Minsky's Financial Instability Hypothesis in the new financial institutional framework. What are the lessons for developing countries?

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The importance of Minsky

- The capitalist system is unstable and it is related to economic cycles
- Financial variables are of utmost importance to explain economic system instability
- Minsky rescued Keynes revolutionary ideas from Hicks partial analysis
- Minsky foresaw financial instability in the capitalist golden age period

Issues at discussion

- **A critical revision of FIH**

  Financial inflation modify economic activity due to moving **expectations** on the **leverage ratio**

Or

  Financial inflation induces **financial gains** affecting indirectly economic expansion (re-distribution of Y)

- **How financial inflation affects developing countries** (DeC)
  - Develop financial market workings are not replicated in DeC

and

  - The new wealth distribution **is not linked to** domestic capital owners. External dependence

I. Minsky' Financial Instability Hypothesis and the Business Cycle

Minsky FIH is depicted by two key prices

- Supply price :

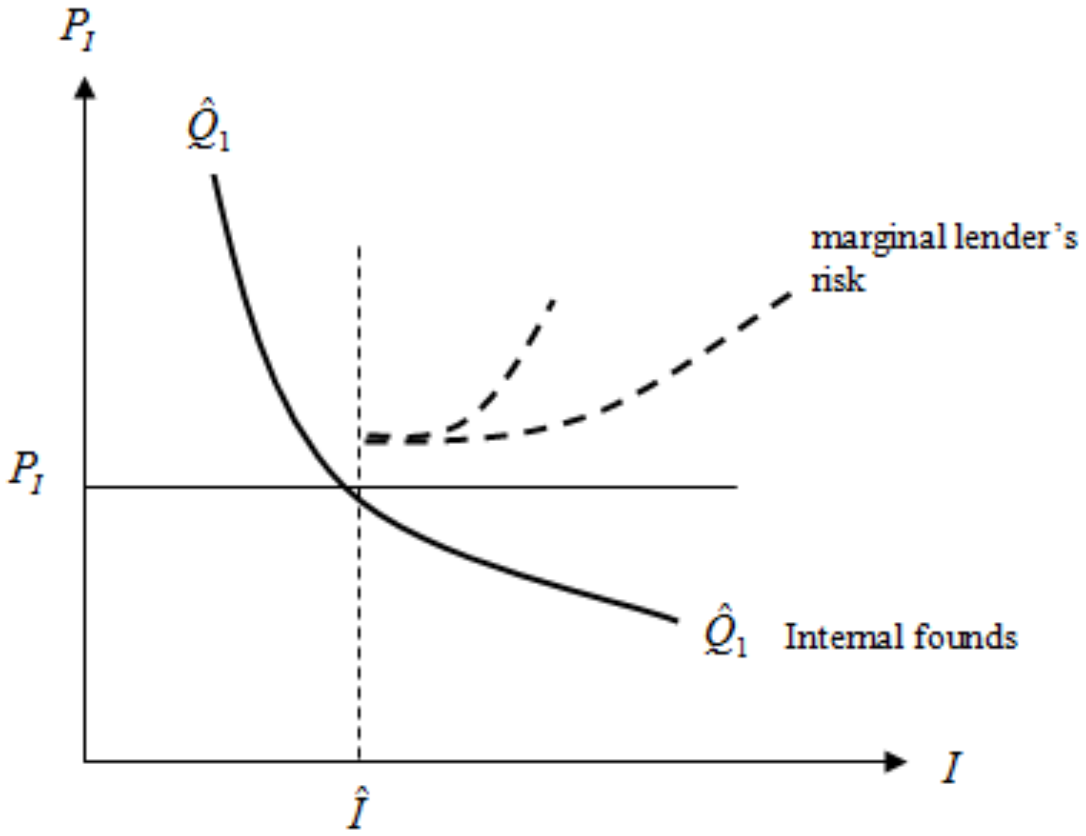
  P_I = f (cost –real and financial)

The upward part is due to:

