Political crises	
	Currency	Bank	War	Constraints	Currency	Bank	War	Constraints
Africa	37	4	12	6	34	4	16	23
Asia	23	3	16	7	19	4	10	9
Industrial countries	22	2	1	1	28	1	4	1
Latin America	31	5	10	5	27	5	10	8
Middle East	26	4	10	4	16	2	5	12
Transition countries	27	6	6	4	20	6	11	13
Western Hem. islands	21	2	0	3	11	5	0	3
High income	20	2	0	2	20	1	0	0
Upper middle income	23	5	2	3	16	4	0	8
Low middle income	30	5	10	6	26	6	13	12
Low income	36	4	18	6	32	4	19	23

Source: Cerra and Saxena, "Growth Dynamics: The Myth of Economic Recovery," AER 2008

Wars, Crises, and Regime Change Oh My!



Percent of Recession Years Coinciding with Shock

	LICs	Other Inc groups
Currency Crisis	43	34
Banking Crisis	27	25
Rise in Unconstrained Executive Power	8	7
Civil War	22	7
Any of Above	68	60

Costs of crises

-Financial

-Political

- Based on work in Cerra and Saxena, “Growth Dynamics: The Myth of Economic Recovery”
AER, March 2008

Empirical specification

$$g_{it} = a_i + \sum_{j=1}^4 \beta_j g_{i,t-j} + \sum_{s=0}^4 \delta_s D_{i,t-s} + \varepsilon_{it},$$

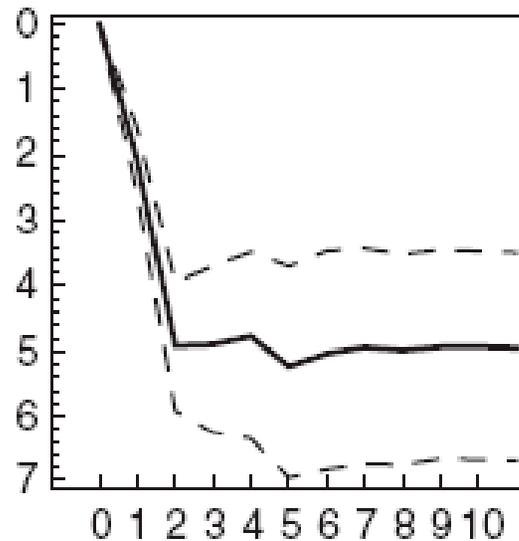
Business
cycle
dynamics

Indicator
of
crisis

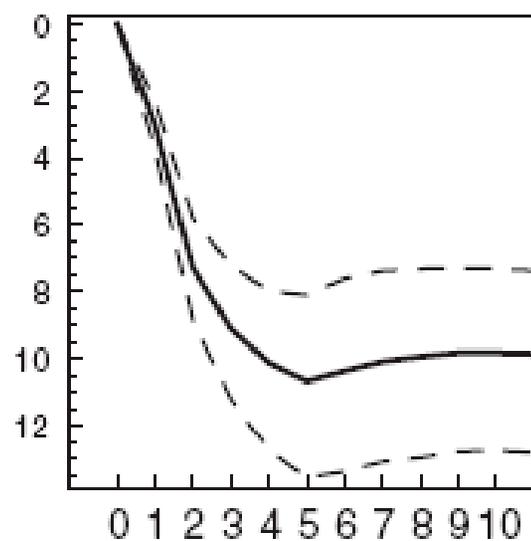
On average, financial crises generate persistent output loss

