



True Value Metrics
Meaningful Metrics for a Smart Society



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Transitioning to a 'Greener' Society ... Overview

Transitioning to a 'greener' society should be an obvious priority for leadership of the economy and society, but it isn't. Why not? The answer is the lack of relevant meaningful metrics.

I have spent most of my career using accounting and financial analysis to optimize economic performance. I have done this as a corporate CFO and as a consultant for the World Bank, the United Nations and others. Financial analysis is powerful, and universally used in successful companies, as well as every proposal for public sector investment or grant financing ... but it gets the wrong answers.

Money profit accounting and financial analysis is not enough. The other dimensions of socio-economic performance must be brought in to the analysis. Decision makers have to accept that most initiatives to make the economy and society 'greener' are bad for money profit performance even though they are good for every other metric of societal performance. As long as society works with maximizing money profit performance, stock market prices and GDP growth as the priority goals for society, transitioning to a 'greener' society is not going to happen. The metrics have to be changed.

TrueValueMetrics (TVM) is my initiative to move towards more meaningful metrics in a smart society. The goal is a single framework of metrics that includes not only the money profit elements, but also all the key externalities that the prevailing money profit methodology ignores.

Some of the key concepts in TVM are:

1. The central entity for primary analysis is an 'economic activity' ... all of them;
2. The performance of an organization is the sum (roll-up or consolidation) of the performance of all the economic activities where the organization is involved;
3. The performance of a community ... a place ... is the sum (roll-up or consolidation) of the performance of all the economic activities in the place;
4. Both the community and the organization use the same sets of data;
5. TVM is more accounting than economics. more cause and effect than correlation, more arithmetic than mathematics (statistics);
6. TVM uses standard value in much the same way that cost accountants use standard costs;
7. TVM uses state, progress and performance rather like a money profit accountant uses balance sheet, profit and loss account and return on investment (ROI);
8. State is a summary of everything that matters in a place at a point in time ... and for analysis purposes, quantified using standard values;
9. Progress is change in state over a period of time ... using consistent standard values; and
10. Performance is measured by relating progress to the consumption of resources ... change in state, both in terms of time and place.

When TVM is applied to important segments of the modern economy, the picture of performance changes. For example:

The consumption of fossil fuel to support a modern high energy economy has the appearance of being good for society and the economy:

- *profits for the extractive industries and the distribution chain flow into the economy;*
- *jobs for everyone working in this industry; and*
- *GDP growth and all the rest.*

But what about:

- *the fact that finite resources are being depleted and will never be replaced;*
- *the pollution and social disruption in the extraction and distribution processes; and*
- *the particulate and carbon pollution and the impact on health and the environment.*

Take these into account and renewable energy is more beneficial than fossil fuel ... while not being more profitable, if at all profitable.

For many years, I used a spreadsheet template for the financial model for a business plan that related cause and effect for 5 years by month and a further 10 years by year. The assumptions were identified and could be changed to reflect different scenarios. The results of the analysis were formatted so that the relevant tables could be moved into the business plan text with simple cut and paste or drag and drop. While this was a good tool, it was not sufficient. As TVM emerges, a similar spreadsheet template is being developed so that financial analysis and impact analysis are developed for the business plan at one and the same time. Business profits from the use of fossil fuels has to be netted out against the impact of fossil fuels on society before being compared to the performance of renewable energies like wind and solar.

For a money profit company there are money revenues, money costs and the net are money profits. There are also important externalities. While engaging in economic activity to generate money profit, a company buys goods and services, pays wages, consumes resources, uses energy, generates waste, occupies space, pollutes the air with particulates, noxious gases and carbon, and pollutes the water. The externalities in many sectors of the money profit economy are more important than the money profit, but excluded from almost all the analysis that is done for decision making, especially at high levels of business, banking and politics.

A system of meaningful metrics needs to engage with every flow of value in society. The following are in alphabetical order not in sequence of perceived importance:

- **Capital.** The availability of capital is constraining the modern economy, but this is because capital investment is driven by the money profit potential rather than the potential for social value. New metrics are needed, and then this will facilitate social impact stock exchanges so that finance can be allocated where it will have the most important impact.
- **Carbon.** Global warming and weather instability seems to be a 'fact of life' and most likely caused by the release of carbon based gases into the atmosphere. Because it cannot be seen, that does not mean it is not there. You manage what you measure. In order to manage the impact of any economic activity, TVM is incorporating a carbon analysis toolkit into the framework.
- **Clothing.** The manufacture of clothing was one of the core activities of the industrial revolution, and remains a driver of the modern economy. Over time the textile industry has moved towards areas of low wages. Globalization and free trade have been driven by a profit agenda where there are metrics rather than by a comprehensive greener sustainable agenda which up to now has been without metrics.