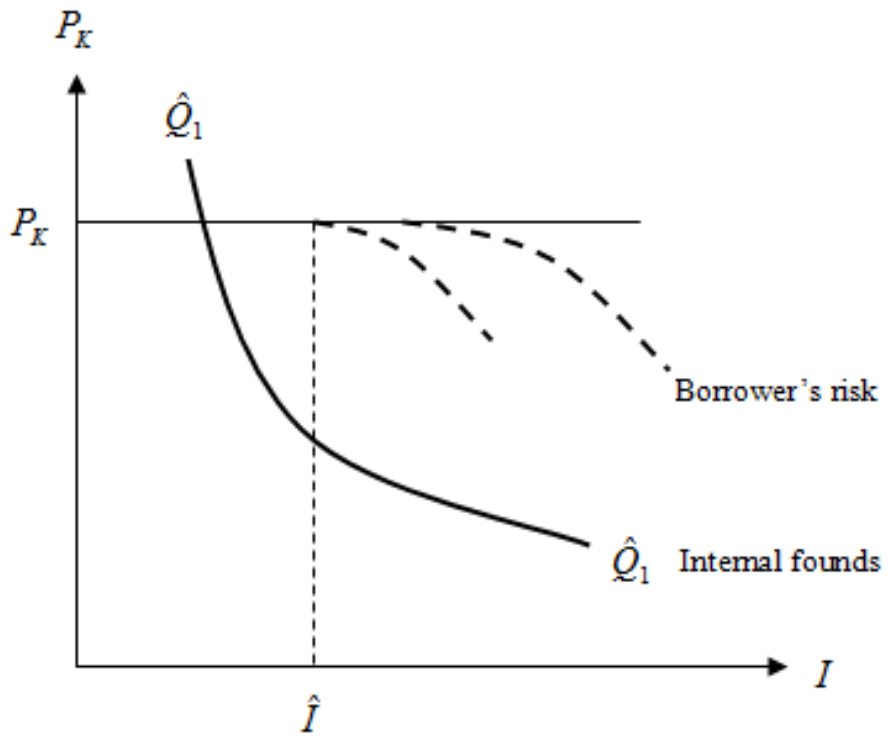
- Diminishing returns

- Market financial costs (Kalecki's lender increasing risk)

Graph


P_I
$\hat{Q}_1$
marginal lender's risk
P_I
$\hat{Q}_1$
Internal founds
I
$\hat{I}$

- P_D = (Expected returns, discount rate)
  Conditional to the economy
  Reflects borrowing increasing risk
  Depends on **asset price movements**.
  Affected by **corporations leverage ratio**, **secondary market deepness** **and** **interest rates movements**
- Graph


P_K
$\hat{Q}_1$
P_K
Borrower's risk
$\hat{Q}_1$
Internal founds
I
$\hat{I}$

Main criticism to P_D and P_I

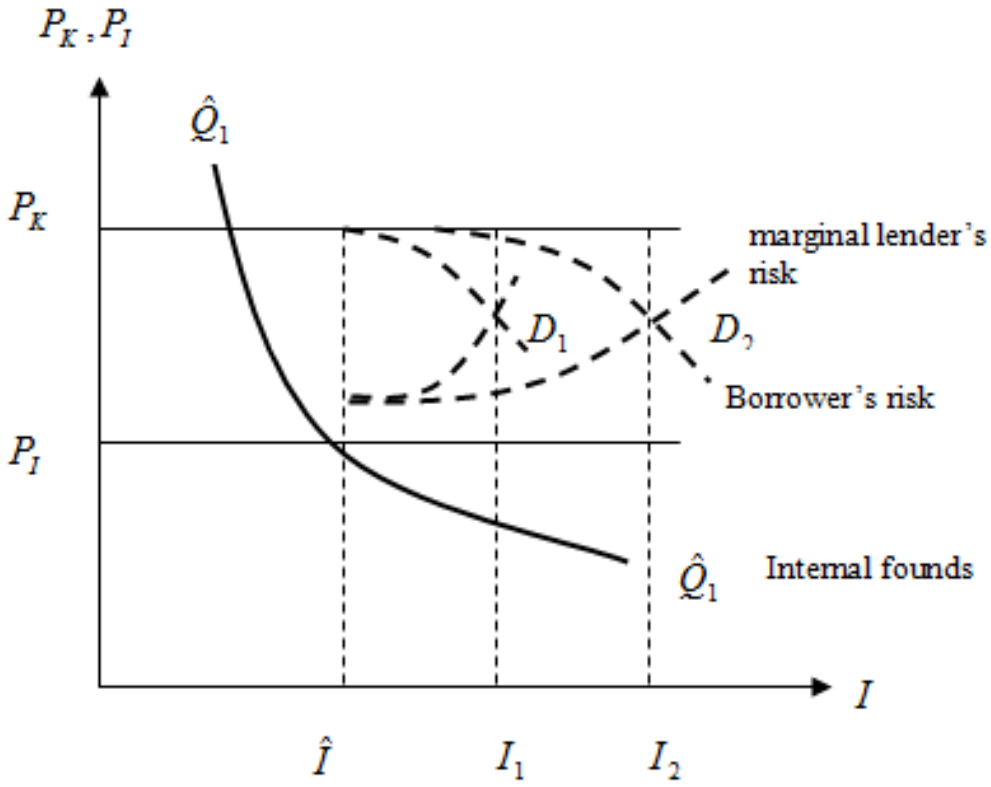
- These prices are applied to a macro level under the assumption that

