

Is Sustainable Growth an Oxymoron?

Contributed by John Fullerton
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The first and overarching theme of the G-20 Toronto Summit is "laying the foundation for sustainable and balanced growth." Words matter. Although motivated by a genuine desire to foster a global economic system that improves societal well-being without the boom/bust cycles we've just experienced, the concept at the heart of the G-20 initiative is fundamentally flawed.

"Sustainable growth" as now commonly used by policy makers and many economists is an oxymoron. At a macro level, the economic system processes what ecologists call "material throughput" (intake of natural resources, output of wastes) to create human wealth and well-being. As the economy grows, throughput grows. The last century saw a 4-fold increase in global population, yet a 40-fold increase in GDP. Due to resource productivity gains, that 40-fold increase in the scale of the economy was accompanied by "only" a 16-fold increase in fossil fuel use and CO2 emissions, a 9-fold increase in water use, and a 35-fold increase in fishery catches. Despite all the advances in technology leading to resource productivity improvements, and assurances from many otherwise intelligent economists, there is no evidence of a decoupling between GDP growth in the aggregate and the absolute material throughput of the economic system. This is a very big deal. As the laws (not theories) of thermodynamics tell us, perpetual material growth on a finite planet is biophysically unsustainable. Reliance on technology to achieve not only heroic material productivity improvements, but to actually achieve decoupling (more aggregate growth with less absolute throughput, every year, forever) is hubris. We might recognize hubris from our recent Wall Street and BP fiascos. Evidence of stress abounds, with symptoms ranging from resource constraints such as water scarcity, soil depletion, and looming peak oil, to excess pollution overwhelming natural waste sinks, most notably CO2 building up in the atmosphere. We are in a condition known as ecological overshoot, with the current global economy using 1.4 times the earth's capacity to regenerate what we use in a year. Current growth trends lead to the need for two earths within a decade. If the whole world lived the material lifestyle of the average American, we would require five earths already. This deficit requires drawing down our finite natural capital. Like drawing down the principal in a bank account, this works temporarily but is unsustainable. With perpetual material growth, the deficit grows each year, while the stock of natural capital shrinks. Do the math. Think energy shortages, water shortages, soil degradation, food shortages, and of course, climate change. "Balanced" growth in the context of the G-20 agenda refers to balanced trade and presumably balanced long term fiscal budgets, both critical. But the word "balance" lives with "sustainable" in a far more profound way. Systems scientists tell us that any sustainable system requires balancing efficiency with resiliency, and that there is a tradeoff. They also tell us that the optimal balance is skewed in favor of resiliency, not efficiency. The financial collapse taught us what happens when we let our drive for efficiency overwhelm system resiliency. Economic system and financial system resiliency remain weak, demanding immediate attention. Resiliency improves with decentralization, extensive diversity, excess buffers against uncertain risks, and feedback loops in the system that improve resiliency at the expense of efficiency. Despite some improvements, little in the US financial reform bill structurally improves systemic resiliency. Most notable is the failure to address the now increased concentration of power, and risk for catastrophic damage, in the too big to fail or manage, and now anti-competitive mega financial institutions. While G-20 participant concerns about a rise in protectionism are legitimate, the path to "balanced and sustainable growth" is not to be found simply with more global trade. Policy makers gathering in Toronto would be wise to consult Toronto's own Jane Jacobs and her profound ideas for sustainable growth centered around cities and regions. Resiliency calls for strengthening local and regional economies from which to engage in beneficial and smart global trade. Smart trade is essential, but it is a means, not an end. The theory of comparative advantage presumed capital was not mobile. In a world of freely flowing capital, competitive advantage drives trade with real associated costs: social costs from outsourced jobs, and increased throughput costs associated with transportation energy spent. Real "sustainable growth" is possible, but it is qualitatively different from the characteristics of the modern economy. It is like the growth in a mature rain forest or a rich, diversified grassland. It is self-sustaining on solar power. It builds natural capital such as soil and social capital such as education and continuous personal development. It enhances diversity and decentralizes power and risk within the system, which in turn builds resiliency. We need policies that radically shift the human economy in this direction if we want to call it "sustainable growth". This means massive public and private investment in "green" technologies ranging from a new energy system to breakthrough material sciences, to "cradle to cradle" manufacturing systems. It means massive investments in the restoration of natural capital, and associated shifts in our management of natural capital, most notably our fresh water and soils. It also means making choices, some easy some tough, some private some public, in order to fund these investments. In the developed world where we are already using far more than our fair share of material throughput, prudent restraint must replace excess. But most fundamentally, it means coming to grips with the question of appropriate scale of material throughput for the human economy. It means managing scale. Appropriate scale implies limits. Limits in a democracy imply quotas. Scale limits make the question of fair allocation much harder, and consequences of inequality more severe. Scale limits require sound scientific information about biophysical systems and new metrics. Scale limits require new economic theories and new models. And they imply a collaborative governance challenge far beyond anything humanity has historically demonstrated. At its core, sustainable growth within our interdependent capitalist system will require a new understanding of wealth. True wealth is not merely money in the bank. True wealth is grounded in the quality of our relationships, our communities, our physical, emotional, and spiritual health, the richness of our culture, and the health of the environment that supports all life on earth. Sustainable capitalism demands us to ask, what is the purpose of capital? What we feed grows. Capital can fuel the critical

transition to a truly sustainable economy only if we listen to the rise in our collective consciousness that is already showing the way. The time for bold and collaborative leadership is now.

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