Overview
Regulatory Strategy
André Downs
Paul De Civita
Policy Research Initiative

Executive Brief
4 Welcome to Regulatory Strategy

Articles
10 The International Risk Governance Council, its Approach to Risk Governance and How Public Policy Could Benefit from Improved Risk Governance
Foreword by: The Honourable Donald J. Johnston
Article by: Christopher Bunting

17 ”Private Politics”: Public Activism as an Alternative Regulatory Mechanism?
Daniel Diermeier

22 An Idea Whose Time has come: A Regulatory Budget and Strategic Regulatory Agenda
G. Bruce Doern

31 Principles for an Effective Regulatory Impact Analysis Challenge Function
Richard B. Belzer

40 The Science and Practice of Risk Ranking
Baruch Fischhoff
Granger Morgan

48 Benefit-Cost Analysis: An Overview
Arnold C. Harberger

55 Economic Analysis of Policy and Market Based Instruments
W.L. (Vic) Adamowicz

61 Qualitative and Quantitative Analysis in Economic Evaluations to Support Decision Making
Andrew MacDonald
Robert Raucher

66 The Future of Strategic Evidence-Based Regulation: A Conference Summary
Policy Research Initiative

The Policy Research Initiative (PRI) conducts research in support of the Government of Canada’s medium term policy agenda. Its core mandate is to advance research on emerging horizontal issues, and to ensure the effective transfer of acquired knowledge to policymakers. As a peer-reviewed journal targeting the federal policy community, Horizons publishes high-quality policy research papers from researchers across federal departments and from external experts. For more information on the PRI or to consult previous issues of Horizons, please visit <www.policyresearch.gc.ca>.

All web sites referred to in this issue were confirmed as of January 2009 unless indicated otherwise.

Alternative format: available on demand

Any comments or questions? Requests for subscription or change of address?
E-mail: horizons@prs-srp.gc.ca
Phone: 613-947-4956
Fax: 613-995-6006

The views expressed herein reflect solely those of the authors, and do not necessarily represent the views of the Government of Canada or any organization with which the authors or Horizons are affiliated.

Introduction

The Government of Canada recently embarked on a program to streamline its regulatory procedures. This new program, set forth in the Cabinet Directive on Streamlining Regulation (CDSR), is both a new way of writing regulations and a new way to think about the entire regulatory process. The centerpiece of the CDSR is regulatory impact analysis. The general notion is that the government can and should use well-respected and commonly used analytic tools, such as benefit-cost analysis, to examine in advance the likely consequences of an array of alternatives, and use this analysis to inform both the government and Canadians before making important decisions. The CDSR includes a system to ensure that regulatory analysis meets high standards for transparency, quality, analytic rigour, and utility for decision making. The design of that system of regularized oversight — called a “challenge function” in Canada and some other OCED countries — has yet to be determined. This paper discusses options that have been tried or proposed elsewhere and helps guide a credible analysis of alternatives. The benefits of the CDSR cannot be achieved without an effective challenge function, but designing and implementing such a function is not easy. Challenge functions are needed because regulatory agencies and stakeholders often disagree about certain fundamental issues, such as which instruments should be selected and what regulation ought to achieve. These disagreements spill over into regulatory analysis. When disagreements arise, the challenge function should be perceived as a neutral process for resolving technical issues and clarifying the remaining policy differences. All stakeholders will not always perceive outcomes as equitable, but an effective challenge function can enable the fairness of the regulatory process to be above bias or favouritism, thus making unhappy individual regulatory outcomes less disconcerting.

Challenge functions are inherently regulatory in nature, so they can be unpleasant in practice. Whereas government agencies normally regulate others, they are themselves the regulated parties of a challenge function. Many of the lessons about regulatory design, well described in the CDSR but targeted at the private sector, also apply to the relationship between challenge functions and regulatory agencies. When regulating the private sector, agencies often try to persuade them to embrace agency norms. Similarly, the challenge function agency will seek to persuade regulatory agencies to embrace the ethic of neutral regulatory analysis as a prerequisite to regulatory decision making.
For this reason, designing an effective challenge function can be a complex task. The many factors to consider often entail trade-offs such that advancing one objective requires sacrificing part of another. An even more important lesson can be gleaned from the experience of others: it is much easier to design a challenge function to fail than it is to design one to succeed.

This brief paper identifies several important principles to consider when designing a challenge function. To set the stage, US experience is briefly summarized, but from perhaps an unusually critical perspective. Subsequent sections set forth competing models for challenge function design and explain how they can be expected to perform.