  Internal funds remain constant as investment increases (not acknowledged Kalecki's proposition) , see graph

  Profits = f(I, C_K) $\therefore \uparrow I \Rightarrow \uparrow IF \Rightarrow$ leverage ratio need not Δ.

  Increasing debts **are** related to financial gains, (discussion over lags)

  $\therefore \Delta$ of financial prices are explained K inflows to security markets not monetized (high turnovers)


P_K, P_I
$\hat{Q}_1$
P_K
marginal lender's risk
D_1
D_2
Borrower's risk
P_I
$\hat{Q}_1$
Internal founds
I
$\hat{I}$
I_1
I_2

II. **The Post Bretton Woods era: Deregulation, globalization and economic growth**

a) Investment creates its own saving and it is stable under condition of limited capital mobility

b) Financial inflation reduces investment (industrial) growth and higher financial values partially offset effective demand reduction through finance to consumption and housing spending

a) Why investment shrank

- **We now that:**

  $\uparrow I \Rightarrow \uparrow$Profits $\Rightarrow \uparrow$IF $\therefore \uparrow Y \Rightarrow \uparrow$retained profits

  Credits to finance I are destroyed (ceteris paribus) Investment is not necessarily related to financial instability (ir are exogenous)

Accordingly

$\downarrow I \Rightarrow \downarrow$Profits $\Rightarrow \downarrow$ IF $\therefore \downarrow Y \Rightarrow \downarrow$Effective demand ($S_H$ &S_E) . If $I < S_H \Rightarrow S_E \downarrow \Rightarrow$ Financial deficit

$\therefore$ I = S, equalized by retained profit and business disequilibrium . Main problem I $\downarrow$

b) **Deregulation and globalization: *financialization***

- *Financialization* softens industrial recessions

  If D_{FS} > ↑ Liquidity Non money income ⇒ ↑ capital market turnover ⇒ ↑F_W & (S_h+ S_e) ⇒↓I

(Saving does not operate as a threshold to I)

- Financial inflation ⇒↑ liquidity & financial gains ⇒ ↑consumption & ↑ housing spending (wealth effect)

Impacts of financialization: Overcapitalization

- Non Financial Corporations ⇒ forced mergers and acquisitions + Securities new source of income (reduced I)
- Financial corporation: increase financial layering (non liquid asset turned into liquid assets)
- Banks: finance non traditional sectors (not related to investment) & securitization
- Households: S↓+ higher liabilities to non dynamic growth sector) and Y↓

- Industrial recessions are largely eliminated by “over-capitalization that increases liquidity of large companies and thus makes it easier for them to maintain payments on their commitments”
- The upper limit of this process reaches when financial bubble bursts, income shrinks through wealth effect, house asset prices and effective demand shrinks; N falls and borrowers are unable to pay debt commitments, house price goes down, non-bank financial institutions and banks bankrupt, finance is halted, taking place an industrial recessions.
- A mayor element price inflation and deflation