Output relative to baseline

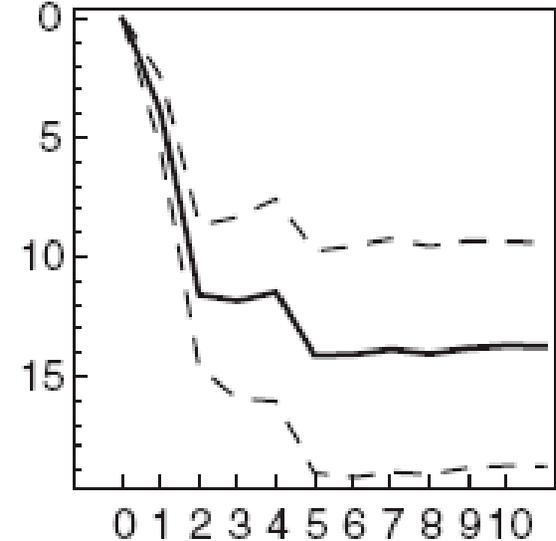
Currency crises



Banking crises

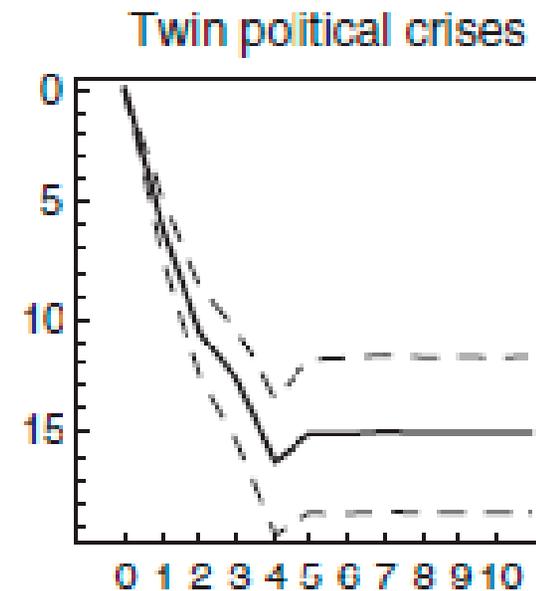
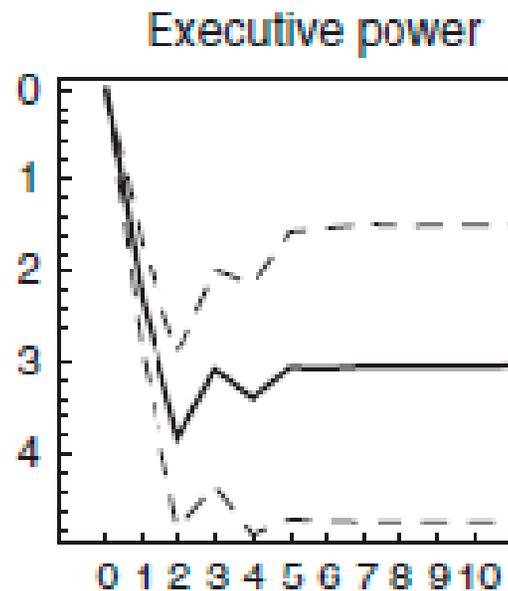
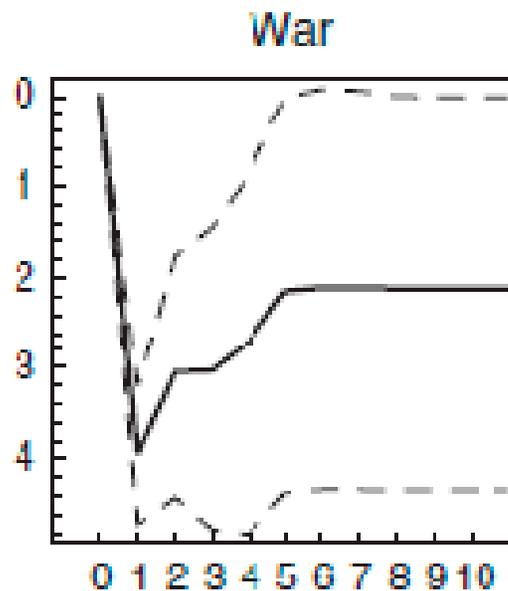


