

## Human and Social Capital – Prerequisites for Sustained Prosperity

Modern learning and knowledge-based corporations have realized for some time that human knowledge has become the primary form of capital in the global competitive space. Knowledge, defined as the ability to coordinate one's actions, alone and with others, effectively and purposefully, is embedded within and activated by human social and cultural institutions.

Learning to coordinate one's actions, i.e., producing, maintaining and sustaining human capital, can only take place within a requisite social infrastructure: cultural and educational institutions, family-based kinship systems and shared experiences of history, habits, values, beliefs and aspirations.

Functioning democracy is based on respect and free-market behavior is based on trust. This is why democracy and markets are to a large extent *learned behaviors*, brought forth by strong cultures and social infrastructures. Without the learned and deeply habituated respect and trust, both democracy and markets become merely gaudy and often cruel caricatures of themselves. Russia and Eastern Europe are the prime examples of today.

Only socially and culturally strong nations, rich in human capital, family values, respect and trust, can ever become prosperous – regardless of their natural, physical or financial endowments. Only the learning nations, evolving their human and social capital continually and reliably, can ever taste truly sustainable prosperity.

A wealthy nation, like a wealthy farmer, must be able to continue increasing its stock of capital. Such accumulation of the capital stock enlarges the

set of alternatives and opportunities for subsequent generations, thus making current wealth sustainable.

Increased wealth also helps to generate higher income, although higher income can also be temporarily created through decreasing one's wealth and reducing the capital.

Only the poor countries, like the poor individuals, live mostly from their income while only maintaining or even dipping into their capital stock. Income based on the depletion of capital is not sustainable and should not be accepted as income [1], but only as a consumption of capital. Only the poorest of the poor consume their own substance: they eat up their own capital endowments.

It is therefore the charge and challenge of the current generations to leave the future generations with more capital per capita.

There are *at least* four basic forms of capital:

1. Man-made, produced physical assets of infrastructures, technologies, buildings and means of transportation. This is the manufactured 'hardware' of nations. This national hardware must be continually maintained, renewed and modernized to assure its continued productivity, efficiency and effectiveness.
2. Natural capital, i.e., nature-produced, renewed and reproduced 'inputs' of land, water, air, raw materials, biomass and organisms. Natural capital is subject to both renewable and non-renewable depletion, degradation, cultivation, recycling and reuse.
3. Human capital (or human resources) refers to the continued investment in people's skills, knowledge, education, health and nutrition,

abilities, motivation and effort. This is the 'software' and 'brainware' of a nation, perhaps the most important form of capital for rapidly developing nations.

4. Social capital is the enabling infrastructure of institutions, civic communities, cultural and national cohesion, collective and family values, trust, traditions, respect and the sense of belonging. This is the voluntary, spontaneous 'social order' which cannot be engineered, but its self-production (autopoiesis) can be nurtured, supported and cultivated.

All of the above capitals must be developed in balanced, harmonious ways. The last two forms are currently most significant and effective in the creation of wealth and prosperity. The vector or portfolio of capitals, its structure and profile, is more significant than its overall aggregate sum. A country that has all or most of its wealth in natural resources might become an international supplier but it will not progress itself. Although the trade-offs among the capitals are often necessary, and sometimes wise and strategically desirable, they are rarely sustainable. The optimal *capital portfolio* could be negatively affected by irreversible or too frequent tradeoffs and substitutions.

In the long run, it appears to be the social capital which provides the necessary supportive infrastructure for the human capital to manifest itself effectively. Through renewing primarily both itself and human capital, and consequently also the man-made and natural capitals, the set of opportunities is being widened for future generations.

Social capital is clearly critical [3], although one of the most neglected and ignored. This is a spontaneous social order, uncoerced and unforced civil society and culture which defines people's ability to work towards common goals and objectives in groups and organizations, form new associations and cooperative networks, dismantle and slough off the old institutions without conflict or violence. It is the *enabling environment* for human capital to become effective.

Social capital includes not only business, but also voluntary and not-for-profit associations, educational institutions, clubs, unions, media, charities and churches. A strong civic community

is characterized by a preponderance of horizontal organizations, self-reliance, self-organization and self-management, while autocratic, centralized and hierarchically vertical organizations of command are found in societies of lesser trust, low spontaneous sociability and thus lower economic performance. The State then has to compensate for the lack of reciprocity, moral obligation, duty toward community, and trust – a role for which the State is the least equipped and the least reliable institution to undertake.

Strong cultures, strong spontaneous social orders, strong levels of civic trust tend to produce higher economic performance and generate wealth, not the other way around. Strong economic performance and wealth creation are not precursors or prerequisites to strong civil societies

Nations with weak cultural and civic traditions will be generally poorer, saddled with 'strong' governments, relying crucially on their natural resources and man-made capital, neglecting the social and human spheres of existence. Wealthier and high-performing economies will be typically engendered by nations characterized by a strong, dense and horizontally structured culture of trust, cooperation and voluntary associations.

One would therefore expect the wealthiest nations to have most of their wealth embodied in social and human capital, only a lesser part in man-made or natural capital. For example, the wealthiest and the high income countries have, on average, only 16% of their total wealth in produced assets and 17% in natural capital, but some 67% in human resources.

The poorest countries are raw material exporters, having 20% of their wealth in produced assets, but 44% in natural capital and a meager 36% in human resources.

If we look at the US dollar wealth per capita and the percentages lodged in human, produced and natural capital respectively [1], we find, for example, the 'wealthy' portfolio profiles indicated in Table 1.