- **Developing economies performance under the new financial settings**

I. Main Capital market indicators

Main Capital Market Indicators (1987/2008)						
	International finance corporation price index (in US$)					
Section A	USA	LA & C	Argentina	Brazil	Chile	Mexico
Average	489	695	306	1172	2378	1956
SD	*255*	*511*	*672*	*293*	*1388*	*1450*
Max	*879*	*2289*	*2875*	*1057*	*5567*	*6432*
Min	*148*	*97*	*137*	*45*	*374*	*182*
AAGGR	*10*	*18*	*17*	*18*	*15*	*21*
	International finance corporation price index changes (in US$)					
Section B	USA	LA & C	Argentina	Brazil	Chile	Mexico
Average	10	21	25	30	19	27
SD	16	39	49	41	30	42
Max	34	116	138	105	90	102
Min	-23	-38	-50	-43	-30	-42

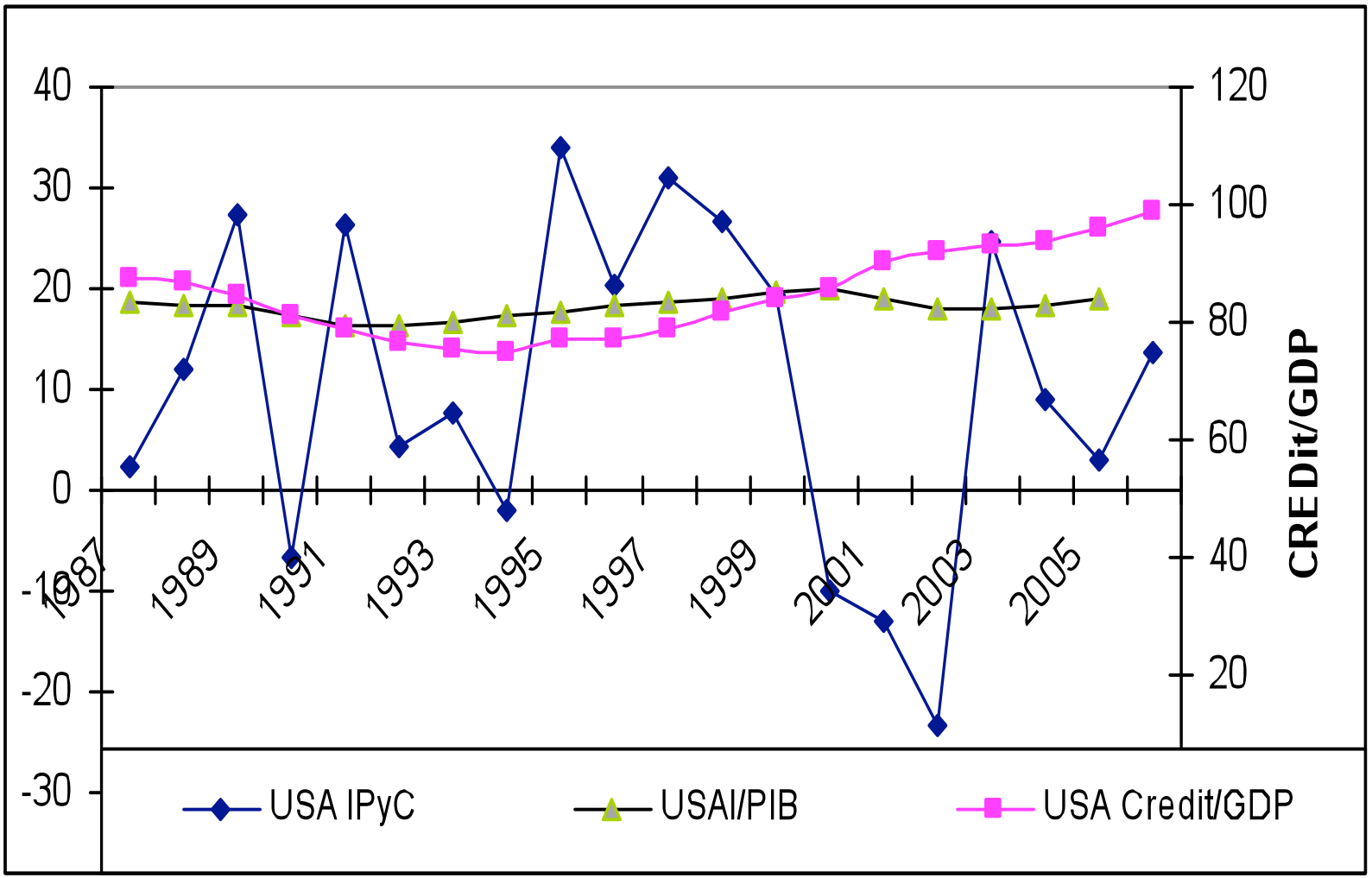
Section C	Market capitalization of listed companies (% of GDP) **					
	USA*	LA & C	Argentina	Brazil	Chile	Mexico
Media	110	27	27	28	85	27
SD	40	11	26	17	29	11
Max	180	52	101	67	124	61
Min	53	8	2	4	28	8
AAGGR	5	11	18	11	8	9
	Stock Trade Turnover (%)					
Section D	USA	LA & C	Argentina	Brazil	Chile	Mexico
Media	125	n.d.	24	39	10	42
SD	49	n.d.	19	18	3	33
Max	204	n.d.	84	86	19	179
Min	53	n.d.	2	0	6	21
AAGGR	7	n.d.	-11	-2	-6	-9
	Listed companies **					
Section E	USA	LA& C	Argentina	Brazil	Chile	Mexico
Media	6834	1776	138	493	252	180
SD	1135	234	32	81	27	21
Max	8851	2159	186	592	295	209
Min	5133	1274	83	357	205	125
AAGGR	-1	-1	-3	-2	1	-2