Twin crises

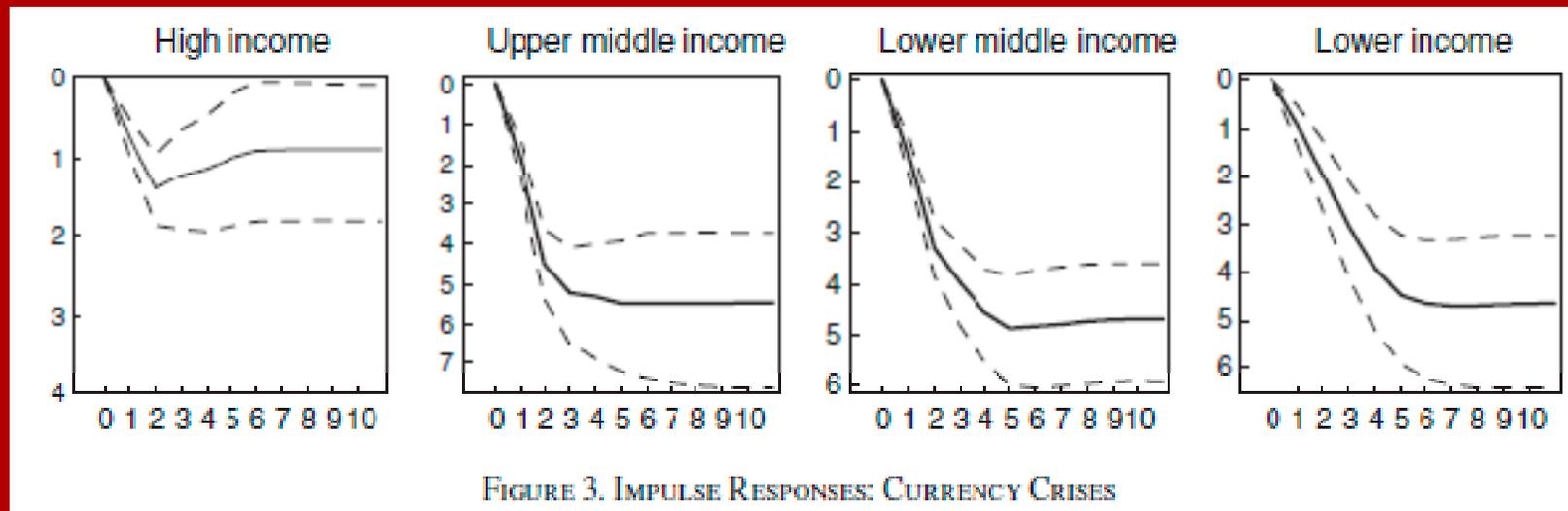


On average, political crises also generate persistent output loss

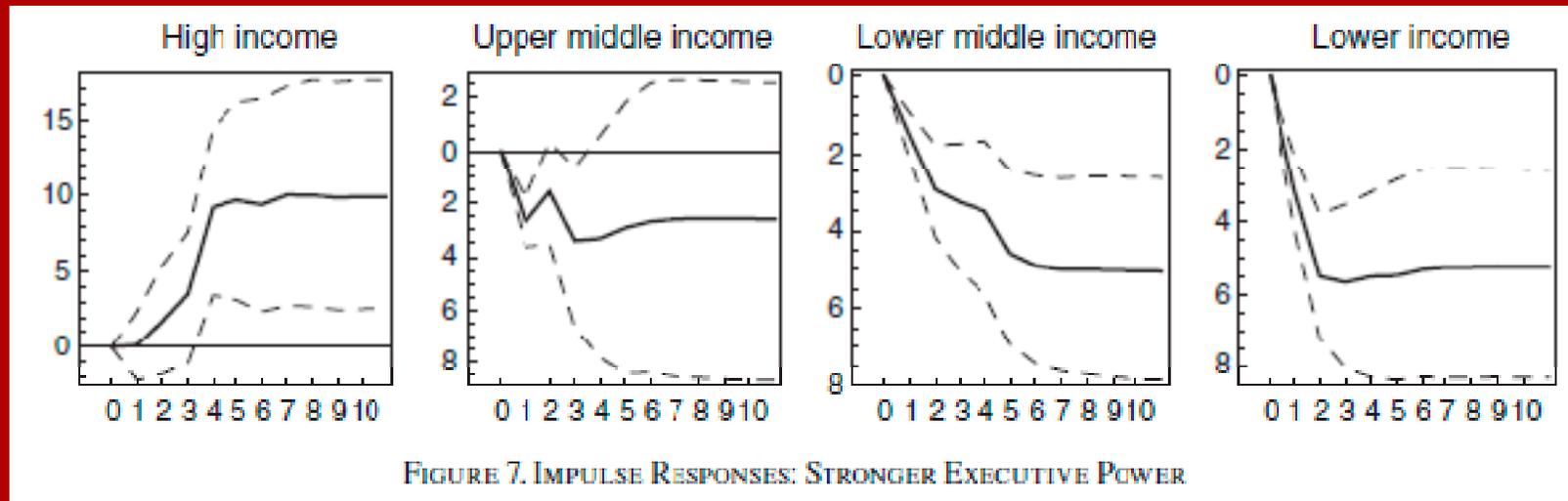
Output relative to baseline



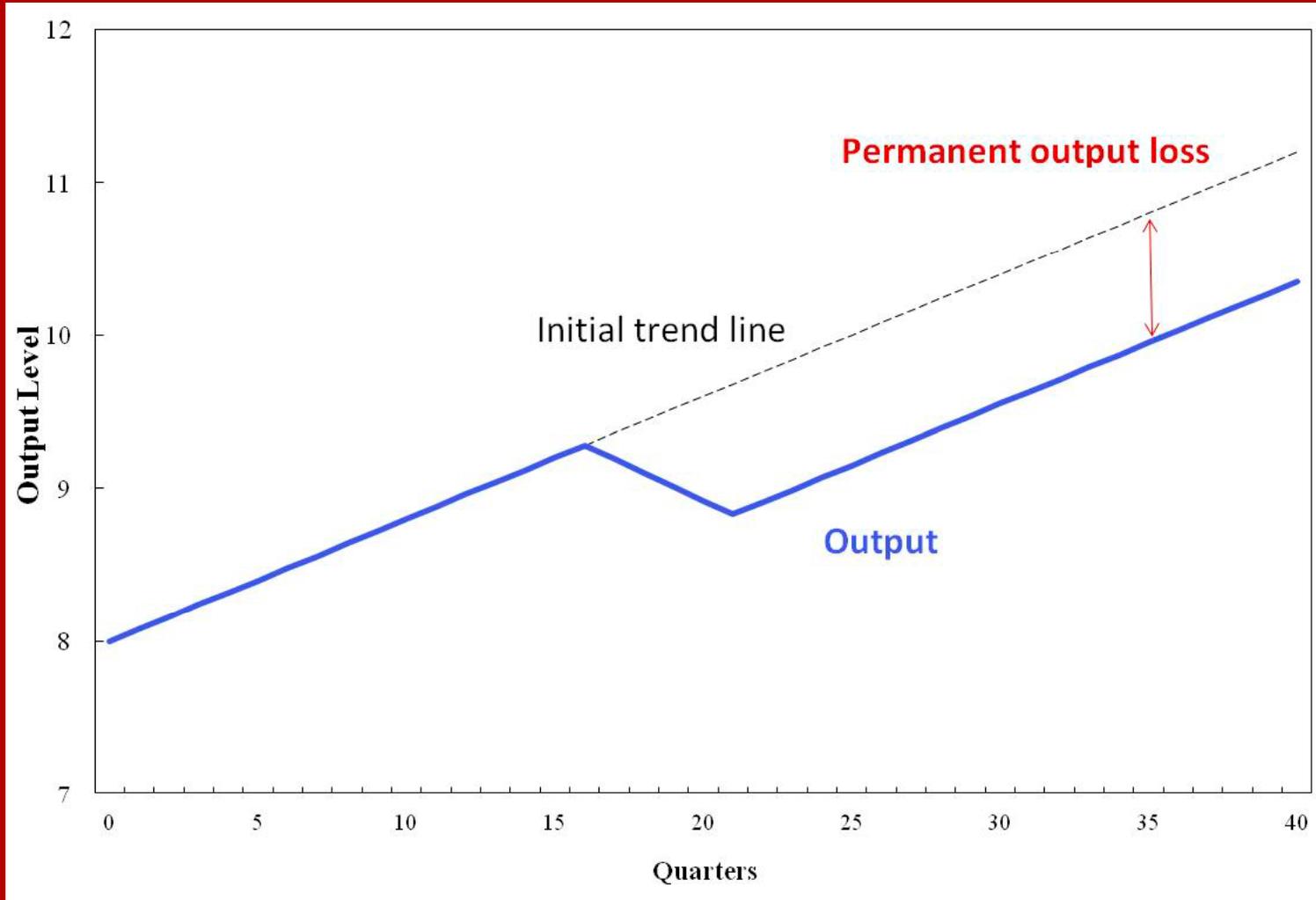
Currency crises have larger impact at lower income levels



Increase in executive power: impact depends on income level



Typical recession and recovery



Policy implications: Potential output & Output gap

- Lower level of economic activity
 - Welfare loss
 - Higher debt ratios (denominator effect)
 - Lower level of revenue
- Monetary policy reaction to output gap
- Perhaps different concepts of output gap for fiscal and monetary purposes
 - Trend
 - Inflation pressure

Does vulnerability to negative shocks set you back?

- Country long run growth rates may differ
- Higher returns for higher risks?



