Economic Entropy

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For over two decades, legendary Yale Endowment Fund Manager David Swensen set the standard by which all institutional money managers were judged. Over a 28-year period, Swensen's team has generated annual returns of 13.8%, phenomenal in any market.

One of the more profound things Swensen learned from his investing experience was that "size was the enemy of performance." The more capital one manages, the more challenge there is generating worthwhile investment returns.

What Swensen noticed in investing is commonly known as the law of diminishing marginal returns. In economics, diminishing marginal returns is defined as ***a decrease in the output of a process as the amount of a single influence is incrementally increased, while the amounts of all the other factors of production stay constant.***

The greater the amount of money under management, the greater the number of people involved in the process of managing it, including investors with expectations, investment managers with goals, government referees with regulation and back office people involved in supporting every constituent's need. This greater scale makes decision making more complex, typically requiring more compromise to satisfy as many parties as possible. Outcomes naturally and inevitably get watered down.

Like in investing, decision making also suffers in economic ecosystems that have become burdened with too much of something. Too many decision makers, too many constituents, too many rules and too-complicated systems translate to more and more time and more and more compromise in order for the majority of participants to be satisfied. This leads to lower productivity and performance.

Of course a certain amount of infrastructure is always needed to support productive processes. But at some point, every ecosystem and every process has a tipping point when too much of some input results in the law of diminishing marginal returns.

Neither Swensen nor anyone else has been able to determine the tipping point when too much of something has impaired the potential for above average performance. There are just too many influencing factors to understand, much less control.

The law of diminishing marginal returns is presently playing out in several parts of economy and in several economies. Perhaps its most obvious victim is central bank monetary stimulus.

Monetary stimulus occurs when the central bank of a country changes regulation, reduces the cost of capital, and/or injects quantitative easing to "stimulate" economic activity. The theory is that monetary stimulus will grow GDP and prosperity.

After the 2008/2009 recession, injections of fiscal stimulus left multiple federal governments burdened with enormous sovereign debt. As fear about this debt grew, monetary stimulus took center stage. In the US, federal debt ballooned from about $9T to over $16T in a few short years (now approaching $20T). Many well respected economists warned that economy was not growing fast enough to support

this explosion of debt. So before monetary stimulus showed up in force, fiscal stimulus had seemingly reached its own point of diminishing marginal returns.

Current observations suggest that monetary stimulus in the US is no longer working, or maybe never worked from the beginning. Japan has been using monetary stimulus for well over a decade but still can't achieve sustainable growth. Each new monetary stimulus effort produces an economic spurt, but inevitably, economic malaise returns.

The EU has started to follow Japan's lead. First, the European Central Bank circumvented previous rules against purchasing the sovereign debt of its members. Now they are not just purchasing sovereign debt, but also corporate debt. And in their most recent effort to get banks to lend and companies and individuals to borrow and spend, governments are dissuading savings via negative interest rates. With all of this "stimulus," developed economies still continue to struggle.

Another place, although not as obvious, where diminishing marginal returns may be playing out is in the global economy.

Technology + globalization + the market economy = greater global prosperity

This is the formula that drove the growth of globalization over the last 30+ years. It's the formula most economists and politicians continue to use to justify more "free trade." For a good while, the formula seemed to work just fine as developed markets enjoyed cheaper products and emerging markets enjoyed expanded prosperity. But now, to more and more people in the developed markets, the formula seems to look like this…

Technology + globalization + the market economy = decline of the middle class

Wages in developed markets have not kept up with inflation for many years now, leading to a great deal of unhappiness in developed market labor. Although the tools we use to gauge inflation suggest there is very little today, for many people the declining cost of capital and the declining cost of imported goods (PCs, cell phones, clothes, toys and other consumables) have masked a rise in more basic (and mandatory) costs of living expenses (rents/home prices, health care, education, consumer services).

Although numerous government-supported economists and government leaders will suggest US citizens are now better off than ever, recent research by the Pew Charitable Trust finds that over 50% of American households don't have enough savings to cover one month's lost income. And according to the Federal Reserve, 47% of Americans would not be able to cover a $400 emergency without resorting to borrowing money or selling off some personal assets.

Globalization is becoming the scapegoat for these discouraging circumstances in the middle and lower sectors of our developed market labor. Donald Trump and Bernie Sanders have put the exportation of jobs to cheaper labor and production markets around the world under the spotlight, deepening suspicion of this practice and causing populist uprising.

There is also a growing distrust of the market economy's ability to provide greater general prosperity. According to an April 2016 Harvard University poll, 51% of Americans between the ages of 18 and 29

do not support the way in which capitalism is practiced today. Many of today's disgruntled citizens believe the self-interests of corporate and financial managers are steamrolling the needs of labor. The decline in the productivity of labor has itself held back wages. But at the corporate and investor level, global competition has created incentive to reduce labor input per unit of production output.

This is pretty simple and basic business management – focus on reducing costs and increasing output. But moving jobs to cheaper labor markets, or replacing them with technology, is now starting to reverberate back home. A best-case scenario would suggest we are in a "great leveling" period. Wages around the world are moving towards parity. But when developed economy wage stagnation isn't keeping up with the rising cost of many basic living expenses, there's going to be hell to pay somewhere.

In a desperate bid to battle the great leveling of wages, developed countries are pumping their economies with more and more fiscal and monetary stimulus. Thus, more, easier and cheaper money has masked wage stagnation. But as we know, fiscal and monetary stimulus seems to have reached the law of diminishing marginal returns.

It doesn't stop there.

In the European Union, a growing number of citizens have come to distrust the bureaucrats in Brussels and their top down policy on both economy and immigration. In addition, some people would argue that more and more regulation in the US is squeezing the private sector's potential. Many are also starting to wonder whether recent advancements in technology are stimulating or suppressing worker productivity, as well as the general outlook for labor.

Populism and nationalism are on the rise, as more and more citizens question globalization, the market economic model and government's ability to ensure the spread of prosperity and personal financial security.

Where do ecosystems go once they've reached these periods of declining incremental marginal value? We will certainly find out over the next few years. But one clue may be the answer to the following question: How do you solve a very large and complex problem? You do so by breaking it into smaller more manageable parts. Bigger and bigger is better and better may have reached its own marginal rate of return tipping point.

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