b) Gross Domestic Indicators

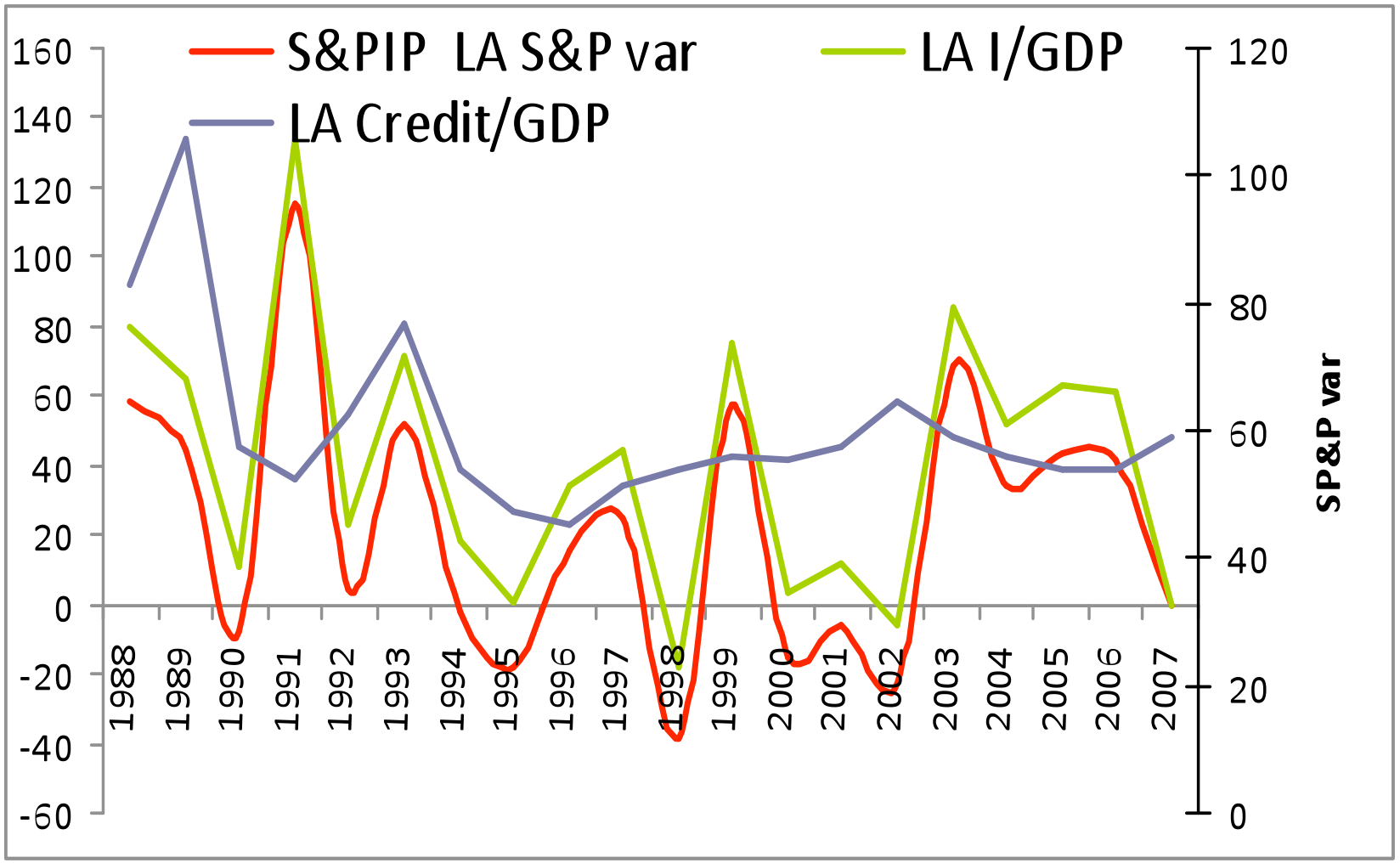
	Table 2					
1987/2006	Gross Domestic Product (Anual growth rate)					
Section A	USA*	LA&C	Argentina	Brazil	Chile	Mexico
Average	3.0	2.8	2.9	2.3	5.9	3.1
S. D.	1.3	2.1	6.8	2.4	3.1	2.9
Max	4.5	6.2	12.7	5.7	12.3	6.8
Min	-0.2	-0.5	-10.9	-4.3	-0.8	-6.2
	Consumption/GDP					
Section B	USA	LA&C	Argentina	Brazil	Chile	Mexico
Average	83.9	79.7	80.0	80.1	73.2	78.8
S. D.	1.5	2.1	4.6	4.3	3.0	2.7
Max	86.5	81.5	84.8	85.0	76.8	82.9
Min	81.8	74.7	71.4	69.6	65.1	74.1

