State of the Economy … Capital and Flow

Until we have more clarity about what is capital and what is flow, it is difficult to make much sense of the performance of the economy and broader society.

There is no metric that specifically measures and reports the state of the economy. In the main we use GDP (Gross Domestic Product) and GDP growth as indicators that the economy is good or not. An economy that is showing negative GDP growth is regarded as being 'unhealthy'. The problem here is that GDP is only a measure of 'flow' and a very poor one, at that.

There is nothing to measure capital. Capital … which relates to assets … things … at a point in time.

Flow relate to transactions of various sorts … processes … activities that take place. Flow has two dimensions, the quantity of the flow and the speed of the flow.

Accounting is very good at making the distinction between capital and flow. The balance sheet reflects the capital, and the profit and loss account or operating statement represents the flow. (see endnote)

Corporate or business accounting with balance sheet and profit and loss account connects the change in the balance sheet over time … increase in capital … with the profit and loss account transactions in this time … flows.

Every money based transactions is recorded and included in the flows, and these same transactions increase or decrease the capital accounts … this is 'double entry' accounting. The foundation for financial reporting is this historic cost double entry accounting system. This is the basis for reporting of business performance.

Valuing a business goes beyond this. The value of a business is the present value of its future. The future depends on all sorts of things, with historic performance being just one of the factors. A public company with its 'stock' on an exchange in the capital markets is valued by the market based on views of the future. The capital markets favor companies that have an improving future and in this valuation process the 'value' of the company's stock will then be bigger than the real capital invested in the company.

What I refer to here is one of many little realities of the economy where capital markets have become the driver of decision making … generating performance that oftentimes has no economic reality at all … or at best merely reflects performance relative to 'financial capital'.

The state, progress and performance of the economy is way more than the performance relative to financial capital. The progress and performance of the economy is not only the performance represented by the financial capital but performance represented by the other capitals as well:
physical capital, human capital, social capital, institutional capital, intellectual capital, and, natural capital.

Some physical capital is reported within the accounts of companies, but much physical capital is not the property of companies, but is, nevertheless a part of the economy. In the United States, for example, the physical capital in terms of the built environment and the infrastructure is huge, but it is old, poorly maintained and in need of multi-trillion dollar maintenance and upgrade. In much of Africa and other parts of the 'developing' world, a sufficient built environment and infrastructure is absent, and massive investment is needed to enable efficient economic activity. Physical capital reflects in the health of an economy. War destroys physical capital, but so also does neglect.

People … human capital … are included in the accounts of companies insofar as there is a payroll cost for employees. Within the accounts of a company payroll is a cost and when payroll goes up, profits go down. From the perspective of the employee, however, higher wages result in a better quality of life and standard of living. This 'trickles down' to other members of the employees family and in turn this moves into the community … the local multiplier effect … to improve the state of the community.

There is often talk about a company 'investing in human capital' but this is usually an investment that enables an employee to be more productive from the perspective of the company. Real investment in human capital is when the result is a person having a better quality of life and standard of living now, and a better chance of having a decent and improving quality of life in the future. Having an adequate income enables a person to invest in ways that will make this possible … like further education, quality time with family, more engagement with recreational activities, less stress and worry, and so on.

Social capital is similar to human capital … but as a group rather than as an individual. Some dysfunctional societies have high levels of individual human capital, but for a variety of reasons the society as a whole does not work. Syria and Libya in 2014 are examples of very low social capital. A country like the US invests heavily in a military in order the 'protect the freedom' of the American people … essentially an investment (albeit rather inefficient) in the social capital of the country. Social capital is enhanced by the behavior of people in a community and what people do as a community. Culture enhances social capital. Social capital feeds back into quality of life and the value of human capital.

Institutional capital is the structure that exists that enables the economy and the society to function in a reasonable and efficient manner. It is the institutions of government, the laws and regulations, the system of justice, the financial institutions and corporate organizations, the religious organizations, the not-for-profits, hospitals and clinics, schools and universities, research institutions and so on.

Intellectual capital is knowledge. Knowledge may be present in a library or within an organization, or knowledge may reside within every human being on the planet. Knowledge is unusual in that it may be given to others without diminishing the knowledge of the giver.

Intellectual property (IP) is a way in which intellectual capital is monetized and incorporated into financial capital. The problem with this construct, is that the wonderful win-win characteristic of knowledge gets replaced with a zero-sum arrangement with an IP owner the winner and society the loser.
The absolute limit to growth of intellectual capital is a function of the amount of brain that exists. Decision makers constrain the growth of intellectual capital by limiting the amount of money that gets allocated to research and development. Budget cuts in the US in recent years have reduced the funding for the National Institutes of Health (NIH) so that this organization had to reduce its funding from 25% to 18% of worthwhile research. Why should this be? Is it smart?

Natural capital is almost certainly the biggest and, after human capital, the most important. Natural capital has been the source of everything, and I like to remember that without natural capital there would never have been any financial capital, nor any of the other capitals.

Society has access to energy because energy exists within natural capital. Because of modern intellectual capital, fossil fuels that are the result of natural processes that have converted sun energy into fossil fuels over periods of billions of years are now able to be used at will for the benefit of our society today. It is the use of fossil fuels that has powered the industrial revolution and enabled the amazing quality of life and standard of living that the middle class in richer countries now take for granted.

To maintain a high quality of life and standard of living we need power, and the challenge is to get that power using better technology so that there is less resource depletion and less environmental degradation. But everything about a better quality of life may not be just about more material goods that do damage to natural capital, but it can be about things that deliver happiness without a natural capital downside.

To put this in perspective, in 1900 the world population was about 1.7 billion people. In 2014 it is around 7.1 billion. This is a big change. The planet is the same size … same land, same oceans, same atmosphere. The flows of things needed to support a decent quality of life for a population of 7.1 billion is going to be way larger than the flows needed to support 1.7 billion people at, say one tenth of the standard of living. … say 4 times a many people and 10 times the quality of life means a 40 fold increase in the flows. The good news is that these flows deliver a better quality of life, so human capital improves. The bad news is that natural capital is compromised in many different ways including: depletion of resources, degradation of the environment (water pollution, land pollution, air pollution including greenhouse gases), degradation of eco-systems and loss of bio-diversity. Further bad news is that some of the bad things accumulate over time and the impact gets exponentially worse.

Interestingly the UN system of national accounts (SNA) is more rigorous about the balance sheet of the economy than the statistical systems used by countries like the US and the UK. Even so, it is the GDP that gets extracted from these data and used to measure (incorrectly) the performance of the economy.

As society goes forward it would be good if decision making can be optimized so that resources are allocated to economic activity that produce the most increase in human capital while doing the least damage to the other capitals, especially natural capital.

We have the opportunity to make good use of intellectual capital and do things in a better way as we go forward compared to the way we did things in the past … and to a large extent insist on doing now despite the amazing progress of technology.

All of this requires a substantial rethink about what we do in conventional accounting and financial reporting … not to mention economic statistics that drive policy formulation at the highest levels.
Endnote: As an important aside, it should be noted that most government accounting is cash based and does not include integrated balance sheet accounts in the accounting. This is politically convenient but otherwise a very bad state of affairs enabling what one might describe as 'smoke and mirrors' accounting.