Down and Out

	Average growth rate
Volatility (proportion of years in recession)	-12.7 ***
T-stat	-9.9
Adjusted R-squared	0.42

Divergence

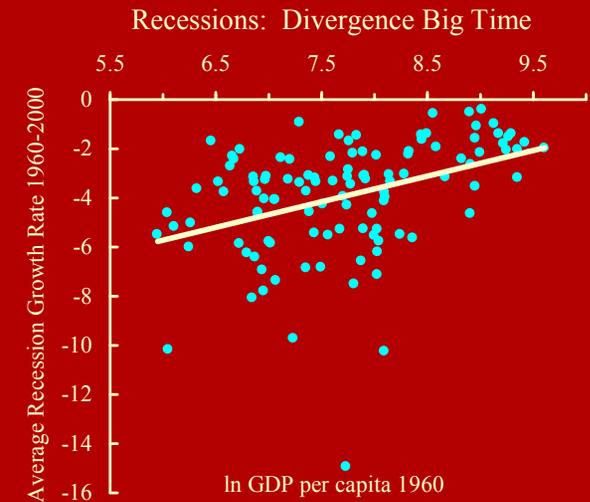
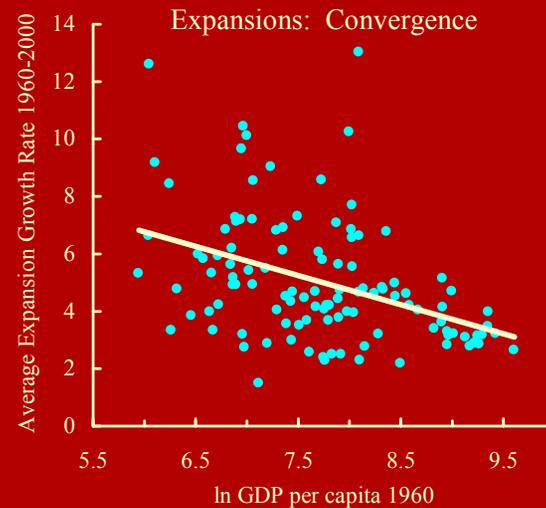
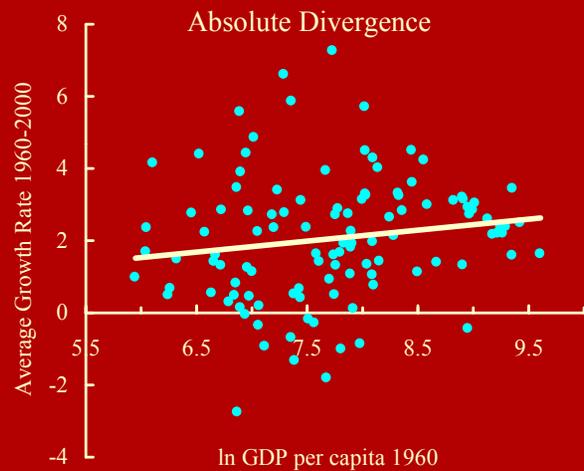
- **Are contractions partly responsible for absolute divergence?**
- **Would poor countries catch up to the rich if not for the bad shocks?**



