

Natural Capital: from resource curse to resource blessing

Glenn-Marie Lange
The World Bank

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Escaping the 'Resource Curse'

Capital Approach to Sustainable Development:

Shift in policy focus, from economic development as GNP/GDP growth to economic development as *'portfolio management'*

Sustainable development requires maintaining per capita wealth

$$\text{Total wealth} = k_{\text{Produced}} + k_{\text{Natural}} + k_{\text{Human}}$$

Key to Development in Resource-Rich Economies: **transform natural capital into other forms of capital**

Transformation of natural capital requires policies to promote:

1. economic efficiency in resource extraction to *maximize resource rent*
2. *recovery of resource rent* by an agency that will reinvest the revenues
3. *Re-investment of rent* in assets that generate at least as much income as the natural capital they replace

“Greening” the National Accounts:

How do we engage Ministries of Finance, Central Banks and Planning Agencies?

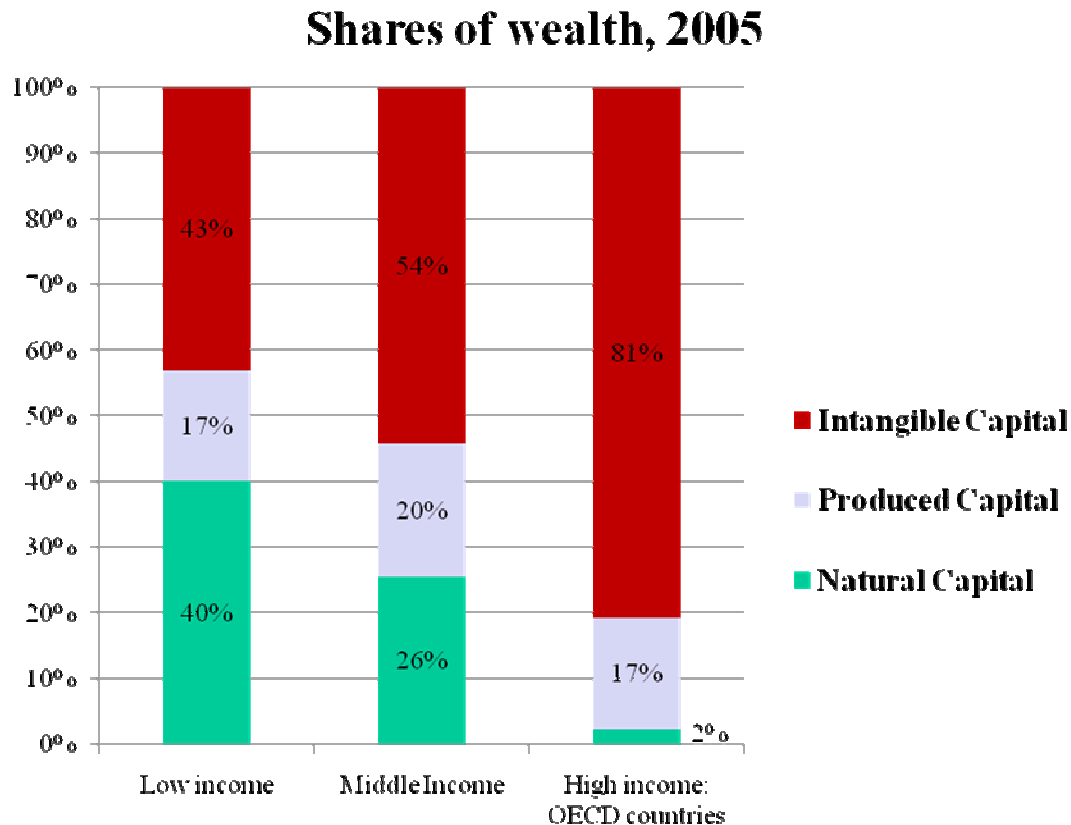
By accounting for total wealth, including natural capital

1. **Is GDP growth sustainable, or, are we “living off our natural capital?”**
2. **What is the real economic importance of natural capital, and how much should be invested in it?**

