

Achieving Environmental Resilience

Prof. Yehuda Kahane

The last 30 years have seen the rise of a post-industrial economy. An economy marked by new underlying rules, based on limitless data and information flow ("digitization"). This is contrasted with the previous assumptions of our economy based on limited of labor, capital and land.

Our current Capitalist economy does not have true competition. It also lacks a fundamental accounting for natural resources and their pricing (water, minerals, society, forestry, animals, and "The Commons"). The post-industrial economy has significant "non-monetary" elements. These non-monetary elements should be combined with current economic theories (by approximations if there are no exact models).

All the Nations of the world agreed in 2015 on the Sustainable Development Goals (SDG) as the most crucial issues facing humanity that need answering by 2030. These goals include environmental and social goals such as climate action, water and sanitation, zero hunger, no poverty, reducing inequality etc. We have less than 9 years to reach these goals.

The global sum of money to reach the SDGs is approximately \$8-14 trillion, annually! The global governmental budget is closer to \$30 trillion. The ability of governments is constrained by the need to fulfill all the government's roles. The private market and corporations are not willing, and are not equipped to do this job, because global GNP stands at approximately \$100 trillion. This is insufficient to close the SDG's gap.

The governments' regulator should raise substantial amounts of capital through a differently, fully balanced, "sustainability budget". This can happen by reallocating investments of the private and business sector (approximately \$350-400 trillion worth of capital). The regulators have the power to provide incentives to support and enhance a process in which the private sector plays a significant role. It is the power to shift the entire consumption pattern towards saving natural elements, and reducing waste.

The business sector measures impact by economic (monetary) values. But the government should account for damage (and profit) to the environment, to society and businesses. In addition, the government does not pay taxes. The majority of "externalities", are non-economic values (non-monetary). Every economic activity has both positive and negative effects. National accountants can distinguish between activities that harm the society and environment, and those actions that benefit society. The sums of capital accounted for will be enormous. This is called a "sustainability budget"

which can be more or less balanced. Government will charge taxation on the negative side, and pay "rewards" (subsidies) to those on the "positive" side - those who create something for the betterment of the environment and society.

[The tax on the "negative": fossil fuels (production of energy), transportation, consumption of meat, pesticides, construction, pollution of water and oceans, paper, deforestation, clothing, construction of warfare, etc.

The subsidies: Saving energy, water, waste, recycling raw material, etc. Cradle to Cradle, renewable energy, petrochemical, plastic, paper, etc.]

The regulator should distribute subsidies within the capital markets (pensions and insurance as well as social security systems), those who specialize in mid and long-term financing. Mainly through long term bonds, with a national guarantee. This bond will carry linkage with the cost of living, and should be untradable.

The yield of these bonds will be substantially higher than regular bond (especially under the current zero interest by the central banks).

Providing such incentives will create a self-perpetuating cycle- higher returns on retirement plans will increase public propensity to save for retirement which means larger long-term savings that will enable to finance more impact investment. That's basically the simple idea behind it.

The ability to offer high yield on "impact investments" will create a self-perpetuating cycle: higher returns on retirement plans will increase the attractiveness of such schemes and the public propensity to save for retirement. This, in turn, will motivate larger long-term savings and thereby enable to finance more impact investment. The re-establishment of retirement security for millennials and future generations, providing for appropriate accretion of real value on retirement savings.

In summary – we suggest a 4-step solution.

- Promote financing of the SDGs in order to save our existence on the planet. There is no way to solve the problem with the same tools that brought us here.
- Given the emergency, there is a need for top-down education to bring about the incorporation of externalities (non-monetary) in conjunction with economics ideas. Essentially applying environmental, social and consciousness values alongside our economic metrics.
- A "Sustainability budget" to complement a national budget and underlying national accounting measurement systems. This will enable to change the production and consumption of the world to be more optimal.
- We must hit several ambitious targets with a single arrow: Fighting climate change, SDG financing, safeguarding pensions for Millennials, and enhancing job creation.