Alan Greenspan: Regulation, innovation and wealth creation

Remarks by Mr Alan Greenspan, Chairman of the Board of Governors of the US Federal Reserve System, before the Society of Business Economists, London, U.K., 25 September 2002.

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Since the dawn of the Industrial Revolution here in Britain, virtually every generation in the industrialized world has witnessed advances in living standards. A never-ending stream of innovation has led inexorably to expanded trade and improved productivity in many nations throughout the world.

Today, we can see on the horizon vast new means of communicating and computing, practical applications of advances in biotechnology, and doubtless many other innovations. But a half-century from now, the goods and services that we produce and consume will, to a significant extent, reflect applications of insights not yet formed or even imagined. Could the residents of sophisticated eighteenth-century London, prior to Sir William Herschel's demonstration of invisible radiation, even contemplate the existence of radio waves that would reach around the world? I still have trouble grasping how the shortwave transmissions of the BBC travel thousands of miles to find their way to my bedroom at night to be picked up by my transistor shortwave radio.

Our modern electronic devices work according to the laws of quantum mechanics, which were laid out in the 1920s by Erwin Schrodinger, Werner Heisenberg, and Paul Dirac; they postulated that at the subatomic level the world did not obey the centuries-old Newtonian views of how the forces of the universe function. The major revolutions of Albert Einstein had occurred a few years earlier and nuclear power was a generation or so beyond.

I raise such examples only to emphasize that we cannot realistically project future innovations and the potential for those innovations to create economic value. Novel insights, by definition, have not previously entered anyone's consciousness. However, that unanticipated discoveries of how to create wealth will emerge in the decades ahead no longer seems as conjectural as it may have, for example, before the Industrial Revolution.

Full realization of the benefits of past innovations, and of those our grandchildren will experience, will depend on the forces of globalization already in play to develop the commercial potential of new technologies and to transmit the application of these technologies across our economies. By spreading expertise and expanding the division of labor and specialization to ever broader markets, those forces led to enhanced trade in the past half-century, which in turn has dramatically elevated the standards of living of nations that have chosen that path forward.

But an ever burgeoning global financial system also inevitably raises the potential of increasing systemic risk. At Lancaster House later this evening, I will be discussing some of the new tools of risk management and the principles that should guide the containment of systemic risk and its allocation between the private and public sectors. Here I would like to focus on a narrower, but nonetheless increasingly important, issue: the nexus of risk-taking, regulation, innovation, and wealth creation.

Owing to persistent advances in information and computing technologies, the structure of our financial institutions is continuously changing, I trust for the better. But that evolution in financial structure has also meant that supervision and regulation must be continually changing in order to respond adequately to these developments. In today's markets, for example, there is an increased reliance on private counterparty surveillance as the primary means of financial control. Governments supplement private surveillance when they judge that market imperfections could lead to sub-optimal economic performance.

But let us consider now another aspect of market regulation efforts: transparency. There should not be much dispute that markets function best when the participants are fully informed. Yet, paradoxically, the full disclosure of what some participants know can undermine incentives to take risk, a precondition to economic growth.

No one can deny that fully informed market participants will generate the most efficient pricing of resources and the most efficient allocation of capital. Moreover, it could be argued that, if all information held by individual buyers or sellers became available to all participants, the pricing structure would more closely reflect the underlying balance of supply and demand. Thus full information would appear to be the unambiguous objective. But should it be?

Take, for example, the real estate developer who conceives of an innovative project that will significantly raise the value of the land on which it will be situated--provided that the site possesses suitable characteristics. Suppose further that it is costly for the developer to determine whether a given site is suitable. If he or she discovers a suitable site and is able to quietly purchase the land from its current owners without revealing the value of the project, the developer makes a substantial profit, and the community overall presumably benefits from improved land use.

But what if, before the purchase of the land, the developer was required to disclose his or her purchase intentions and, in particular, the value enhancement created by the project? The sellers then seeing the bigger picture would elevate their offers sufficiently high to extract the full value of the innovation from the developer. Under these circumstances, would any projects go forward? Clearly not, because developers would be unwilling to bear the cost of evaluating potential sites knowing that they would reap none of the benefit of discovering suitable ones. A requirement for fuller disclosure of the potential, heretofore undiscovered value of the land would engender neither more disclosure nor improved land use.