Wealth estimates by region and income group, 2005\$ per capita

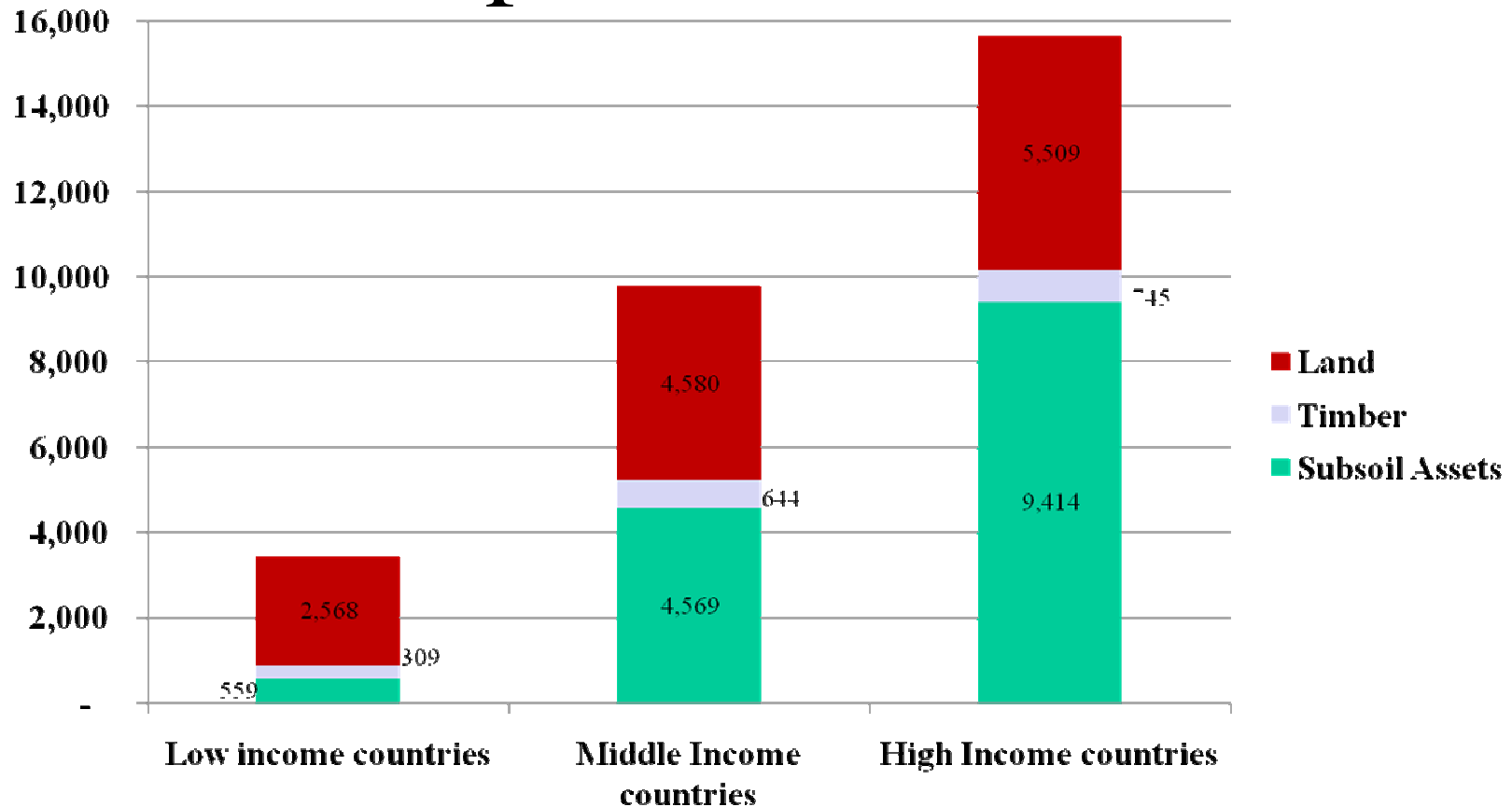
Group	<i>Dollars per capita</i>				<i>Percent share of total wealth</i>		
	Total Wealth	Natural Capital	Produced Capital	Intangible Capital	Natural Capital	Produced Capital	Intangible Capital
East Asia and Pacif.	20,113	6,744	5,676	7,692	34%	28%	38%
Eur. and Central Asia	77,771	16,826	14,228	46,718	22%	18%	60%
Lat. America and Carib.	79,391	16,172	12,259	50,960	20%	15%	64%
Mid. East and N. Africa	30,177	14,615	7,107	8,455	48%	24%	28%
South Asia	10,445	3,466	1,828	5,152	33%	17%	49%
Sub-Saharan Africa	15,254	4,917	1,987	8,350	32%	13%	55%
Low income	9,339	3,749	1,565	4,025	40%	17%	43%
Lower middle income	23,153	7,866	5,884	9,402	34%	25%	41%
Upper middle income	94,339	18,564	15,786	59,990	20%	17%	64%
High income: OECD	590,312	14,378	99,625	476,309	2%	17%	81%
High income: non- OECD	241,212	100,907	50,204	90,102	42%	21%	37%
World	118,390	9,670	20,767	87,953	8%	18%	74%
<i>Oil exporters</i>	<i>61,382</i>	<i>38,870</i>	<i>14,597</i>	<i>7,915</i>	<i>63%</i>	<i>24%</i>	<i>13%</i>