The Challenge Function in the United States

In the United States, the challenge function began with the Federal Reports Act of 1942 which, for the first time, required the government to minimize the public burden of its information collection activities. Paperwork burdens grew anyway, resulting in the bipartisan approval of the Paperwork Reduction Act of 1980. The new Office of Information and Regulatory Affairs (OIRA) was established within the US Office of Management and Budget, and it was directed to manage and control these burdens.

Meanwhile, the White House Council on Wage and Price Stability (COWPS) had been established by Congress in 1974 and given the job of restoring US productivity and controlling inflation. The Council’s functions evolved over time, and during the Carter administration they were extended to the pre-promulgation review of a small number of major regulatory actions. The Council filed public comments concerning benefits, costs, and other impacts, but had no other challenge function authorities.

In 1981, President Reagan transferred this function to the new OIRA and established therein an explicit challenge function with veto authority. This transformed US regulatory practice almost overnight. The OIRA was suddenly responsible for reviewing several thousand individual regulations, as shown in the upper line on the accompanying chart (right-hand scale). At one time, the OIRA boasted more than 80 employees. Early on, the new office also wielded its veto with enough regularity to be taken seriously, as shown in the lower line on the chart (left-hand scale).

If vetoing draft regulations is construed as a measure of success, then success was short lived. Vetoes declined precipitously during Reagan's second term, stabilized during the term of President George H.W. Bush, and vanished during the term of President Clinton. Clinton significantly curtailed the scope of the challenge authority by removing about 90 percent of its workload, but he largely retained Reagan's evaluative criteria and regulatory principles. The data also show that President George W. Bush did not deviate appreciably from Clinton administration principles or practice. The Office of Management and Budget vetoed a handful of draft regulations in 2001.
and 2002, arguably to establish its authority, but has rarely exercised this authority since then. On average, about one percent of all regulatory actions the OIRA reviewed were vetoed, and an unknown (but almost certainly very small) percentage of those were vetoed because of defects in regulatory analysis. In any case, these data do not support the conventional wisdom that the US challenge function has been nearly as effective as advertised by its proponents. Even if it was effective in the early 1980s, it is difficult to argue persuasively that it remains so today.

**Public Notice and Comment**

Predating the era of explicit regulatory analysis, the first challenge function model was the procedural device of requiring public notice of proposed regulatory actions and requesting public comment. Every OECD nation has some system for public notice and comment. In the Canada Gazette one can often find Regulatory Impact Analysis Statements (RIAS), and these documents convey a wealth of useful information of public interest. However, notice and comment procedures lack both a quality control requirement with respect to regulatory analyses or any independent way to require that analyses be qualitatively well-considered or quantitatively objective, meaning free of bias resulting from the authors’ policy preferences (what we want the outcomes to be) or wishful thinking (what we hope they will be).

Because public comments are generally advisory, the ranks of those willing to expend the resources to provide them are necessarily limited. Effort is a function of the degree to which it is perceived that the agency might be influenced to change its mind or could be compelled to do so by a court. The public comment process is at its most vibrant and effective when the legislation authorizing an agency to regulate also has strict rules requiring it to justify its decisions based on competently performed regulatory analysis. Conversely, public comment has little impact as a challenge function when an agency has unfettered decision-making discretion.

**Persuasion and Co-option**

One can always find examples in which an agency’s interests, as it perceives them to be, are served by better regulatory analysis. In these instances, absent or substandard regulatory analysis results from insufficient technical expertise or a resistant bureaucratic culture. These problems can be overcome by persistent, often painstaking, efforts at capacity building, education and training, and organizational reform. A regulatory agency that benefits from good regulatory analysis will learn from experience and, slowly but surely, become its advocate.

Persuasion and co-option fail, however, when better regulatory analysis undermines an agency’s objectives or its claims to authority and primacy. For example, an agency whose statutory mission involves regulating in an area where markets perform relatively well will learn that benefit-cost analysis reveals its regulatory proposals to be inefficient, and thus undesirable from a normative economic perspective. A timely example is the regulation of superficial characteristics of fruits and vegetables, which the European Union recently rescinded (but only in part; it
is estimated that three fourths of all European fruits and vegetables will still be covered by the handful of remaining restrictions). Regulation simply cannot yield net social benefits in the absence of market failure, and there is no evidence that markets are unable to price fruits and vegetables efficiently to account for diversity in shape, size, and similar characteristics. Agencies directed by law to regulate where no market failure exists will not voluntarily submit to the disciplines posed by a challenge function.