- **Education.** Quality of life changes when ones education status changes and opportunities open. The importance of education and the enhanced contribution people can make because of education needs to be accounted for in a systematic way so that people and society can benefit. The metrics need to reflect value accounting for state, progress and performance in the dimension of education.
- **Energy.** For more than 200 years economic performance has been driven by innovation in the field of energy, and it has been a huge success when measured in terms of quality of life improvement for the last few generations including the present generation. However, doing more of the same for the next 200 years will be catastrophic for the human race, and maybe all living things. Something different is needed ... and something different is possible. Fossil fuel can make more money profit, but the impact is bad while renewables are less profitable and the impact is good. TVM will help put both into the same framework of metrics so that better decisions are made.
- **Entertainment.** Entertainment has a place in a healthy society. Entertainment is a component of happiness, and happiness is a component of quality of life. The business model for modern entertainment has a singular focus on money profit, like everything else, but there are better metrics for the performance of entertainment in society, whether the entertainment is sports, or music, or art or dance or hiking or hunting. Whatever makes one happy is valuable providing others are not hurt in the process.
- **Food.** When Adam Smith described the market and the 'invisible hand' in his famous book published in 1776, agricultural productivity was very low and the world could not produce enough food for the population. But things have changed, and productivity and profits have soared to levels never ever imagined. At the same time irreversible depletion of natural resources has accelerated to unsustainable levels. Profits are measured and serve as an incentive to make more profit, but resource depletion is ignored in the metrics and is not included as a disincentive.
- **Governance.** The idea of 'rule of law' is touted as a good driver of the modern economy, but it may be one of the explanations of why the workings of the modern economy encourages behavior like the concentration of economic power and increased value of proprietary ownership over ownership of the commons. The value construct needs to be clear.
- **Health.** Quality of life changes when ones health status changes. The potential efficiency of modern healthcare are amazing, but there are no metrics to encourage efficiency, the prevailing metrics of money profit in medicine means that costs to society are maximized rather than benefits to society. The metrics need changing to reflect value accounting for state, progress and performance in the dimension of health.
- **Infrastructure.** Performance depends on easy access to the infrastructure that is needed for common good. Society benefits from good infrastructure, and business needs good infrastructure. Use of infrastructure is not free of cost even when it is free of price.
- **Mobility.** Transport and communications are areas where performance has improved in amazing ways over the past 200 years ... but are the costs and values really understood. Better metrics are needed.
- **Money.** Is money a good measure of anything important in economics and society. It is a tool to facilitate efficient exchange, and in that role is both important and efficient. Money has become a constraint on economic performance in ways that should not be tolerated, and complementary currencies of one sort or another seem to be essential for a functional modern global economy.

- **Needs.** For people to live there are a number of basic needs that must be satisfied. These are quite modest relative to the productive capability of modern business, but there are many in our global population that cannot access the basic needs of potable water, food, shelter, clothing, fuel, security, health and education. This is preposterous, and a measure of how broken the metrics and incentives are in modern business and society.
- **Religion.** Huge impact on quality of life ... money profit a completely wrong metric
- **Resources.** In modern money profit metrics, resources are only taken into account when they are 'owned' by the business. When they are part of the 'commons' or just existing in nature they are not part of any accounting and metrics. This is a silly state of affairs and results in huge distortions in decision making at the highest levels. The importance of resources is discounted in modern metrics, though business decision makers may well understand their value and therefore want to keep the value unquantified and inaccessible to an educated public.
- **Risk.** Accountants have the reputation for looking backwards. This is OK when it is used to compile objective data on what actually happened in the past, and is used to understand the present. It is dangerous to use the past as a linear predictor of the future, especially when there are risk elements of importance. Risk should be understood, and preparations made to reduce risk and to handle the outcome of some risk materializing. All of this has to be 'in the metrics' in a systematic way.
- **Security.** Quality of life changes when security is compromised. This is so when the infraction is rather modest like housebreaking and when the problem is massive as in civil war and ethnic cleansing. The management of security should reflect the value construct.
- **Shelter.** Shelter is a basic need, and the provision of shelter a big industry. The 'housing sector' has been a driver of economic boom and also bust. There are beautiful housing developments and there are slums and urban blight. The financing of housing is based on a money profit construct that ignores the value components of housing for the people concerned and the community.
- **Wages.** Society ... the community ... the individual and his/her family are impacted more by the externalities than they are the other components of money profit activity, with one exception ... wages. Wages from a money profit activity are of great importance in quality of life and the working of a modern economy. But decisions about wages that increase money profit for the organization are almost always at odds with what would be of benefit to the individual, his/her family, the community and society. This has been business behavior for the past forty years, if not for ever, and is now to the point where society as a whole (at any rate in old developed economies) is at risk. The Keynesian wage multiplier has gone into reverse with terrible consequences for those that sell their time to employers and for the communities they live in.
- **Waste.** In much of modern production, the waste by-products are more than the goods and service that are being produced and consumed. The costs of waste are included in the costs of production in so far as they are inputs into the process ... but the costs to society are totally excluded. Society either pays to clean up the mess or society lives with the waste and all the anti-social issues that go with waste whether they are health impacts or pollution of the environment. If there is to be management of waste, there needs to be metrics about waste.
- **Water.** The consumption of water in modern society is unsustainable, but water in the modern era of business and economics has been treated as either completely free or very low cost. Without clean potable water, modern society will not survive, and accordingly there needs to be powerful metrics about the value and the cost of water.