A submission to the
The Senate Economics References Committee
Inquiry into "Personal choice and community impacts"

Public Hearing held on Friday 11 September 2015

Regulating choice: The need for evidence

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9 September 2015

If markets are thought of in the broad sense of people going about their lives voluntarily exchanging goods and services in the process of producing and consuming, then "measures introduced to restrict personal choice 'for the individual's own good'"[3] are predicated on the idea that particular markets fail because people make decisions against their own, or the wider community's, best interests. The inquiry's Terms of Reference specifically mentions the heavily regulated tobacco, alcohol, marijuana, recreational cycling, and entertainment markets (items a through e). To that list might be added the markets for labour, food, healthcare, scientific research, and finance, to name some of the most important.

Whether or not these and other markets can truly be said to have failed, the relevant question for public policy is whether regulation can, and in practice does, improve outcomes relative to outcomes in the absence of regulation.

Based on a consideration of the conditions necessary for regulation to be successful and of the findings of a review of experimental research, we conclude that the *Iron Law of Regulation* applies. The Iron Law can be stated as "There is no form of market failure, however egregious, that is not eventually made worse by the political interventions intended to fix it." The conditions for successful regulation are onerous and unlikely to be met in practice, available evidence finds regulations are harmful, and evidence that regulation can improve the general welfare is lacking.

Given that the weight of evidence favours freedom of choice over regulation, we suggest that regulations should be presumed harmful, unless proven otherwise. Regulations should be revoked, or not promulgated, unless an independent, open, and comprehensive cost-benefit analysis using validated scientific procedures finds that the regulation provides a net increase in welfare. Existing regulations that have not been enforced for some time, or have not been enforced in a consistent and rational manner, might reasonably be revoked without further consideration. Reducing regulatory restrictions on people's freedom to conduct their own affairs as they see fit would increase the welfare of Australians at the stroke of a pen.

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[3] From item f of the inquiry's Terms of Reference. Available from
http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Economics/Personal_choice/Terms_of_Reference

Theoretical and logical underpinnings of the Iron Law

The Iron Law of Regulation builds on the ideas of Adam Smith[4], Jeremy Bentham[5], Friedrich von Hayek[6], Milton Friedman[7], and others that people are better off when they are free to conduct their own affairs and to make arrangements with others as they see fit. Adam Smith referred to that freedom as the "simple and obvious system of natural liberty," and described how and why that simple and obvious system leads to prosperity, as if by an "invisible hand". Exchange between free individuals only occurs if both expect to benefit from the arrangement. In contrast, regulations involve forced compliance, so that at least one of the parties is harmed.

Those who believe in the superiority of regulation might have faith that a regulator could in practice increase total net welfare, or could deliver better outcomes for the believer. The first belief is not obviously plausible and, on further consideration, depends on a highly questionable sequence of assumptions. Specifically, in order to increase total net welfare, a regulator must: (1) know stakeholders' endowments, relationships, and preferences; (2) determine in detail how the situation could be changed to the benefit of those affected; design rules that will (3) produce the intended changes; but (4) not produce unintended changes (e.g. graft, reduced competition, and suppression of innovation); (5) resist pressures to modify the rules in ways that would reduce the net benefit; (6) ensure that those affected by the rules know and understand them; (7) establish rewards and punishments that ensure that the rules are followed; (8) establish fair procedures for resolving disputes arising from enforcement of the rules; (9); change rules when the situation changes (e.g., due to inventions or natural disasters); and (10) keep the administrative costs of the rules below the value of the benefits.[8] To be effective, each regulation would have to meet all of the conditions.

A reasonable person would wish to see evidence that the ten necessary conditions would in fact be met.

Despite being based on heroic assumptions, regulation is part of folk economics.[9] Most people seem to consider it obvious that *other people* should be regulated. Consider, for example, regulations that food packaging must list specified ingredients of the product in a standard format. On the face of it, the requirement seems reasonable and likely to protect customers. Experiments show, however, that regulations on labelling that are intended to encourage people to reduce their calorie consumption have the opposite effect.[10]

Need for evidence on conditions for successful regulation

In the latter part of the 19th and early 20th centuries academic economists, with some leading exceptions, became fascinated with theories of market failure and began to believe that they were clever enough and knew enough to design regulations that would improve the people's net welfare. During the latter part of the 20th century, a new generation of economists began to study the evidence, and discovered that government failure poses a greater threat than market failure[11].

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[4] Smith, Adam (1759, 2007). *The theory of moral sentiments*. Cosimo: New York.

[5] Bentham, Jeremy (1843). *A manual of political economy*. Available from http://socserv.mcmaster.ca/econ/ugcm/3ll3/bentham/manualpoliticaleconomy.pdf

[6] Hayek, Friedrich August (1948). *Individualism and economic order*. University of Chicago Press: Chicago. Available from https://mises.org/library/individualism-and-economic-order

[7] Friedman, Milton (1962). *Capitalism and freedom*. University of Chicago Press, 2009.