Divergence big time: It's the crises

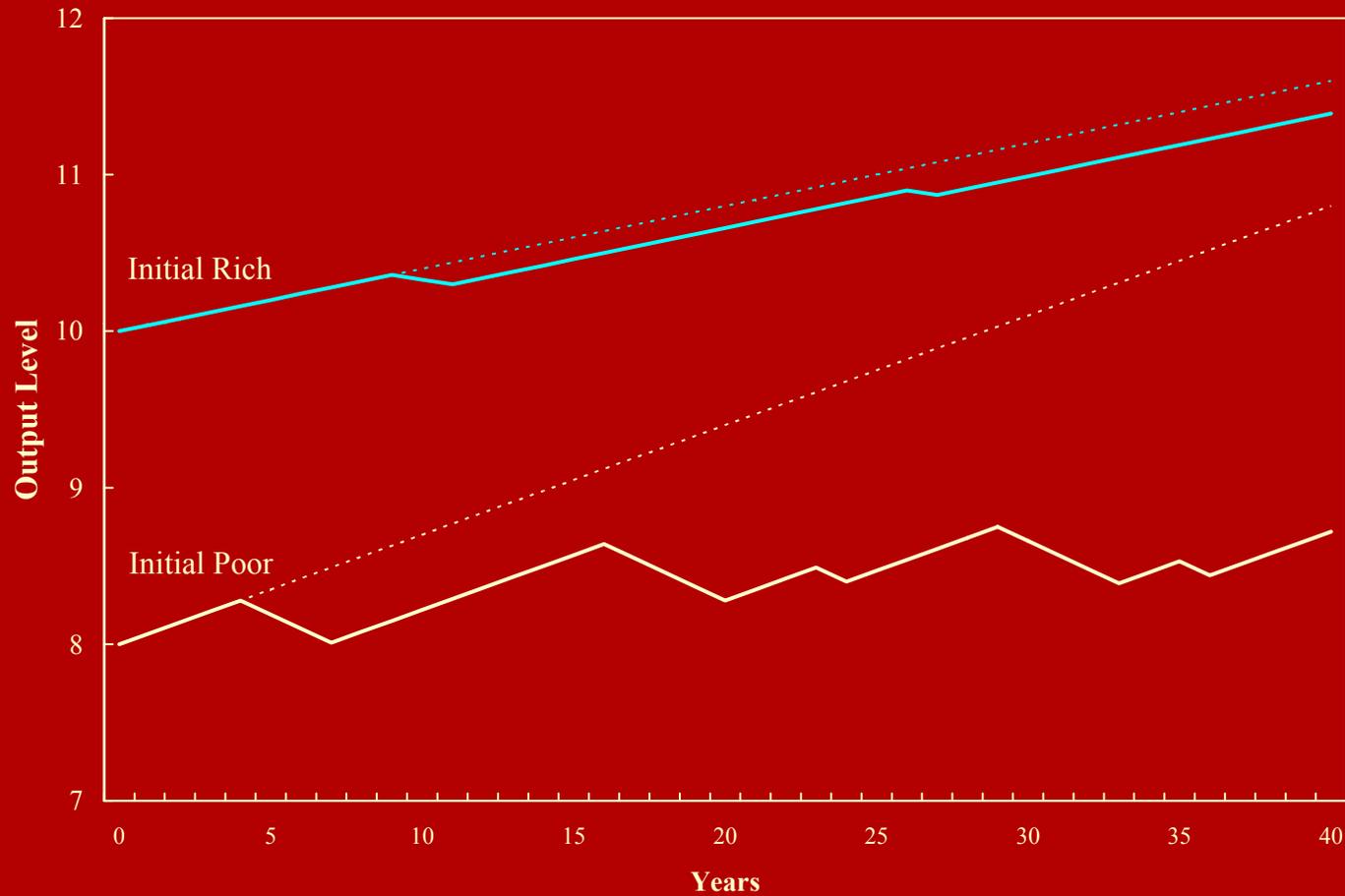
Dependent Variable:	Average Growth Rate 1960-2000			
	<u>All years</u>	<u>Expansion years only</u>	<u>Recession years only</u>	<u>Proportion of of recession years</u>
ln RGDP per capita in 1960	0.30 **	-1.02 ***	1.04 ***	-0.085 ***
T-stat	2.2	-5.2	5.8	-6.4
Adjusted R-squared	0.02	0.16	0.15	0.20
No. of Countries	112	112	112	112

Convergence in expansions, Divergence in recessions



Source: Cerra and Saxena, "Growth Dynamics: The Myth of Economic Recovery"
(IMF WP 05/147)

Stylized Model of Development



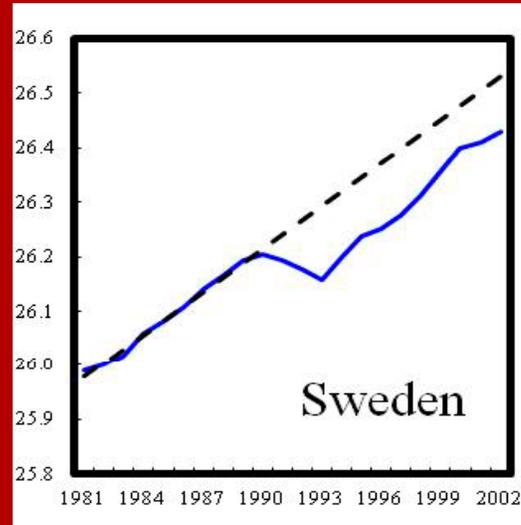
Source: Cerra and Saxena, "Growth Dynamics: The Myth of Economic Recovery" (IMF WP 05/147)