**Peer Review**

Peer review is routinely used in scholarly settings and has become popular in government. Peer review can, but usually does not, perform the challenge function well. Agencies use it less to improve quality than to ratify their work. Governmental peer review is therefore subject to severe conflicts of interest. Agencies using peer review may choose the reviewers, write the reviewers' instructions (the “charge”), decide when and how the reviewers meet, and even control their discussions. Agencies have powerful incentives to choose reviewers who are friendly, desirous of establishing or maintaining cordial (or financially profitable) relations, and disinclined to be troublesome. Instructions to reviewers can be crafted to avoid asking the most pertinent questions or to constrain panels’ reviews to a carefully restricted domain. When this happens, governmental peer review works as a challenge function only when experts disregard their instructions and refuse to ratify. This happens rarely, and only among peer reviewers with extraordinary self-confidence and personal resolve.

In scholarly settings, peer review is used mostly to allocate grants or ration pages in a refereed journal. The task is to select the “best” from what is available, not to ratify anything. Scholarly peer reviewers have ratification authority only in one context: the decision to approve of a doctoral dissertation leading to the award of a Ph.D.

Peer review also suffers from potentially more serious defects. First, when even (and perhaps especially) the best and brightest experts are assembled, there is no way to limit their review to the matters in which they are expert. Scientists are susceptible to the conceit that their expertise is easily transferrable elsewhere. Second, scientists can leverage their position as technical reviewers to advocate for specific public policies. This can be managed in various ways, such as by explicitly directing reviewers to stay out of policy debates and technical areas where they lack expertise, with the threat that their work will be summarily dismissed if they don’t. Responsibility for selecting panels and writing their instructions can be given to a genuinely independent entity. Panels can consist of very sceptical individuals willing and motivated to question nearly everything.

Still, some of these problems cannot be remedied no matter how much care and effort is devoted to the task. Scientists will often be tempted to believe that their own research is the most important in any field of inquiry and be critical of the research of professional rivals. They will be tempted as well by the prestige that comes from service on committees of highly distinguished people, and the power that comes from being authoritative, even if for just a short while.

**Separate Agencies’ Policy and Analytic Functions**

Typically, personnel employed or contractually funded by the regulatory agency also conduct its regulatory analysis. They are subordinate to agency program officials and subject to pressure to produce analyses that support programmatic objectives. Even when there is no explicit pressure, analysts in a regulatory agency tend to share its perspectives, goals, objectives, and culture.

For this reason, obtaining independent regulatory analysis from within the agency requires at least that analysts be organizationally separated from program officials. Their promotion and advancement must be insulated and they must report to senior officials without dilution or censorship. Where these conditions do not apply, an aggressive challenge function will be necessary to get minimum quality analysis from an agency.

**Regulatory Analysis Blueprints**

A process reform that has been used occasionally involves the advance preparation of regulatory analysis blueprints. These should not be substantive descriptions of what an agency intends to do by way of regulation, but rather plans outlining how it will go about performing regulatory analysis in advance of making decisions. Like
public comment processes in general, the effectiveness of a blueprints procedure depends on whether blueprints are, and are perceived to be, genuine efforts to inform the analytic process.

Blueprints need to state clearly what data and analytic methods will be used or, if one purpose is to generate new data and methods, the precise criteria that will be used to choose among competing data and methods. The challenge function agency can monitor, and if necessary, compel compliance. Blueprints also enable agencies with different perspectives to participate more effectively, for they can perform their own shadow analyses. Similarly, by establishing a bona fide public participation blueprints process, the resources of the private and non-governmental sectors can be activated to inform decision makers and improve the quality of regulatory analysis.

A regulatory agency cannot be counted on to select the most objective (i.e., the most policy-neutral) regulatory analysis. It has an inherent conflict of interest. For that reason, a blueprint process probably should vest the authority to choose the best analysis in the challenge function agency. If there is a concern that non-transparent logrolling or deal making could go on behind closed doors, this can be prevented by using a procedure called final-offer arbitration in which the choice of the “best” analysis is restricted to the set of analyses presented and the decision is carefully documented for the ultimate arbiter, the minister.

**Competitive Supply of Regulatory Analyses**

Regulatory agencies tend to control the production of regulatory analyses. This creates two problems. First, as noted above, analyses produced by regulatory agencies are not independent. The second problem is one characteristic of monopolies. Economic theory teaches that they produce too little output at too high a price, and the output they do produce is often substandard.

