
Intangible Capital Is the Largest Share of Total Wealth

The most striking aspect of the wealth estimates is the high values for intangible capital. Nearly 85 percent of the countries in our sample have an intangible capital share of total wealth greater than 50 percent. This outcome validates the classical economists' intuition that human capital and other intangibles play a major role in economic development. Intangible capital varies widely across income groups and across regions. In the developing world, the Latin America and the Caribbean region has the highest level of intangible capital, \$49,000 per capita. The lowest levels are in South Asia, \$4,000 per capita, and Sub-Saharan Africa, less than \$7,000 per capita.

Chapter 7 uses a production function framework to divide the intangible capital residual into the components that explain its variation across countries. Human capital (measured through years of schooling) and governance (measured through a rule of law index) together explain nearly 90 percent of the variation in intangible capital.

Intangible capital comprises 80 percent of the total wealth in high-income countries. It is close to zero, and often negative, in major oil exporters such as Nigeria, Algeria, and Venezuela. What is special about oil states? Box 2.1 analyzes this issue.

Box 2.1 Why a Negative Level of Intangible Capital

As seen in table 2.2 in appendix 2, a number of countries appear to have negative levels of intangible capital. This is the case for the Republic of Congo, Nigeria, Algeria, the Syrian Arab Republic, and Gabon. Although positive, very low levels of intangible capital are estimated for República Bolivariana de Venezuela, Moldova, Guyana, and the Russian Federation (see table on the next page).

A negative level of intangible capital is possible by construction because it is calculated as a residual—the difference between total wealth (the present value of future consumption) and the sum of produced and natural capital. The real question is how to interpret a negative or extremely low value of intangible capital.

**Intangible Capital and the Composition of
Wealth in Highly Resource-Dependent Countries**

Country	Intangible capital per capita (\$)	Percentage share of total wealth		
		Natural capital	Produced capital	Intangible capital
Russian Federation	6,029	44	40	16
Guyana	2,176	65	21	14
Moldova	1,173	37	49	13
Venezuela, R. B. de	4,360	60	30	10
Gabon	-3,215	66	41	-7
Syrian Arab Rep.	-1,598	84	32	-15
Algeria	-3,418	71	47	-18
Nigeria	-1,959	147	24	-71
Congo, Rep. of	-12,158	265	180	-346

Source: Authors.

Recall that total wealth is the present value of *sustainable* consumption. What the low and negative values of intangible capital are really saying is that the level of GNI is *too low* in these countries. If it were higher, then higher levels of consumption per capita could be sustained and both total wealth and intangible wealth would be higher. GNI is too low in these countries in the sense that they are achieving extremely low rates of return on their produced, human, and institutional capital. This is a classic symptom of the *resource curse* as documented by Auty (2001) and Gylfason (2001).

Lower Shares but Higher Levels of Natural Capital in Richer Countries

High-income countries have a relatively low ratio of natural resources to total assets compared with poorer countries. Is income in poorer countries constrained by a high level of natural-resource dependence? Without further analysis it is not possible to draw a general conclusion regarding the causal link between asset composition and income. The fact

that lower-income countries are more dependent on natural resources than their richer peers seems to be an intrinsic feature of the development process.

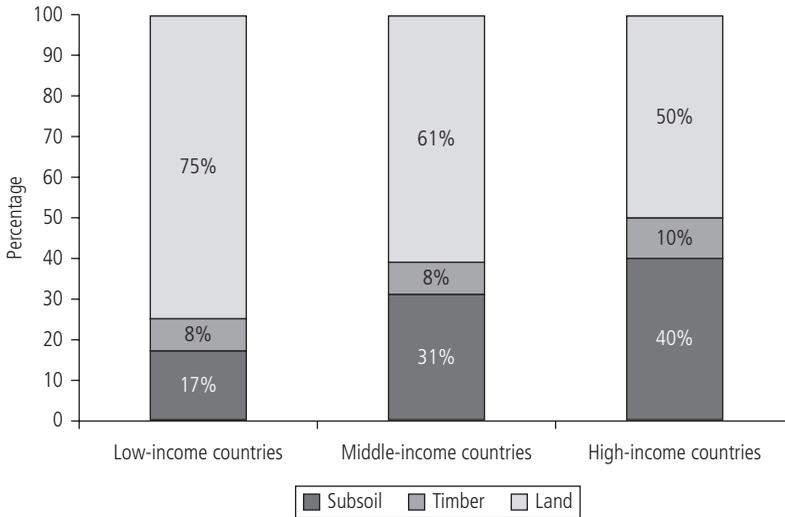
While rich countries clearly were more heavily forested and had more abundant wildlife and fish resources in the past, it is striking that the value of natural capital per person is higher today in high-income countries than in low- and middle-income countries. In high-income countries it is likely that preferences linked to higher incomes are playing a key role in fostering more careful management of natural capital, while higher levels of other forms of capital may interact positively with the value of natural capital—specialized knowledge and greater mechanization, for example, boosts the yields on cropland in rich countries compared with the yields in poor countries.