Shares of wealth by country income-class, 2005



- **Intangible capital** is the largest share of wealth
- **Natural capital** share declines with income
- **In the poorest countries, natural capital** is more important than produced capital

Value of natural resources per person, 2005



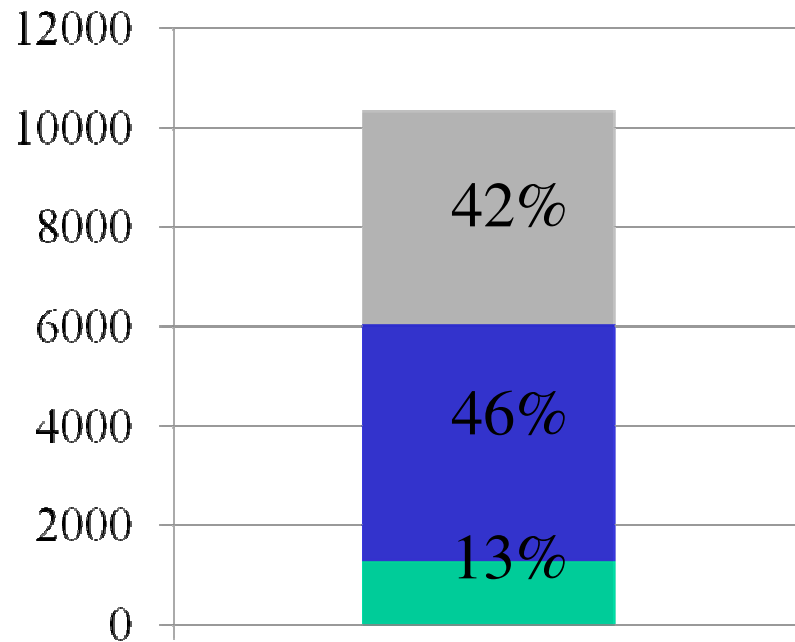
Land resource management is critical in the poorest countries

Composition of Natural Capital, 2005 (\$ per capita)							
Group	Natural Capital	Subsoil Assets	Timber resources	NTFR	Prot. Areas	Cropland	Pasture-land
Low income countries	3,749	559	309	76	166	1,958	610
	100%	15%	8%	2%	4%	52%	16%
Middle Income countries	10,643	4,569	644	186	565	3,894	686
	100%	43%	6%	2%	5%	37%	6%
High income: OECD countries	14,378	4,724	786	484	2,529	3,447	2,262
	100%	33%	5%	3%	18%	24%	16%

Note: NTFR: Non timber forest resources, PA: Protected Areas.

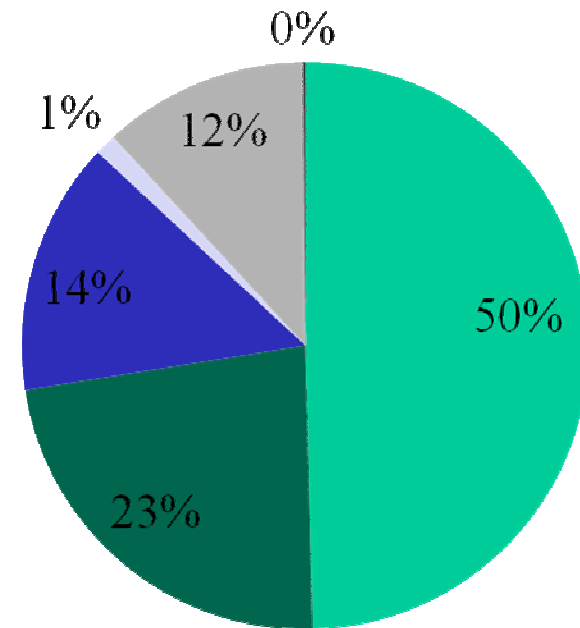
Where is the wealth of Kenya? (\$ per capita), 2005

