Mises Economics Blog Proceeding ever more boldly against evil.

Source link: http://blog.mises.org/5439/free-market-science-vs-government-science/

Free-Market Science vs. Government Science

August 8, 2006 by George Reisman

SHARE IT:
Tweet
reddit this!

- /r/Libertarian
- /r/Economics
- /r/Politics
- /r/Mises
- /r/Anarcho-Capitalism

Stumble
Digg This
Email This

In a free market, science originates in the minds of individual scientists, who have studied and thought about problems that interest them and who from time to time arrive at new insights, which they develop further and verify. In the course of their work and in the dissemination of its results, they often need more funds than they can personally provide. In such cases, inspired by the value they see in their work, they attempt to obtain the necessary funds from those other individuals whom they can persuade to share their understanding of their work and its value.

In a free market, the main source of funds would be wealthy businessmen and wealthy heirs. In a free market, there would be no income or inheritance taxes, both of which are a violation of the freedom of the individual to spend his own wealth as he chooses. And because there would be no income or inheritance taxes, there would be no need for the establishment of foundations and trusts as means of avoiding these taxes, nor for the appointment of trustees or anyone else with power to determine the use of one's funds. There would thus simply be wealthy businessmen and heirs in full control of their own funds. And a businessman would not have to worry about running afoul of any regulatory agency that might use its power to harm his business in retaliation for his supporting research that was unpopular.

The possession of substantial wealth by single individuals, with full power to determine its use, is of vital importance. This is because not only do new ideas originate in the minds just of single individuals, who necessarily must set out completely alone in any quest to change the understanding of the rest of mankind, but the change in other people's understanding, which must subsequently be brought about, also proceeds just one mind at a time.

For an individual to understand something that is new and significant is not an easy or automatic task even in the best of circumstances. For the original discoverer it must be somewhat daunting to think that there is a significant truth that as yet, in the entire world and in the entire history of the world, he alone understands. Such an individual needs to have considerable confidence in the power and reliability of his mind. Galileo, Newton, Pasteur, Edisonâ€"all the great innovators in science and invention have necessarily been in this position.

The first people to be persuaded of the truth and significance of a new discovery, after the discoverer himself, must also have considerable confidence in the power and reliability of their minds as well. Their situation is that as yet only they and the discoverer understand this truth and its value. They must be prepared to proceed on the basis of no foundation but that of their own, independent judgment that the discovery is in fact true and valuable.

In this connection, it should be realized that even the utmost obviousness of a truth is never a guarantee of its acceptance by an individual. There are many people so doubtful of their own capacity to judge the truth, so fearful of the possible need to defend it in a conflict with others, who they expect will disagree, that their response even to an extremely obvious but not yet generally recognized truth is, in effect, that it need not be true because if it were, it would already be generally recognized and accepted. For such people, the ability to recognize the truth melts away without the assurance that practically everyone else is prepared to confirm the truth as true. Only then can acceptance of a truth be sufficiently separated from the possibility of conflict with others that it can take place without being blocked by fear.

Consider, for example, how the great mass of people could once go on believing, century after century, that the world was flat. Certainly that was how the world appeared to them any time they looked out at a broad expanse of land in front of them. But some people in this period knew that the world was round and that its appearance of flatness could easily be reconciled with the fact of its roundness.

The conclusion that the world was round was an obvious inference to be drawn from such facts as the tops of the masts of sailing vessels appearing on the horizon first, followed by more and more of the masts, and then by the body of the vessels, as they came closer. It was an

obvious inference to be drawn from the knowledge that while one could see only so far when one looked out at the land in front of one, the limit of one's field of vision was not the limit of the extent of the earth, which went further. Curvature of the earth was the obvious explanation in both cases.

While some people undoubtedly did understood this much at the time, most people could not be persuaded of it for many centuries. They were essentially immune to this knowledge. Whether is was simply out of fear of conflict with others to whom they might have to explain it in the face of resistance and possible derision, or simply a matter of intellectual laziness on their part, or both, the essential fact is that here was a very simple truth that the great majority of mankind could not be gotten to accept for a very long time. And even today, when virtually everyone finally does acknowledge that the earth is round, it is probably the case that a large proportion of the people who now do so, have no better reason for doing so than that this is what they know the great majority of people believe and is thus what they are expected to believe.

Intellectually inert and fearful people continue to be extremely numerous. They are to be found at all levels of educational attainment. Those with higher levels of education simply know more about what most people supposedly believe and that they are thus expected to believe. They hold their knowledge virtually as a collection of public opinion polls. Very little if any of their ostensible knowledge is solidly grounded. They have little or no basis for forming an independent judgment of the truth or falsity of new knowledge.