Japan has virtually no natural resources, yet all ten of the world's largest banks are now in Japan. The accumulated wealth is virtually all due to human and social capital investments. These can be compared with some selected 'poor' countries

Table 1  
Capital portfolio profiles of 'wealthy' countries

Italy	\$373,000; 82, 15, 3
Belgium	\$384,000; 83, 16, 2
Netherlands	\$379,000; 80, 18, 2
Japan	\$565,000; 81, 18, 2
Switzerland	\$647,000; 78, 19, 3
Luxembourg	\$658,000; 83, 12, 4

Table 2  
Capital portfolio profiles of 'poor' countries

Ethiopia	\$1,400; 40, 21, 39
Sierra Leone	\$2,900; 14, 18, 68
Bhutan	\$6,500; 8, 7, 85
Zambia	\$13,000; 9, 18, 73

Table 3  
Capital portfolio profiles of some poor and developing countries

Vietnam	\$2,600; 74, 15, 11
Slovakia	\$33,000; 78, 17, 5
Czech Republic	\$50,000; 66, 15, 19
Mexico	\$74,000; 73, 11, 16
Slovenia	\$111,000; 67, 16, 17

portfolios (see Table 2).

The capital portfolios in Table 2 have so little investment in human and social capital that their future prospects are quite discouraging indeed. On the other hand, there are some poor and developing countries which seem to have the right 'mix' of capitals, indicating a possible economic takeoff in the future (see Table 3).

Richer countries are generally those which invest more in their human capital, education, nutrition, health care, etc., over longer periods of time.

Some poor countries have relatively high incomes because they do not invest enough into renewing their capital portfolio, but actually consume their capital ('eat up their next-year corn-seed'). Especially the Sub-Saharan countries have recently registered very high levels of disinvestment, negative savings and capital depletion. Many countries in Eastern Europe are artificially increasing their current incomes for political reasons, but at the cost of depleting their wealth. It is quite sad to see some of these countries rapidly disinvesting in their educational, health care, nutritional and cultural endowments, nurturing corruption and the anything-goes culture, being culturally blind to

'dirty money' and myopic about their future.

This adds up to a very short-sighted and nation-damaging policy, destroying nations' social capital and wealth, virtually irreversibly.

The recent World Bank studies [1] have confirmed the leading role of human capital in economic development. With the exception of some raw material exporters, human capital exceeds both natural capital and produced assets combined: sustainable development is best achieved by investing in people. Yet, it is on less than a fifth of total wealth (man-made capital) that the bulk of current economic policies is focused.

The World Bank and other similar institutions have so far emphasized building the assorted 'Aswan dams' rather than founding technology institutes and enterprise foundations, educating people and expanding their self-reliance and self-management opportunities and abilities. That is why most of the world still remains poor after some 50 years of misplaced 'efforts'.

Many of the misguided policies are the result of naive beliefs and neo-pagan market worshipping, especially in Russia and Eastern Europe. The free-market efficiency is only one of the many by-products of preexisting moral communities.

Without such moral communities, the unfettered free market is neither conservative nor constructive but a most radically disruptive force, relentlessly dissolving the loyalty of corporations to their communities, customers to their neighborhood merchants, athletes to their teams and nations, teams to their cities, and so on. Without the culturally preformed, spontaneous social orders of trust, loyalty and reciprocity, a nation cannot achieve and maintain sustainable wealth.

America's human capital (Capital portfolio profile: \$421,000; 59, 16, 25) accounts for some 60 percent – compared to only 15 percent for the produced capital – of the productive capital stock. Developing America's human capital is therefore by far the most important factor in maintaining its global competitiveness.

Lowering taxes for speculators in used cars, used goods, used stocks and used bonds cannot compare in importance with giving the tax incentives to teachers and educational institutions and thus encourage more and better people to educate nation's

children. The payoffs would be incommensurable.

Buying and selling used cars is no different from buying and selling used stocks for gain: no tax incentives are needed for speculation. Also, the wave of mechanical and politically motivated deficit-cutting efforts appears to be similarly short-sighted. Cutting could turn into a useless political exercise if the creation of crucial social and human capitals is undermined and their accumulation stunted.

Contrariwise, creating a reasonable deficit by investing in the most productive, non-speculative forms of capital and assets could be a safer way towards prosperity. The United States national debt is now about 63 percent of the output, a relatively trivial phenomenon compared to Belgium's 138 percent or Italy's 122 percent (see their comparative wealth profiles above).

Politicians often argue how they, as individuals, have to balance their budget. It is typical, especially in the United States, that individuals do take out home mortgages that are *up to 300 percent* of their incomes – and these are clearly the richer, not the poorer segments of the population. The poor have only very little or no debts.

In other words, it is not how much to invest or how far to go into debt, but where and how and to what productive, non-productive or speculative purposes is the debt (and investment) applied to. This holds true for individuals, companies, economies, countries and nations.

## References

- [1] Serageldin, I. (1995). Sustainability and the Wealth of Nations: First Steps in an Ongoing Journey, *Third Annual World Bank Conference on Environmentally Sustainable Development*, Washington, DC, September 30.
- [2] *Monitoring Environmental Progress: A Report on Work in Progress*, Environmentally Sustainable Development Series, The World Bank, September, 1995.
- [3] Fukuyama, F. (1995): *Trust: The Social Virtues and the Creation of Prosperity*, Free Press, New York.
- [4] Zeleny, M. (1991). Knowledge as Capital: Integrated Quality Management, *Prometheus* 9(1): 93–101.

Milan ZELENY  
*Graduate School of Business*  
*Fordham University at Lincoln Center*  
*New York, NY 10023*  
 USA