Total wealth



■ Produced Capital ■ Natural Capital ■ Intangible Capital

Natural capital



■ Crop ■ Pasture Land ■ Forest - Timber
 ■ Forest - NTF ■ Protected Areas ■ Subsoil assets

Changing Wealth: a better indicator of macroeconomic performance

Sustainable development requires maintaining total wealth (manufactured, natural, human)

Wealth changes from one year to the next by savings, positive or negative (depletion, degradation)

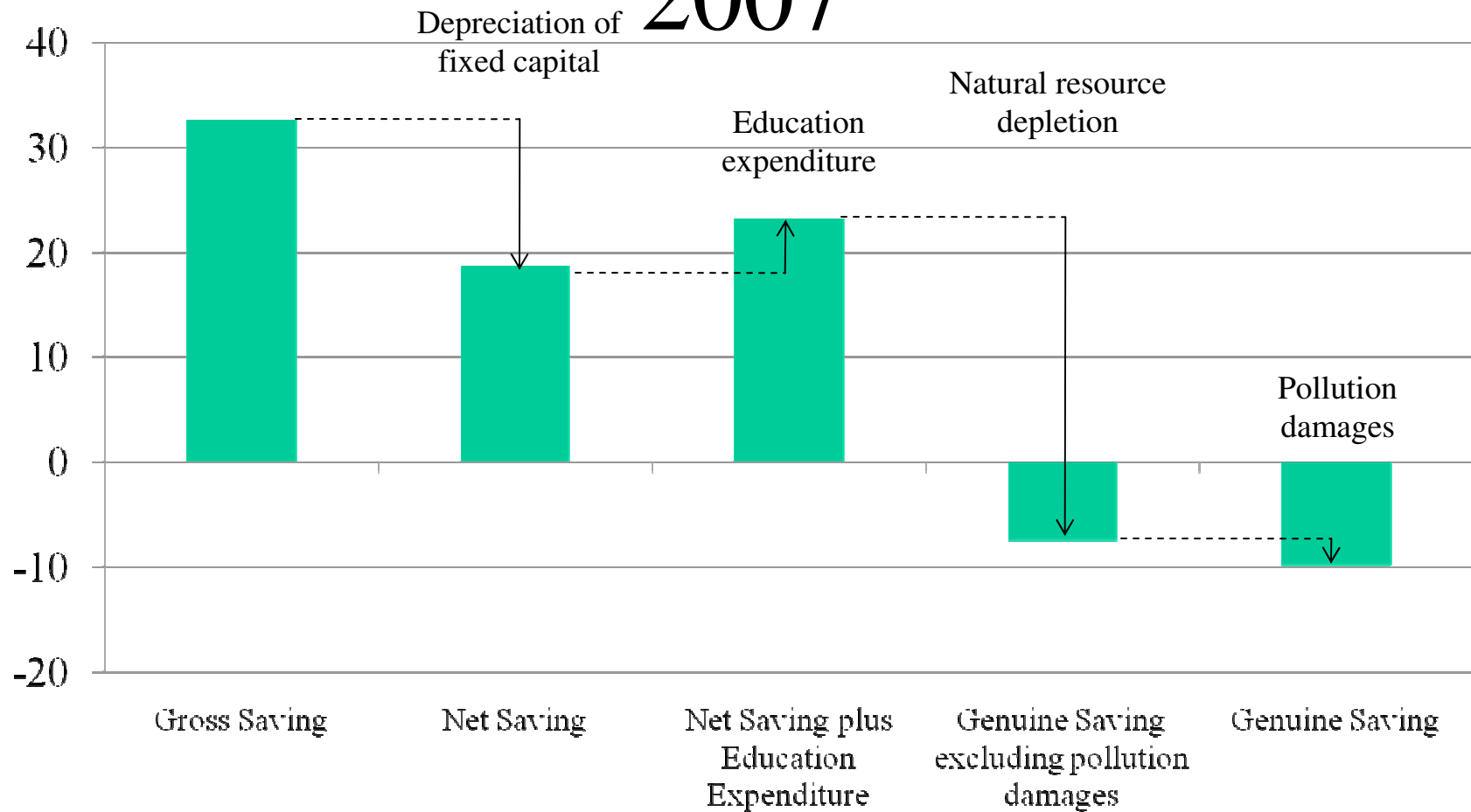
→ Indicator of sustainable development is changing wealth or ***Genuine Savings***

