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1982-2009.
A generation long problem: the structural constraint

by

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1982-2009. A generation long problem: the structural constraint

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On The Sustainability of External Debt: Is Debt Relief Enough?

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Essays on External debt sustainability in Low Income Countries

Annalisa Prizzon, PhD Thesis, University of Pavia, October 2009

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	1970-1974	1975-1979	1980-1984	1985-1989	1990-1994	1995-1999	2000-2004	2005-2007
B. Debt indicators								
B1. Dimension								
Total debt stocks (million of US$)	9862,09	29588,90	65887,33	112246,46	150235,40	164127,60	156634,23	133780,78
Debt service payments (million of US$)	844,94	2136,05	5354,07	6355,02	5727,54	6692,95	5274,22	5675,87
Interest arrears (million of US$)	120,41	910,83	2750,25	5753,39	12620,16	14435,15	11757,00	12832,23
Principal arrears (million of US$)	168,29	1078,07	3046,92	10470,42	24756,94	28734,45	21476,79	21598,49
Debt-to-GNI ratio (%)	22,92	40,32	74,75	129,99	161,15	141,93	130,92	89,59
Debt-to-export ratio (%)	…	158,42	330,45	691,18	772,11	612,69	492,13	237,84
Debt service-to-export ratio (%)	…	10,54	20,09	26,29	21,88	18,97	14,54	7,61
B2. Conditions								
Interest rate (%)	3,35	4,18	4,44	3,04	1,97	1,33	1,11	1,09
Average maturity (years)	23,81	24,18	25,52	29,29	29,36	28,05	30,51	28,74
Concessional debt/Total debt (%)	59,87	53,31	46,98	51,60	59,88	66,59	72,18	73,66
Average grace period (years)	6,50	6,21	6,35	7,37	7,66	7,19	7,71	5,25

Ten years after Enhanced HIPC many **HIPCs** and **LICs** have debt problems

Debt Sustainability Analysis, probably some elements have not been given due consideration

• **Financial aspect** $g > \theta$ or $g > i$ θ growth rate of debt

• **Structural aspect** **NICA-Non Interest Current Account**

• **Human development aspect** **-Improvements in the standard of living**
-Achieving the MDGs
-Increase expenditures in health and education

Focus on structural element

Once there is a debt stock there is an in-built dynamics

Changes in d = D/Y through time depend on:

- **i-g**

- **Initial debt stock or D/Y**

- **NICA**　　　　　　　-equivalent to *primary surplus* for domestic debt

　　　　　　　　　　　-Trade account, but also remittances, aid.