Diversity of experience within the average

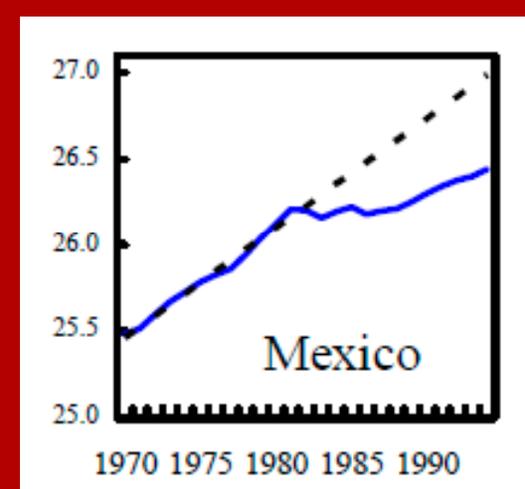
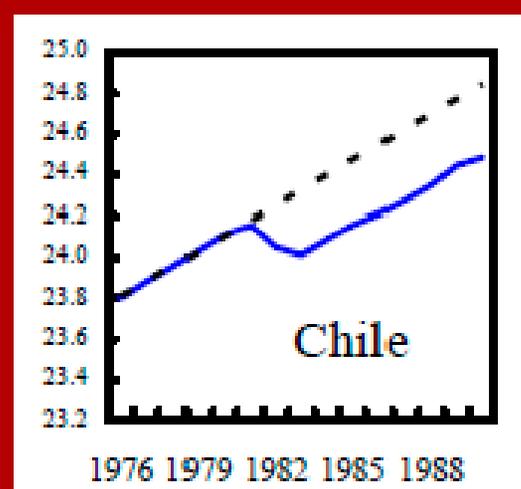
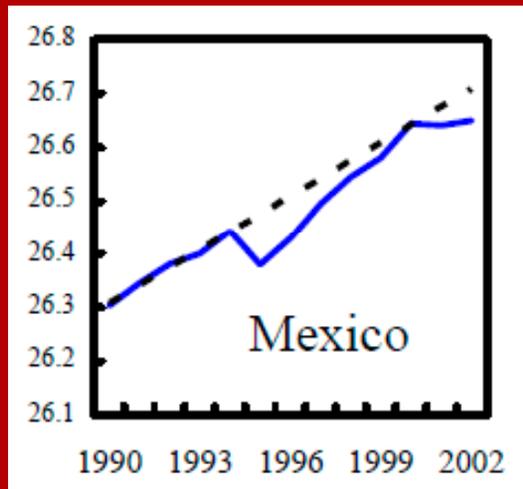
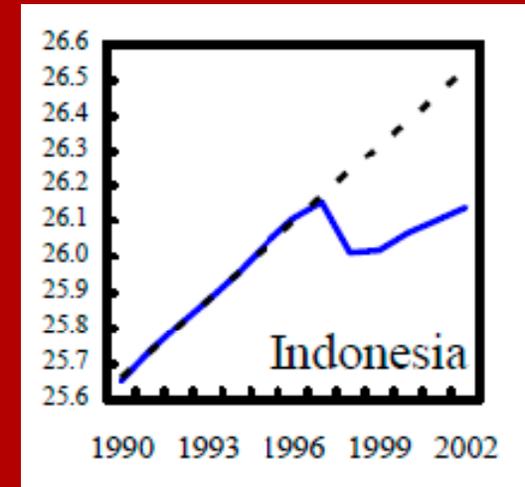
bounceback