Poorer Countries Rely on Land Resources

Given the importance of natural capital in the wealth of poor countries, the individual subcomponents merit consideration. Excluding large oil-exporting countries, land resources are very important in low-income countries, with a 75 percent share of natural wealth (69 percent consisting of cropland and pastureland), followed by subsoil assets at 17 percent. By comparison, in middle-income countries land resources account for 61 percent of natural capital, while subsoil assets account for 31 percent. Figure 2.3 summarizes these findings.

The importance of land resources (cropland, pastureland, and protected areas) decreases with the level of income. This suggests a potential poverty-land-dependence trap in low-income countries. Countries in which land resources account for more than one third of total wealth, such as Niger, Burundi, and Moldova, all belong to the low-income country group.

By contrast, low-income countries, as a group, are not particularly dependent on subsoil assets. Countries rich in mineral and energy resources may be found in each of the income groups.

Figure 2.3 The Composition of Natural Capital (High Oil Exporters Excluded)

Source: Authors.

Key Conclusions on Wealth

The ranking of countries by total wealth per capita in appendix 2 does not differ hugely from the ranking by gross domestic product (GDP) per capita. It would be surprising if it did, since GDP is the return on total wealth. There are important exceptions to this, particularly the highly resource-dependent economies featured in box 2.1. But the primary interest in measuring wealth is not to rank countries. It is to better understand the composition of wealth and how this composition varies across levels of income.

The main conclusions from the wealth analysis include:

- Low-income countries are highly dependent on natural resources. The share of natural capital is greater than the share of produced capital in these countries.
- Cropland and pastureland is the largest share, nearly 70 percent, of natural wealth in poor countries (excluding oil exporters).

- Overall, intangible capital is the preponderant share of wealth in virtually all countries, with the share increasing with income. The particularly inefficient use of produced and intangible assets in the most resource-dependent economies leads to the anomalous result of apparently negative shares of intangible capital in these economies.
- The level of natural wealth per capita actually rises with income. This contradicts the common assumption, that development necessarily entails the depletion of the environment and natural resources.

The declining *share* of natural wealth as income increases is not an argument that natural resources are somehow unimportant—food, fiber, timber, minerals, and energy are all plainly needed to sustain lives and economies, but it does indicate a decline in relative importance. The key point is that low-income countries are highly dependent on natural resources *now*. How these resources are managed will affect both current welfare and the prospects for development in poor countries.

Table 2.3 Wealth per Capita by Region and Income Group, 2000

Region	\$ per capita				% share of total wealth		
	Total wealth	Natural capital	Produced capital	Intangible capital	Natural capital	Produced capital	Intangible capital
Latin America and the Caribbean	67,955	8,059	10,830	49,066	12	16	72
Sub-Saharan Africa	10,730	2,535	1,449	6,746	24	13	63
South Asia	6,906	1,749	1,115	4,043	25	16	59
East Asia and the Pacific	11,958	2,511	3,189	6,258	21	27	52
Middle East and North Africa	22,186	7,989	4,448	9,749	36	20	44
Europe and Central Asia	40,209	11,031	12,299	16,880	27	31	42
Income group							
Low-income countries	7,216	2,075	1,150	3,991	29	16	55
Lower-middle-income countries	23,612	4,398	4,962	14,253	19	21	60
Upper-middle-income countries	72,897	10,921	16,481	45,495	15	23	62
High-income OECD countries	439,063	9,531	76,193	353,339	2	17	80
World	90,210	4,681	16,160	69,369	5	18	77

Table 1.1 Total Wealth, 2000

— \$ per capita and percentage shares —

Income group	Natural capital	Produced capital	Intangible capital	Total wealth	Natural capital share	Produced capital share	Intangible capital share
Low-income countries	1,925	1,174	4,434	7,532	26%	16%	59%
Middle-income countries	3,496	5,347	18,773	27,616	13%	19%	68%
High-income OECD countries	9,531	76,193	353,339	439,063	2%	17%	80%
World	4,011	16,850	74,998	95,860	4%	18%	78%