Positive Genuine Savings indicates sustainable development

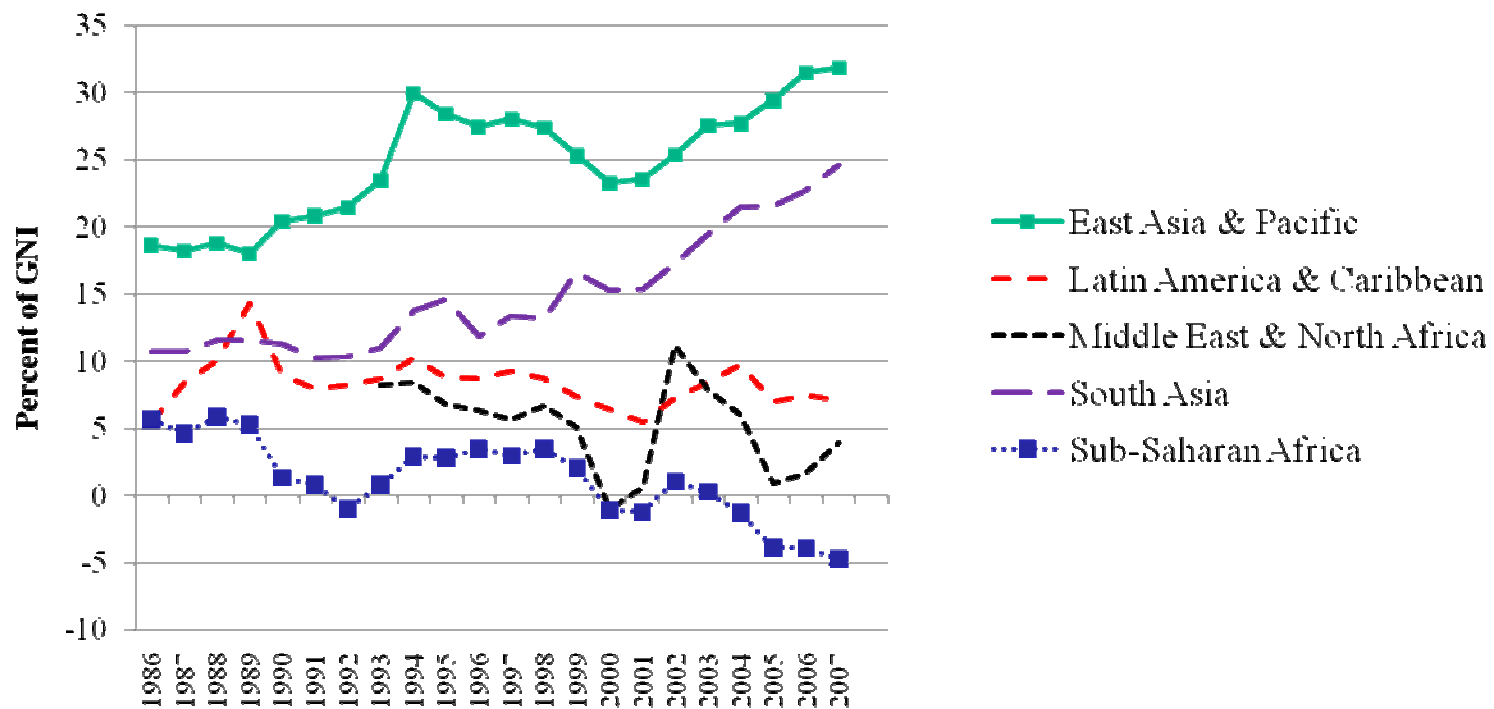
Negative Genuine Savings indicates unsustainable development—'living off our natural capital'