Such people are so numerous that even in relatively small groups one or more of them can be expected to be found. This is what makes it so important that the power to make decisions rests in the hands of single individuals, not groups, committees, or boards of any kind. To the extent that it is groups, committees, or boards that decide, the likely presence of such people and their mutual reinforcement of each other constitutes a major obstacle in the way of a valuable new idea going forward.

The advancement of science depends on a free market, because the free market and its vesting of decision-making power in the hands of single individuals rather than groups is able to shunt aside those who lack the power of independent judgment. They are relegated to the sidelines, where they can enjoy all the benefits of scientific and economic progress but not get in its way.

Now let us turn to science under the tutelage of the state.

State control of science is the attempt to combine opposites. In essence, science is mind; the state is physical force. Science makes its way by means of the voluntary assent of the individual human mind to its recognition of truth. In contrast, the state and what the state sponsors makes its way by means of the use of physical force and the threat of physical force. There is no law, regulation, ruling, edict, or decree made by the state that is not backed by the threat of physical force to compel obedience to it. The state does not say to the individual do or do not do this because of its reasonableness or lack of reasonableness, and take as long as you like before coming around to our position. No. It says, do this or do not do this if you want to stay out of jail and avoid being injured or killed in resisting.

Any financial support the state may provide to science is by means of taxes collected at the point of a gun, from people who know that they will be imprisoned if they do not pay the taxes and injured or killed if they resist being imprisoned. This is a remarkable foundation for the progress of science, much like a purported construction of a laboratory by gorillas.

Thus, the starting point of state-sponsored science is the exact opposite of the starting point of actual science: it is physical force not the voluntary assent of the individual mind.

There is another important difference in starting point. Science begins in the mind of the individual scientist seeking important truth not previously identified. State-sponsored science in contrast typically begins with an already established *consensus* concerning the subject to be pursued. This is because the existence of a consensus increases the likelihood of being able to obtain political support for the project.

Of course, not all state-sponsored science requires an existing consensus. Stalin did not need a consensus when he decided to promote the career of the biologist Lysenko, because of the latter's support for the theory of acquired characteristics.

The example of Stalin and Lysenko sheds light on the kind of scientific quest that any politician or government official will initiate if he can. Because the primary concern of such a person is always the maintenance and enhancement of his power, the projects he initiates will be projects designed to increase his power and prestige. Any connection with scientific truth is likely to be merely coincidental. Thus in the case of Stalin and Lysenko, the objective was not the promotion of the science of biology, but support, wrung at the expense of the science of biology, for the Marxist doctrine that life under Communist rule could change human nature by virtue of a succession of generations acquiring characteristics that would then be genetically transmitted to later generations.

Whether state-sponsored science rests on an existing consensus or on the initiative of an individual politician, it differs radically from genuine science in yet another respect. This concerns the relationship between science and money. In a free market, it is the truth and importance of the science that drives the raising of money. Money is raised in order to facilitate the development and dissemination of the science. Money is the means; science is the end. With state-sponsored science, this relationship is largely reversed.

The state, in effect, offers pots of money in the form of "grants" for the study of matters selected by politicians and their appointees, and then scientists must choose areas of investigation that are most likely to secure them some of that money. The "scientists" gather around the pots of money, like bees around pots of honey, eagerly seeking as best they can to slurp up some of the money by means of writing whatever kind of grant proposals they think will promote the agenda of whichever officials have the power to determine the award of the grants.

The meaning of this state of affairs is that the initiative for science passes from scientists to the state, i.e., to politicians and their appointees. And instead of money serving science, science now serves money, and, it must be stressed, not ordinary money, but money collected at the point of a gun, and made available on conditions determined by politicians and the appointees of politicians.

In a free market, of course, *applied* science serves money. There are companies that want to develop specific products and they employ scientists

to help develop them. But the funds are raised voluntarily and the applied science must be true, or the products will not work. There are also companies and wealthy individuals in a free market who may be interested in the exploration of various fields of basic science and who offer monetary incentives to scientists to pursue such research. Again, at the very least, the relationship is strictly voluntary.

What is crucial is that in a free market, there is *room* for independent scientists, scientists who themselves take the initiative in their work and who, thanks largely to the existence of a substantial number of wealthy businessmen and heirs, have a real chance of obtaining the funds they need in order to pursue their work and disseminate its results. Indeed, in a free market, without income taxes, there might well be significant financial support for independent science extending deep into the ranks of the middle class.