The remedy for the ills of monopoly is competition. A challenge function can be devised so many analyses are prepared by diverse interests, with each team of analysts implicitly serving as peer reviewers of others’ work. The crucible of effective, rigorous, and highly motivated critical review provides the incentive each team needs to perform its best work. The staff of the challenge function agency then becomes a reviewer of competing portrayals of regulatory effects and decides which analysis is best.

Such an approach offers significant secondary benefits to the challenge function agency. For example, it would no longer need to devote scarce resources to training in analytic methods. Competition will motivate prospective regulatory analysts to learn their craft without subsidized assistance. This is particularly helpful given the limited evidence that devoting resources to training regulatory agency analysts results in proportionate quality improvements.

**Criteria for Gauging the Effectiveness of a Regulatory Challenge Function**

Designing a challenge function requires balancing a set of competing objectives; trade-offs among objectives are inevitable and no single approach will dominate on all margins of interest.

**Clarity of Purpose**

For a challenge function to be effective over an extended period, its purposes must be both clear and stable. Analysts must know in advance what is expected of them and thus be able to predict how their work will fare under
review. The public also must have confidence that the challenge function is consistent, equitable, and transparent.

Predictability is enhanced if the challenge function agency also has a synergistic mission reinforcing analytic quality. Paperwork reduction and information quality are good examples of synergistic missions. Regulatory agencies always want more information, both to perform regulatory analysis and to craft efficient and effective regulations. Left to their own devices, however, agencies tend to seek more information than they really need (thus imposing undue burdens on the public) and may not be sufficiently motivated to assure information quality sufficient for the intended purpose. When the challenge function agency also oversees paperwork reduction, it can reduce the quantity of information demanded by the government while simultaneously improving its quality for analysis and decision making.

Conversely, predictability is significantly degraded if the agency also has missions that conflict, such as the advancement of a substantive policy agenda. Ironically, the existence of conflicting missions undermines the agency’s effectiveness at achieving each one.

Institutional Capacity
The scope, scale, and intensity of the challenge function determine the institutional capacity that must be built to enable it to have a chance to be effective. Obviously, the more expansive the mission, the greater will be the resources that must be devoted to the task. These resources consist of professional staff with training, experience, and expertise that equal or exceed that of the agencies whose work they review. It also means access to outside expertise where necessary. This is especially important for complex regulatory actions that contain detailed scientific, technical, engineering, or statistical information. No challenge function agency can possibly retain on staff all of the expertise it needs to review complex proposals effectively, yet access to such expertise is essential for effectiveness.

In both the EC and US models, the size of the professional staff is insufficient. In the European Commission, it is not clear that it has ever been otherwise. In the United States, the staff has been cut by about half while its responsibilities have greatly expanded. Both schemes lack sufficient in-house expertise in vital areas, and in the United States, staff are forbidden from obtaining help from outside the government.

No challenge function agency can possibly retain on staff all of the expertise it needs to review complex proposals effectively, yet access to such expertise is essential for effectiveness.

Independence
The need for independence has already been noted in different contexts, but it is worth highlighting as a separate criterion, because there are multiple dimensions involved. As indicated earlier, if the regulatory agency prepares the only analysis, then its authors need independence from program officials to produce objective work products. In a similar vein, analysts working for the challenge function agency require multiple types of independence — independence from competing missions, as noted above, but also independence from political interference.

For a variety of reasons, this might not be as feasible to implement as it is necessary. The challenge function can overcome this in part by using well-crafted and reproducible evaluative criteria and following transparent review procedures. Despite the limitations of peer review, the challenge function almost certainly will have to rely on this tool for complex scientific and technical issues. Securing genuinely independent peer review is thus an additional challenge function task that cannot be left to regulatory agencies to perform.

Over time, challenge function agencies are tempted to promote their successes and minimize their failures; that is, they often do not live by the same analytic discipline that they impose on others. A key predictor of this problem is a reporting requirement in which the challenge function agency must show that its efforts have improved the quantity or quality of regulatory analysis. Faced with such a requirement, the agency will lower its standards. A reporting requirement that
rewards the challenge function agency for mounting successful challenges may avoid this problem.