　　　　　　　　　　　-Only a positive NICA can lead to debt repayment

Sustainability as a non increasing debt ratio

Boundary relation

State equation

$$\theta = i - \frac{nica}{d}$$

$$\dot{d} = \frac{\dot{D}}{D} - \frac{\dot{Y}}{Y} = \theta - g$$

$$nica \geq (i - g)d$$

$$\dot{d} = -nica + (i - g)d$$

Following figure modified from Pasinetti 1998, Harck, 2000, CJE

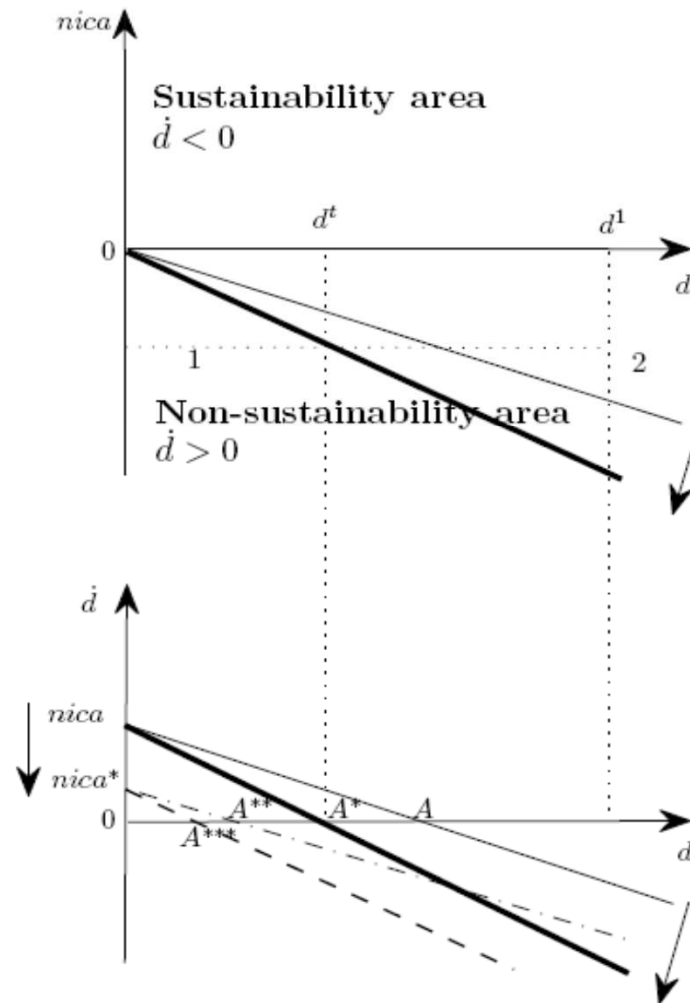Gianni Vaggi, University of Pavia

Figure 1: The Framework of the 'Geometry of Debt Sustainability'
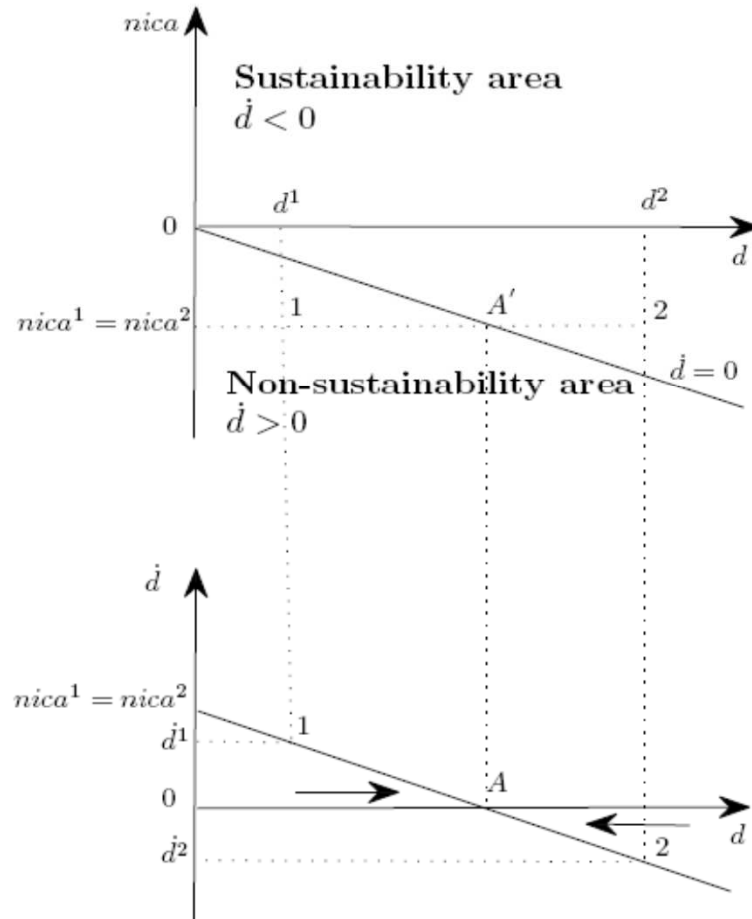
A country can stabilise the debt ratio even if it has a NICA deficit but in order to permanently improve her debt situation it needs to **reduce the deficit and generate the surplus**, this is much more complicated than having **g> i**. It requires time and **structural change**.

Debt forgiveness per se will not solve the problem. However cancellation opens some opportunity: a lower foreign exchange constraint
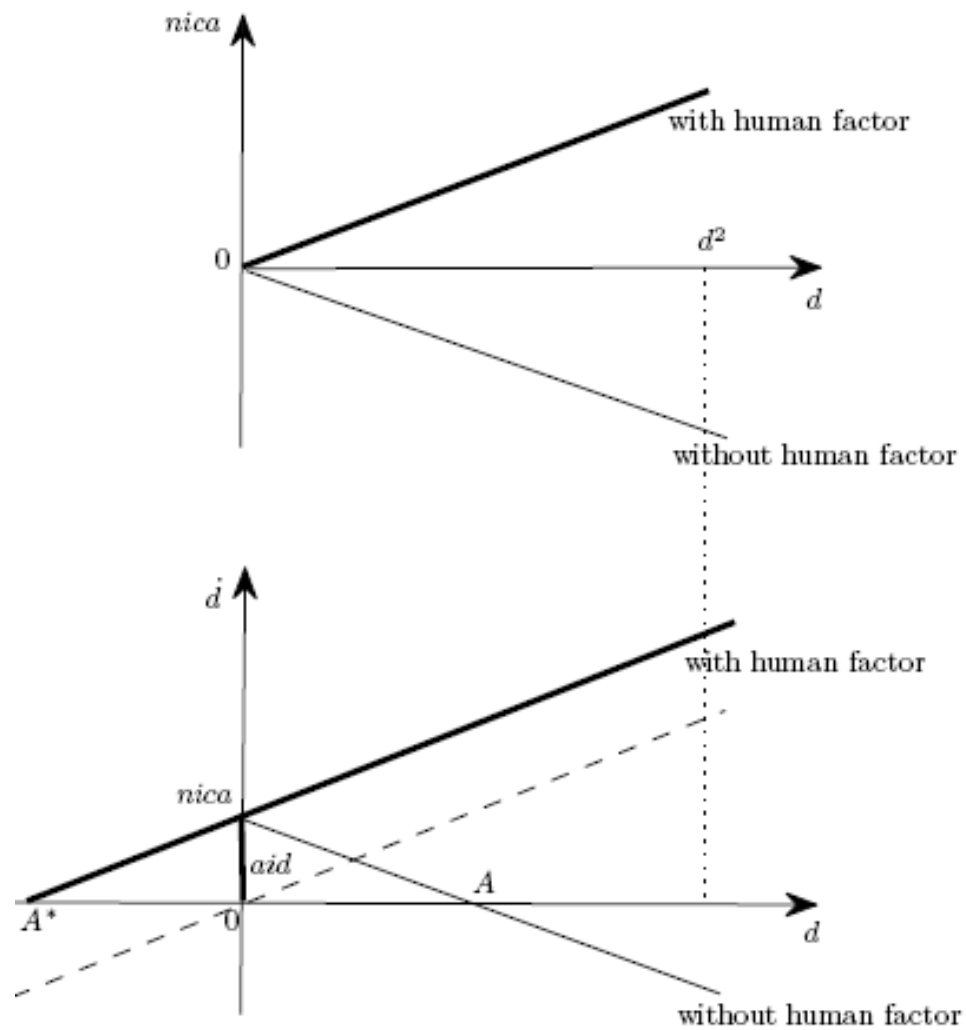
- g could increase