parallel growth



slower growth

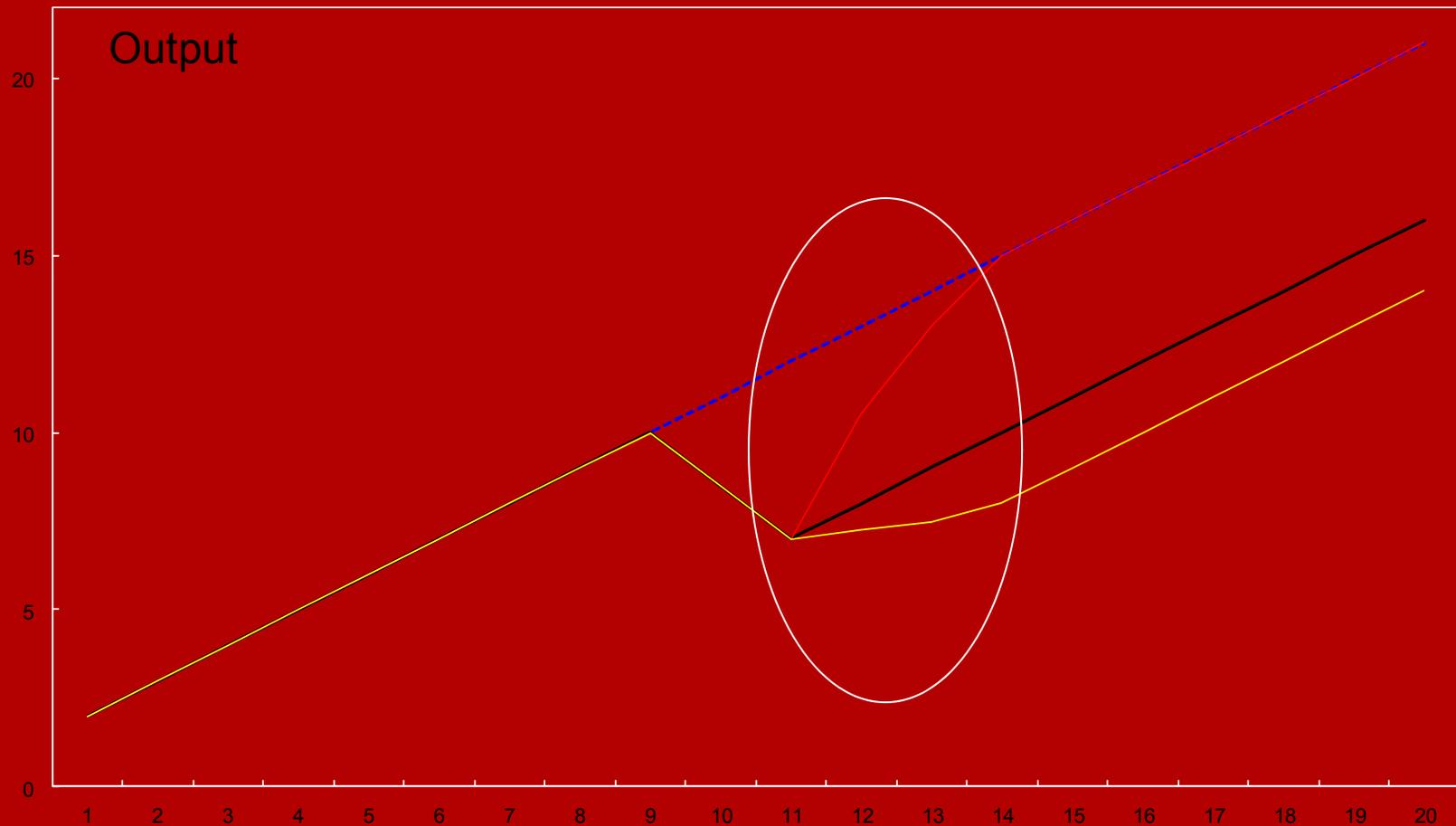


Policies for Recovery



Source: Cerra, Panizza and Saxena, "International Evidence on Recovery from Recessions"
(IMF WP 09/183)

Different recovery profiles



Source: Cerra, Panizza and Saxena, "International Evidence on Recovery from Recessions" (IMF WP 09/183)

Fiscal policy

	IND	DEV	DEV NO SSA
Recovery Year (RY)	-0.60 *	-0.75 **	-1.39 ***
Fiscal deficit ratio to GDP	n.s.	n.s.	n.s.
RY * Deficit ratio	0.12 **	n.s.	0.11 **

Monetary policy

	IND	DEV	DEV NO SSA
Recovery Year (RY)	-0.71 **	-1.23 *	-1.19 *
Real money growth	n.s.	0.06 ***	0.06 ***
RY * Real money growth	0.13 **	n.s.	n.s.

Foreign Aid

	DEV	DEV NO SSA	SSA
Recovery Year (RY)	n.s.	-1.3 ***	n.s.
Aid growth	n.s.	n.s.	n.s.
RY * Aid growth	2.5 *	n.s.	4.9 **

Exchange rate regime (fix & intm)

	IND	DEV	DEV NO SSA
Recovery Year (RY)	n.s.	n.s.	n.s.
Interm ex rt regime	n.s.	n.s.	n.s.
Fixed ex rt regime	n.s.	0.7 **	0.8 **
RY * Interm	n.s.	-1.6 **	-1.7 **
RY * Fix	-1.5 **	n.s.	-1.3 **

Real exchange rate

	IND	DEV	DEV NO SSA
Recovery Year (RY)	-0.9 ***	n.s.	-0.8 **
RER (relative to US dollar)	n.s.	1.8 ***	1.8 *
RY * RER	n.s.	-3.2 **	n.s.

Looking ahead: What do we need to learn?

- **Output gap – implication for fiscal & monetary policy**
- **Direction of causality and common factors**
- **Policies and conditions fostering resilience: this crisis as experiment**
 - **Macroeconomic stimulus**
 - **Buffers (high reserves, low debt, social safety nets)**
 - **Financial development**
 - **Trade and financial integration**

Conclusions

- ◆ Different responses to shocks
- ◆ Financial crises and many political crises have permanent impact on level of output
- ◆ Crises derail growth for LICs, incomes diverge: crisis traps
- ◆ Macro policies can boost recovery
 - sometimes with greater effectiveness than in later stages of expansion



Thank You