Timing
A challenge function can intervene at different points in the regulatory process, and choosing these points has a dramatic impact on the program’s likely effectiveness. Historically, challenge function agencies have played a gatekeeper role at the end of the process. This works, however, only if the challenge function agency has the authority to veto regulatory analyses and compel them to be revised. Vesting the agency with veto authority has important practical and political consequences. For example, the agency must be willing to exercise this authority; powers that go unexercised may disappear.

The challenge function instead can be located at the beginning of the regulatory development process. If this is done, the best it can do is establish a plan for how regulatory analysis would be conducted. It cannot assure that the plan is followed, and some regulatory agencies will choose to depart from the plan for unpersuasive reasons.

A better alternative is to establish multiple points of intersection – at the beginning, the end, and places in between – each with a limited set of issues to resolve and different enforcement tools. This approach significantly improves the flexibility with which challenges can be brought. At the same time, however, it expands the scope of the challenge function task and creates reasonable expectations that it will act.

Transparency
Transparency has at least two dominant forms: procedural transparency (which applies to the process of evaluating regulatory analyses) and technical transparency (which concerns the data, models, and analytic and statistical methods used in regulatory analysis). Both forms of transparency involve a principle that it is easier to believe others should follow than it is to follow oneself.

Regulatory challenge programs do a good job of demanding transparency on the part of regulatory agencies, but can themselves be highly opaque. This is usually justified on the grounds that senior government officials have a need for professional candour that they cannot obtain if they must “work in a fishbowl.” This is true but largely irrelevant. A challenge function that includes a high degree of protection for confidentiality within the challenge function agency is one that suffers from actual or perceived conflicts in mission, with concomitant distrust and ineffectiveness.

Technical transparency is essential for any challenge function to be successful. Regulatory agencies – and anyone else preparing all or part of a regulatory analysis that they believe ought to be relied upon as the most objective characterization of likely regulatory effects – must be obligated to show their work. Qualified members of the public ought to be able to use the same assumptions, data, models, and methods used by the original analysts and obtain essentially the same results.

Review Criteria
Any successful challenge program must have criteria for determining whether a regulatory analysis is sufficient for the decision problem at hand. These criteria must be transparent (meaning readily known by all) and objectively interpretable (meaning not subject to the idiosyncrasies or eccentricities of the reviewer or anyone’s policy preferences). Thus, criteria that speak to the “feasibility” of one thing or the “appropriateness” of another are poorly suited for use in a challenge function, because they are inherently subjective.

Benefit-cost criteria tend to be the most widely used in challenge functions, and there are good reasons why. First, there are well-established external rules for deciding whether a regulatory effect is a cost, a benefit, or a transfer. Second, economists have decades of practical experience objectively quantifying effects. Practitioners understand that benefit-cost analysis is supposed to be positive (i.e., descriptive) and not normative (i.e., prescriptive). Thus, the discovery of bias in a benefit-cost analysis is per se evidence of manipulation. Whether error is meaningful depends on whether it is larger than the explicit or implicit precision of the estimates or sufficient to change the net-benefit ranking of alternatives.
Evidentiary Standards and Burden of Proof

A challenge function must be clear concerning who bears the burden of proof, what that entity must do to satisfy this burden, and what evidentiary standards will be applied. It is a reasonable starting point to require the author of an analysis to follow generally accepted benefit-cost analysis practices, fully reveal all source materials, and ensure that a qualified third party can reproduce the results. In addition, it also is reasonable to expect that an analysis will be an unbiased portrayal of the effects of a proposed regulation, and that these effects are accompanied by probabilities of their occurrence or well-founded, semi-quantitative descriptions of their likelihood. Rare events must not be described as “likely,” and descriptors such as “plausible” and “possible” must be described in quantitative terms consistent with general understanding.

Meeting these standards might be sufficient to earn a weak presumption of validity. The next task is to decide who is authorized or allowed to challenge. Typically only the challenge function agency would have this authority, in which case limited resources or the known perils of monopoly power may well handicap the challenge function. Alternatively, other governments (i.e., provincial) or other government agencies could be authorized to mount challenges, thus allowing the discipline of competition to work as an agent for the discovery of error. This would have the additional salutary effect of leveraging challenge function agency resources. Finally, any member of the public could be allowed to mount a challenge. Such a regime would ensure that the broadest possible span of interests and competencies were taken into account.

Regardless of which model is employed, the challenge function needs a clearly stated evidentiary standard for determining whether an analysis requires correction. The choice of evidentiary standard is an implicit trade-off between Type I and Type II error. In this case, Type I error (a false positive) means interpreting a claim, inference, or conclusion as false when in fact it is true. A Type II error (a false negative) arises when a claim, inference, or conclusion is interpreted as true when in fact it is false. There is no obvious pair of weights to assign to Type I and Type II errors. As a practical matter, the more the challenge function tolerates Type II error, the less effort will be devoted to challenge.