- NICA could improve

If not, debt will be re-created: same stable D/Y as before, even with total cancellation: 'fresh start'.

Figure 2: Debt Forgiveness, the Growth Rate and NICA

•Increases in **aid** and **remittances** have the same effect as an improvement in Trade Account

•Increase in **FDI** and **Portfolio Investments** similar to debt forgiveness

Affordability versus sustainability, the human development aspect

The 'human factor $h = p + k$ **-p =** population growth rate

                                    -k= target increase in Y/P

$$nica = (i + h - g)d \quad \text{boundary relation}$$

$$\dot{d} = (i + h - g)d - nica \quad \text{state equation}$$

,

If **g < i + h**   Impossible to

»   -service the debt

»   -improve income per capita

Using the state equation it is possible to estimate the g* required to stabilise the debt ratio.

Data are averages for 2000-2006. We set **k** at **5%** for HIPC, and **2%** for Latin America and East Asia, that is in column h_1 .

g* and g_{h1} * are the growth rates required to stabilise the debt ratio, with and without the 'human factor'.

Growth and debt stabilization

	nica	*i*	*d*	h_1	g^*	g^*_{h1}
HIPC	-8.32	1.32	70.1	7.43	13.2	20.3
Latin America	-1.91	5.92	39.8	3.40	10.7	14.1
East Asia	1.06	3.01	50.2	3.50	0.90	4.40

Authors' calculation based on World Bank (2008a) and World Bank (2008b)

Many goals at the same time

- Export diversification, positive T/A or at least NICA
- MDGs

Two birds with one stone, but where is the stone?

Some policy space and some breathing time

Given the 2007-2009 crisis which options:

In the **short run**: sustained aid + debt forgiveness

In the **medium run**: -trade and industrial policies (T/A and NICA), but what about trade agreement such as EPAs? SDT and WTO regulations; -domestic savings

Authors' calculation based on World Bank (2008a) and World Bank (2008b)

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Tab. A.7: External Flows — HIPCs and HICs

		1970-74	1975-79	1980-81	1985-89	1990-94	1995-99	2000-04	2005-07
Interest payments									
	HIPC	0.60	0.95	1.65	1.61	1.81	1.43	1.03	1.15
	HIC	1.70	3.07	6.34	6.94	2.67	3.22	5.14	3.65
Principal repayments									
	HIPC	1.20	1.65	1.77	2.08	2.58	2.10	1.51	1.36
	HIC	2.89	3.39	2.18	1.96	2.14	2.59	3.86	3.69
Debt related flows									
Net flows on debt									
	HIPC	7.09	16.18	24.30	13.72	9.55	7.73	7.98	13.62
	HIC	2.94	4.42	5.96	1.84	1.44	1.92	1.63	1.40
Net transfers on debt									
	HIPC	5.24	13.44	13.36 plus 4.29		4.23	3.14	2.53	3.70
	HIC	1.61	2.42	0.98	(3.22)	(1.23)	(0.62)	(1.21)	(0.94)
Non debt related flows									
FDI									
	HIPC	2.83	1.37	2.29	1.01	3.05	6.70	11.20	14.06
	HIC	1.73	0.64	0.65	1.02	1.64	3.45	3.72	4.17
Portfolio equity									
	HIPC	...	0.24	0.04	0.06	0.06	0.06	(0.57)	(0.02)
	HIC	...	0.00	0.00	0.01	0.53	0.17	0.01	0.33
Grants									
	HIPC	2.36	4.29	5.22	6.93	10.99	8.58	9.87	17.17
	HIC	0.09	0.08	0.12	0.43	0.56	0.18	0.18	0.22
Workers' remittances received									
	HIPC	...	...	3.79	3.26	2.39	2.20	5.64	8.24
	HIC	...	2.28	0.68	1.08	1.53	2.51	3.23	3.74

Source: World Bank (2008a,b)
Negative values under parenthesis

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From the Debt Crisis to Sustainable Development

Changing Perspectives on North-South Relations

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