[8] From Armstrong, J. S., & Green, K. C. (2013). Effects of corporate social responsibility and irresponsibility policies. *Journal of Business Research, 66*, 1922–1927. SSRN Working Paper 2207952 version available from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2207952

[9] Rubin, Paul H. (2003). Folk Economics. *Southern Economic Journal*, 70, 152-171.

[10] Ben-Shahar, Omri, & Schneider, Carl E. (2014). *More than you wanted to know: The failure of mandated disclosure*. Princeton University Press: Princeton, NJ.

[11] See, e.g., the introduction in Winston, C. (2006), *Government failure versus market failure: microeconomics policy research and government performance*. AEI-Brookings Joint Center for Regulatory Study: Washington, D.C.

Since the late 20th century, opinion among academic economists appears to have drifted back toward the belief that regulation is desirable, or at least inevitable. The movement in academic opinion is not surprising when one considers that universities have come to be dominated by professors whose political beliefs favour a big role for government and whose positions have increasingly come to depend on government funding that is often tied to studies designed to support a need for regulation[12].

Moreover, a general belief in the benefits of regulation creates a heightened demand for academic and practicing economists to help with the design, implementation, and justification of regulations. In turn, the increased supply of economists looks for ways to justify and promote their services. To do so, economists and others have in recent times resorted to looking for causal relationships by analysing big data using complex statistical techniques. That approach allows the analyst to find support for whatever they or their client would prefer[13]. We refer to the resort by social scientists to such unscientific procedures as *regressionomics*.

There is a lack of research investigating the conditions under which regulations should work, and a lack of evidence to show that regulations do, in fact, work under specified conditions. As with all of the social sciences, experimental evidence—including laboratory and field experiments as well as quasi-experiments and natural experiments—are needed. Anecdotes and analysis of non-experimental data are inadequate for drawing conclusions about causal relationships—such as the effects of a regulation—in complex situations. The need for experimental evidence on the effects of regulation is no different from the need for such evidence in order to determine, for instance, the effect of environmental influences on health and disease[14] or the effects of human activity on the environment[15].

Such evidence as does exist leads to the conclusion that government failures lead to greater losses in welfare than do the market failures that the government legislation and regulations were intended to remedy. Economists Clifford Winston[16] and John R. Lott, Jr.[17], for example, have provided notable summaries of evidence, from situations in which natural experiments occurred, on the effects of regulations.

Our own research has investigated the effects of government regulation of speech[18]— advertising in particular—, of corporate social responsibility[19], and of the environment[20]. We could find no evidence that regulation increases welfare, and in most cases it caused harm. We have not found a regulation that would meet even one of the ten necessary conditions for successful regulation described in the previous section.

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[12] Such studies are likely to be well received by journal reviewers and are therefore more likely to be published in high-status journals. There is experimental evidence for confirmatory bias by academics: see, e.g., the seminal study by Mahoney that found reviewers tended to reject articles with findings contrary to their own theoretical perspective; Mahoney, M. J. (1977). Publication prejudices: an experimental study of confirmatory bias in the peer review system. *Cognitive Therapy and Research, 1(2),* 161-175.

[13] Armstrong, J. S., Green, K. C., & Graefe, A. (2015). Golden Rule of Forecasting: Be conservative. *Journal of Business Research,* 1717–1731. http://dx.doi.org/10.1016/j.jbusres.2015.03.031

[14] For evidence that non-experimental studies can and do lead to false health scares, see Kabat, G.C. (2008), *Hyping health risks*. New York: Columbia University Press.

[15] For evidence that false environmentalist alarms are raised from non-experimental studies, see Green, K. C. & Armstrong, J. S. (2011), The global warming alarm: forecasts from the structured analogies method. SSRN Working Paper 1656056. Available at SSRN: http://ssrn.com/abstract=1656056

[16] See Winston (2006), *op. cit.*

[17] Lott, Jr, John R. (2007). Freedomnomics: why the free market works and other half-baked theories don't. Washington, D.C.: Regnery.

[18] Green, K. C. & Armstrong, J. S. (2012). Evidence on the effects of mandatory disclaimers in advertising. *Journal of Public Policy and Marketing*, *31*, 293–304.

[19] See Armstrong & Green (2013) *op. cit*.

[20] See Green & Armstrong (2011) *op. cit*.

Need for evidence on the effects of each regulation

When governments pass legislation and promulgate regulations with good intentions, they rely on the opinions of political leaders and officials that they will improve the general welfare. Is that a reasonable assumption?

Judgments on what will be the net long-term effect of a regulation on the welfare of Australians are in effect unaided judgmental forecasts. Decades of research has established that in complex and uncertain situations—such as are the subject of regulation—even top experts' judgmental forecast are little better than guessing[21]. Moreover, experts' judgmental forecasts of the decisions different parties make in situations in which they have conflicting interests—such as buyers, sellers, and regulators in the tobacco market—are of no value[22].