Section C	Gross Fixed Domestic Capital/GDP					
	USA	LA&C	Argentina	Brazil	Chile	Mexico
Average	18.16	18.93	17.65	18.45	22.51	19.1
S. D.	1.06	1.16	2.80	2.91	2.63	1.3
Max	19.91	21.32	23.50	26.90	27.11	21.4
Min	16.17	16.84	11.96	15.28	19.10	16.1
SECtion D	EXPORTS/GDP					
	USA	LA&C	Argentina	Brazil	Chile	Mexico
Average	10.1	19.2	13.5	10.6	32.6	25.0
S. D.	0.9	3.6	7.3	3.0	5.2	6.4
Max	11.6	25.7	27.7	16.4	45.4	32.1
Min	7.7	14.8	6.6	6.6	26.3	15.2
Section E	IMPORTS/GDP					
	USA	LA&C	Argentina	Brazil	Chile	Mexico
Average	12.6	18.7	11.1	9.5	29.5	26.1
S. D.	1.8	3.3	4.2	2.4	1.9	6.4
Max	16.3	23.3	19.2	13.5	32.5	33.2
Min	10.5	12.7	4.6	5.5	26.6	13.4

Capital market stock prices index, investments and credit coefficients for the US



Capital market stock prices index, investments and credit coefficients for the Latin American & Caribbean economies



Conclusions

- Financial variables are of utmost importance to explain economic booms, recessions and stagnations
- Economy cycles are related to financial inflation and deflation
- Financial price movements seem more related to new income distribution rather than financing production or consumption.

- Financial inflation can partially neutralize industrial recession (corporations can cover previous debt commitments)
- Financial inflation is limited by capital inflows to financial market but reduces investment below household savings
- Developing financial market cannot replicate develop financial markets
- In DeC takes place financial inflation unrelated to domestic variables. They are link to external capital movement

- In DeC economic activity is lower and takes place a divorce between credit and investment spending and GDP movement
- There is high relation between investment and index prices, explained through a third variable (external capital inflows)
- Therefore the neutralizing variables (financial) are extremely mild to neutralize industrial recession in DeC and GDP shrinks comparatively more