An example more immediate to current regulatory concerns is the issue of regulation and disclosure in the over-the-counter derivatives market. By design, this market, presumed to involve dealings among sophisticated professionals, has been largely exempt from government regulation. In part, this exemption reflects the view that professionals do not require the investor protections commonly afforded to markets in which retail investors participate. But regulation is not only unnecessary in these markets, it is potentially damaging, because regulation presupposes disclosure and forced disclosure of proprietary information can undercut innovations in financial markets just as it would in real estate markets.

All participants in competitive markets seek innovations that yield above-normal returns. In generally efficient markets, few find such profits. But those that do exploit such discoveries earn an abnormal return for doing so. In the process, they improve market efficiency by providing services not previously available.

Most financial innovations in over-the-counter derivatives involve new ways to disperse risk. Moreover, our constantly changing financial environment supplies a steady stream of new opportunities for innovation to address market imperfections. Innovative products temporarily earn a quasi-monopoly rent. But eventually arbitrage removes the market imperfection that yielded the above-normal return. In the end, the innovative product becomes a "commodity" made available to all at a modest, fully competitive profit.

To require disclosure of the structure of the innovative product either before or after its introduction would immediately eliminate the quasi-monopoly return and discourage future endeavors to innovate in that area. The result is that market imperfections would remain unaddressed and the allocation of capital to its most-productive uses would be thwarted. Even requiring disclosure on a confidential basis solely to regulatory authorities may well inhibit such risk-taking. Innovators can never be fully confident, justly or otherwise, of the security of the information.

Regulators may not always be able to differentiate easily between secrecy to protect intellectual property and secrecy to deceive or to commit outright fraud. Yet a supervisory system must make that distinction as best it can. There is nothing unusual about making difficult tradeoffs in regulation. In fact, it is the rule rather than the exception for most regulatory regimes--whether in the financial or nonfinancial sectors of our economies. Indeed, such tradeoffs, in a wider sense, determine the differing regulatory regimes we see around the world. Those differences in regimes reflect largely attitudes toward competition.

Competition is the facilitator of innovation. And creative destruction, the process by which less-productive capital is displaced with innovative cutting-edge technologies, is the driving force of wealth creation. Thus, from the perspective of aggregate wealth creation, the more competition the better.

But unfettered competitive capitalism is by no means fully accepted as the optimal economic paradigm, at least as yet. Some of those involved in public policy often see competition as too frenetic. This different perspective is captured most clearly for me in a soliloquy attributed to a prominent European leader several years ago. He asked, "What is the market? It is the law of the jungle, the law of nature. And what is civilization? It is the struggle against nature." A major determinant of regulatory regimes is how a rule of law is applied to strike a balance between the perceived benefits of wholly unfettered markets and the perceived societal costs of overly fierce competition.

There remains an uneasy balance in most countries between unleashing the forces of competition and reining them in when they are perceived to threaten the social order. With markets continuously in evolution and the political perceptions of the proper extent of regulation also changeable, it is no wonder that our regulations always seem to be in flux.

Such flux must be kept to a minimum to avoid fostering uncertainty among innovators. Moreover, shifting regulatory schemes unavoidably leave obsolescent regulations in their wake. Business people in the United States complain, perhaps with some exaggeration, that so many regulations are on the books that they are probably at all times unknowingly in violation of some of them. We at the Federal Reserve endeavor every five years to review all our existing regulations in order to revise or rescind those that are out-of-date. This schedule of review has worked well for us, and it is probably a good practice to apply to regulatory systems generally.

The extent of government intervention in markets to control risk-taking is, at the end of the day, a tradeoff between economic growth with its associated potential instability and a more civil but less stressful way of life with a lower standard of living.

Those of us who support market capitalism in its more-competitive forms might argue that unfettered markets create a degree of wealth that fosters a more civilized existence. I have always found that insight compelling. But the resistance by many to such arguments suggests a more deep-seated aversion to the distress that often accompanies the process of creative destruction.

The choices that we make in our societies on these critical issues will importantly shape the opportunities for the unforeseen, but inevitable, innovation that I noted at the outset to advance the economic well-being of our citizens.