To properly assess whether a regulation is useful requires experimental evidence that the regulation has increased net welfare or, in the case of a proposed or new regulation, forecasts from evidence-based forecasting methods of all costs and benefits over the long-term. In particular, one would need predictions based on experimental evidence from tests of multiple hypotheses[23]. Full disclosure, and independent replications and extensions would be needed before one might reasonably conclude that the regulation would in practice be beneficial.

Fortunately, decades of scientific research on forecasting mean that we now know methods that can provide useful forecasts for complex situations[24]. Some of the biggest gains in forecasting over recent years have been in developing methods for situations involving parties with conflicting interests, such as are a key concern of regulators. The methods, "simulated interaction" and "structured analogies", are simple in concept, and are inexpensive to implement[25]. There is no good reason to depend on experts' opinions about what will happen, when validated forecasting methods that make effective use of their knowledge are readily available.

"This time it's different" is an age-old argument for ignoring cumulative knowledge, and is the primary reason that forecasting, in practice, produces dreadfully inaccurate forecasts. The Golden Rule of Forecasting[26] always applies whenever a forecast is needed. Research to date reported in 105 papers that included experimental comparisons showed that ignoring the Golden Rule by assuming that this time it's different increases forecast errors by an average of 44%.

Finally, another common, but similarly unscientific, objection to the need for evidence is the precautionary principle. Those who propose that the precautionary principle should apply argue that a very bad thing *might* happen and that action should be taken now, just in case[27]. The precautionary principle is an irrational basis for taking action. Logic requires a careful weighing

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[21] See Armstrong, J.S. (1980), "The Seer-Sucker theory: The value of experts in forecasting", *Technology Review*, Vol. 82 No. 7, pp. 16-24; and Tetlock, P.C. (2005), *Expert Political Judgment: How Good Is It? How Can We Know?*, Princeton University Press, Princeton, NJ.

[22] See Green, K. C. & Armstrong, J. S. (2007), The value of expertise for forecasting decisions in conflicts. *Interfaces, 37*, 287-299; and Green, K. C. & Armstrong, J. S. (2011), Role thinking: Standing in other people's shoes to forecast decisions in conflicts. *International Journal of Forecasting, 27,* 69–80.

[23] Avoid spurious evaluations that come to predetermined conclusions by using the scientific method of testing multiple reasonable hypotheses. For a discussion of why that is important, see Chamberlin, T.C. (1890, 1965), "The method of multiple working hypotheses", *Science*, Vol. 148, pp. 754-759. (Reprint of an 1890 paper).

[24] See Armstrong, Green, & Graefe (2015) *op. cit.*

[25] See Green, K. C. (2005), Game theory, simulated interaction, and unaided judgement for forecasting decisions in conflicts: Further evidence. *International Journal of Forecasting*, *21*, 463-472; and Green, K. C. & Armstrong, J. S. (2007), Structured analogies for forecasting. *International Journal of Forecasting*, *23*, 365-376. Both available from conflictforecasting.com.

[26] "The Golden Rule of Forecasting is to *be conservative*. A conservative forecast is consistent with cumulative knowledge about the present and the past", p. 1717 in Armstrong, Green, & Graefe (2015) *op. cit.*

[27] The essay Green, K. C., & Armstrong, J. S. (2008), Uncertainty, the precautionary principle, and climate change, is available from publicpolicyforecasting.com.

up of evidence on the likelihoods and effects of possible eventualities (costs and benefits), as well as of the effects of policies, before embarking on expensive courses of action.

Conclusions

Efforts to regulate Australians' activities, no matter how well intended, are directly reducing our welfare. Moreover, regulation is costly to implement, thereby diverting resources away from more productive activities, and saps initiative by reducing the freedom to make our own decisions.

There is a great opportunity for political leaders to make us all better off by reducing the burden of regulation. No regulation should be promulgated without compelling evidence that it is an exception to the Iron Law of Regulation and thus will deliver an increase in welfare over the long term. Existing regulations should be revoked unless such evidence is forthcoming.

Clearing the decks of regulations that have not been enforced in recent times, or are not enforced in a consistent and rational manner, might be a good way to start a programme of regulatory reduction. Unlike introducing a new regulation, revoking an old one is something that our political leaders could do that is highly likely increase the welfare of Australians, at the stroke of a pen.

Attachments

Armstrong, J. S., Green, K. C., & Graefe, A. (2015). Golden Rule of Forecasting: Be conservative. *Journal of Business Research,* 1717–1731.

Armstrong, J. S., & Green, K. C. (2013). Effects of corporate social responsibility and irresponsibility policies. *Journal of Business Research, 66,* 1922–1927.

Green, K. C., & Armstrong, J. S. (2012). Evidence on the effects of mandatory disclaimers in advertising. *Journal of Public Policy and Marketing*, *31*, 293–304.