

Is Innovation Always "GOOD"?

by Karl-Erik Sveiby 2009-01-05

Is innovation always good? Let's look at one example. A financial innovation, Collateralized Debt Obligations ("CDO"), was developed in the late 1990's by the US financial industry. CDOs bundled loans with bad risk in packages together with loans of better risk, which could be resold at high premiums. The CDO innovation opened up a new lucrative market segment: "sub-prime" loans to American home owners with poor collateral. The global banking industry boomed and huge profits were pocketed; bank executives preened in the media.

The CDO bubble burst late 2007 and the indirect consequences were dire. True, a US recession was long overdue, but it was the poorly understood indirect consequences of the CDO innovation that triggered it. It turns out that very few, if any bank executives had understood the true risks involved. The experts did not warn us either, true, there were a few, but they were silenced or even ridiculed. And the regulating bodies sat on their hands for eight years happy with the surging markets.

Was CDO a good innovation? Yes, short-term for the chosen few; financial remuneration for bank executives, brokers and shareholders. But the Americans have only begun to count the long-term indirect consequences: social disaster and ruin for millions of home owners, while the bill to the American tax payers stood at 2.2 trillion dollars and counting according to FED at the time of writing.

The CDO case displays the intrinsic dilemma: An innovation is by definition new and unknown outside the company that invents it. Innovative technology is deliberately designed to be unique – a prerequisite for profitability and competitive advantage.

Is an innovation beneficial for people in the long run? What is the total value of an innovation including the indirect and intangible consequences? What does a responsible innovation process look like? These fundamental questions are difficult to answer, but it appears few are even trying.

Indirect consequences tend to be predominantly unexpected, negative and long-term, as Everett Rogers noted already in 1971 in his classic work *Diffusion of Innovations*. The trouble with the current pro-innovation bias and the lack of serious critical study of innovation is that fundamental questions are never asked. Not by industry, not by governments, not even by innovation researchers.

In a content study of 1,084 publications on innovation in 1968 Rogers found 0.2%, which discussed the indirect consequences of innovations. The proportion had not changed in 1981 and emerging research at my university, Hanken School of Economics, suggests that the proportion is roughly the same today. Why?

We don't have to evoke disaster scenarios like the UK astrophysicist Marin Rees did in his book *Our Final Century* 2003 in order to be concerned about a future with continued indiscriminate pro-innovation bias. Innovations in fields like nanotechnology and gene manipulated organisms share some uncanny features of the CDOs:

Indirect consequences for society outside the target group of paying customers are unknown; experts in the field are few and generally on the pay-roll of industry; environmental consequences are taken into account only to the degree they are regulated by law, and the issue of long-term indirect social effects is not even on the agenda.