State-sponsored science comes into existence on a large scale in an environment in which the foundations of genuine basic science are already largely undercut by the existence of progressive income and inheritance taxes and an accompanying collectivization even of private decision making: i.e. the replacement of individual decision making with decision making by groups of various kinds, notably boards and committees.

Once state support of science comes into existence, there is little prospect of major advances in science gaining any support from it. A major advance in science represents the radically new and different. However true it may be, its truth as yet lacks adherents. And precisely for this reason, it is almost certain to be rejected by those whose standard of truth is acceptance by others. It does not yet and cannot yet have this acceptance because of its very newness. If it is to be accepted, it must be accepted on the basis of *independent judgment* and nothing else. But the exercise of independent judgment virtually cries out for the foundation of the ownership of *independent wealth*. Independent, i.e., privately owned, wealth, can be used in support of the radically new and different. In that case if the judgment is wrong, the loss is that of the person who made it. But when the wealth being used is publicly owned, then whoever makes the judgment concerning its use, must above all be sure that he can prove that he did absolutely nothing out of the ordinary with it. Only in that way, can he avoid blame for any loss.

State-funded science is necessarily a swamp of mediocrity. It is the domain of peer-reviewed journal articles and of statistical studies. In peer-reviewed journals, nothing is considered worthy of publication unless deemed to be so by "peers." What this means is that in order for a radical new idea to be accepted for publication, it must immediately gain the support of those who hold the opposing, now outmoded ideas that it shows to be in error, or else it cannot be published. Such an arrangement is tantamount to requiring that before Galileo can publish, his ideas must have the endorsement of astronomers who up to the moment of reading him have adhered to the Ptolemaic system of astronomy. It is tantamount to requiring that before Louis Pasteur can publish on the subject of the germ theory of disease, he must have the assent of those who deny the very existence of germs.

State-funded science is very much at home with statistical studies. This is because they can all be made to fit easily specified criteria with respect to such matters as sample size, confidence intervals, and confidence levels. They are thus a very good way for large numbers of "scientists" to be kept employed attempting to establish or deny the likelihood of a relationship existing between practically any two things in the universe. Provided the "scientist" can verify that he has followed the rules of such a study, he can rely on keeping his government grant check and go on to the next "study" and the next government grant.

Perhaps some may find the most telling criticism of state-funded science the simple visualization of the faces of various politicians and government officials, coupled with the realization that it is they who are now in charge of science. Even though our President, his Cabinet officers, and our legislators do not personally award government grant money, they might as well do so. This is because it is still their judgment, such as it is, that determines the appointment of those who do award the grants, or the appointment of those who whose further job it is to make such appointments. And in the same way, with whatever intervening layers of appointees that there may be, it is their judgment that ultimately underlies the choice of all members of the government's panels of science advisors.

There is first of all the very great problem of the ability of our politicians and officials to make any kind of sound appointments. Who are they, after all? What is it that they actually know about science, or about anything for that matter? What qualifies them to determine the qualifications of an appointee? And then there is the further problem of who is it that seeks out such jobs as determining the award of government grant money? Who is it who seeks appointment to the government's advisory panels of scientists?

Serious scientists are concerned with the pursuit of science, not the politics of science. It is not likely that they will be interested in obtaining such positions. Such positions are sought precisely by the opposite kind of "scientists," namely, those for whom it is the politics of science that counts, and not the actual substance of science. These are the kind of people who actually enjoy being members of committees. And it is these people, several rungs down in the bureaucratic hierarchy, who are now the masters of science on a day-to-day basis.

State-sponsored science is the destroyer of science. If science is to live, government funding of science must end.

This article is copyright © 2006, by George Reisman. Permission is hereby granted to reproduce and distribute it electronically and in print, other than as part of a book and provided that mention of the author's web site www.capitalism.net is included. (Email notification is requested.) All other rights reserved. George Reisman is the author of *Capitalism: A Treatise on Economics* (Ottawa, Illinois: Jameson Books, 1996) and is Pepperdine University Professor Emeritus of Economics.

Related posts:

1. The Myth of Under-provision of Science by the Free Market
2. Why the state needs two parties
3. Appealing to the masses: Free market anthem
4. Can the Free Market Wage War?
5. Crazy economists still believe in the free market

Subscribe to comments on this post via RSS

Ludwig von Mises Institute • 518 West Magnolia Avenue • Auburn, Alabama 36832-4528

Phone: 334.321.2100 • Fax: 334.321.2119

contact@mises.org • webmaster • mises.org sitemap