Genuine saving – Kazakhstan

2007

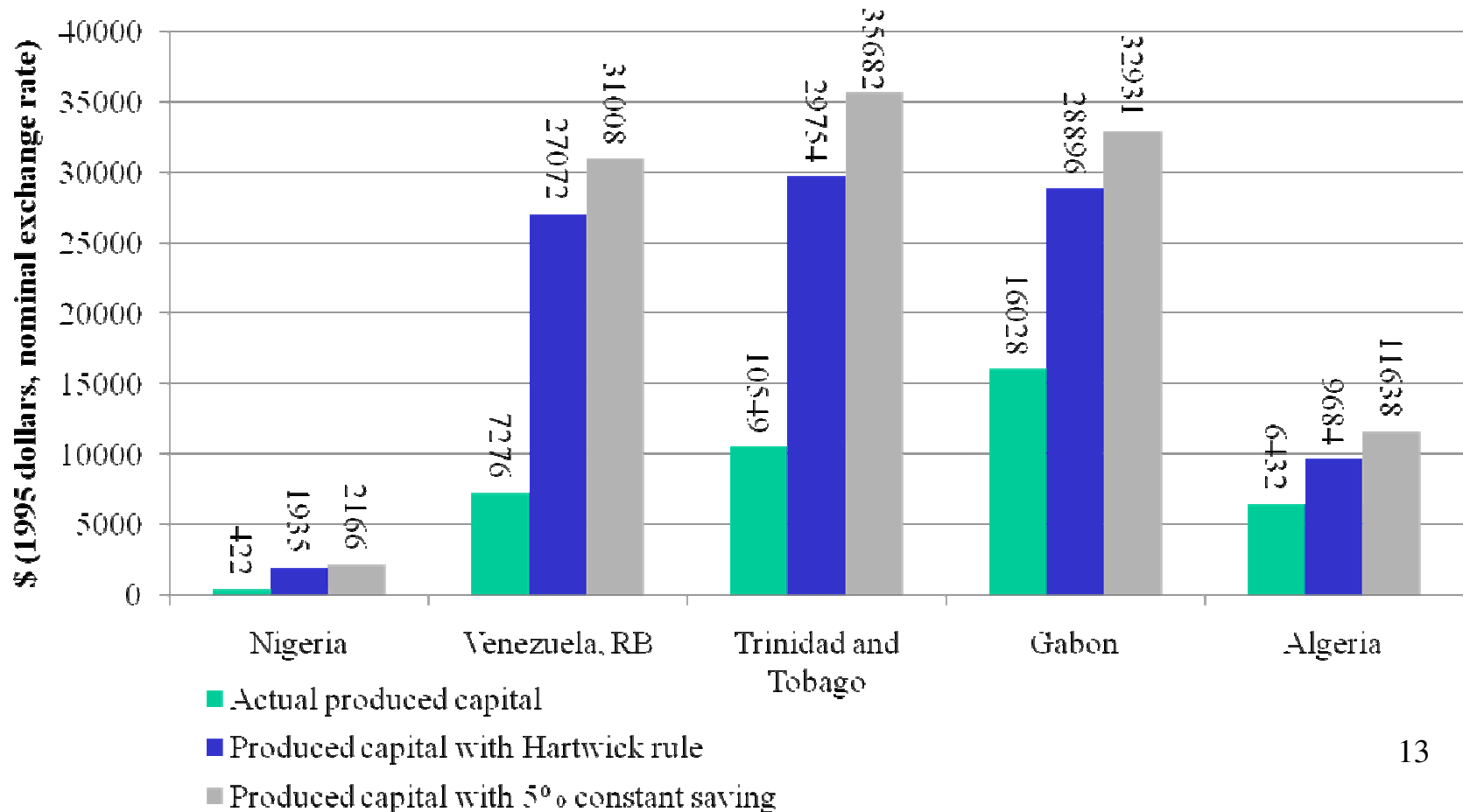


Genuine Saving rates by region, 1986-2007



What if countries had reinvested rents?

(manufactured capital by 2000, actual and potential)



Policy Use in PRSPs, MDGs:

Is economic growth sustainable or are we “living off our (natural) capital?”

MDG, PRSP’s main objective: Sustainable economic growth with poverty reduction

- **PSRP Monitoring matrix: Macroeconomic indicator of success is GDP growth**
- **MDGs do not set explicit target indicator for sustainable development**

GDP measures economic growth, but does not take into account how much capital we are using up

GDP measures economic growth
Change in wealth measures sustainability of growth

BOTH ARE NEEDED!

The West grew rich by depleting natural resources, so why shouldn't the developing world?

Genuine Savings and Green Accounting:

Ensure that utilization of natural capital, especially depletion, results in greater wealth and sustainable economic growth

—not short-lived consumption that leaves a country poorer than before

Global Initiative for Environmental Accounting

Major Components

1. Integrate wealth accounting into the analytical and operational work of the World Bank
2. Implement wealth accounting in a group of countries, developing and developed countries
3. Develop standardized guidelines for the implementation of wealth accounting through the UN process (SEEA)
4. Establish a process to promote wealth accounting beyond the project countries through a broad, global partnership with national govt agencies, international agencies, NGOs, academic institutions and other.