Authority

Many challenge functions have legal foundations and specific authorities conferred on the agency or body that perform them. Deciding what authorities should be conferred on the challenge function is complex, and there are few simple or easy answers. Diverse authorities of varying intensity and effect appear to be superior to narrowly defined authority even when that authority is extremely powerful. Under the US model, the challenge function agency has the authority to veto draft regulations—a very substantial power—but it also lacks the authority to do anything less drastic. Since 1981, it has reviewed 39,381 draft regulations and vetoed 426. This represents 1.08 percent of the total, meaning that the Office of Management and Budget rarely exercises its single authority under the challenge function.

The challenge function agency can be given a broader set of authorities to exercise at different points in the process. For example, if the challenge function agency learns early on that a particular regulatory analysis is headed in the wrong direction, perhaps because important alternatives were excluded, or it is expected to be based on a crucial model known to be seriously flawed, it should be able to intervene early to secure a mid-course correction. Neglecting (or being unable) to correct known errors in a timely manner makes the challenge function less effective, more adversarial, or both.

A challenge function also can be effective without giving the agency decision-making authority. For example, in Australia, the Office of Best Practice Regulation (OBPR) cannot actually prevent an agency from proceeding without a required regulatory analysis or veto of a substandard product. However, the OBPR makes its reviews public and agency non-compliance public. In contrast, when a challenge function agency has veto power, it tends to exercise that power rarely, thus reducing effectiveness. If, as in the United States, the challenge function agency also has a public reporting obligation, then it cannot publicize poor regulatory agency performance without raising questions about why it did not exercise delegated veto power.
Equitable Application

Agencies (and non-government suppliers of regulatory analysis) must be assured that the challenge function agency applies the same quality standards to all. Experience shows that it is possible to apply criteria consistently to all analyses that are reviewed with equal intensity, but it is very hard to devote the same intensity of effort to reviewing all analyses. If a challenge function agency reviews competing analyses, it must take great care to avoid inconsistencies that give even the appearance of bias.

Principles of horizontal and vertical consistency can be used to help reduce potential inconsistencies across regulatory actions. Horizontal equity means devoting the same intensity of review to regulatory analyses of similar scale and scope. Vertical equity means allocating effort that is proportional to scale and scope. Discontinuities and errors in the classification of proposed regulations undermine equitable application. The US challenge function, for example, requires regulatory analysis only for proposed actions whose impacts exceed a clearly defined but difficult to implement cost threshold. Regulatory agencies can evade this requirement by using various tactics, such as dividing a major regulation into a set of smaller parts each of which stays below the threshold for mandatory analysis, or the simple expedient of not performing even a screening analysis to determine whether the regulation’s costs exceed the threshold.

Achieving equitable application will be tested immediately by the challenge function agency’s institutional capacity – most obviously, its budget. Thus, the choice of challenge function model should take into account a reasonable expectation of what resources can and likely will be devoted to it. For a centralized review function such as the US model to be effective, very significant investments in highly qualified professional staff must be made. If it is unlikely that the challenge function will be well funded, or it will slowly be defunded like in the United States, then a different model should be chosen to leverage its scarce resources. For example, a model stimulating the competitive supply of regulatory analyses, in which a smaller challenge function agency serves as a referee and arbiter of quality, is likely to be more effective if the budget is limited.

Conclusions

There are many options for structuring and implementing a regulatory analysis challenge function, and no model has been shown to be superior on each margin of interest. A practical way forward for Canada is to first conduct a realistic assessment of the constraints under which its challenge function will operate. For a challenge function to be effective, it must be designed taking these constraints into account. Once this is done, various alternatives can be examined with an eye toward maximizing the net impact of the program. Indeed, it would be sensible to compare alternatives using the same analytic tools that regulatory agencies are expected to follow when they propose new regulations.

There are reasons to believe that a challenge function incorporating competitive supply of regulatory analyses would fare well in this analysis, because it could overcome several known problems that have been shown to afflict other models. Nevertheless, it is important that no alternative be given special treatment or an a priori preference. Challenge functions are a special form of regulation, and for that reason, the choice and design of a challenge function for Canada should be informed by a rigorous analysis of all reasonable alternatives.