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Via Email to: Jennifer_H._Nou@omb.eop.go

Jennifer Nou
Office of Regulation and Information Policy
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725 17th Street, NW
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Dear Jennifer:

I am writing in response to your request for a review of the Draft 2011 Report to Congress on the Benefits and Costs of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities. Thank you for this opportunity to participate in this important process.

My overall assessment is that this is an excellent report. It is a model of clarity and it is evident that OIRA is unafraid to tackle the important issues that feed into designing regulations that provide maximum benefits to American citizens at a minimum cost. It also draws upon the latest academic research in a way that is very productive for formulating policy, not just for making debating points. All of this is evident in many of the innovative regulatory policies that the Obama Administration has introduced.

Stepping back, it is clear that President Obama and his appointee, Administrator Sunstein, have charted a new and revolutionary course for regulatory policy. Its hallmarks are transparency, regulations that are designed to work based on how people behave in the real world, identifying low cost regulatory solutions such as better provision of information, a devotion to letting data and evidence guide regulatory decisions, and working to ensure that risks are regulated identically across the government. These are a remarkable set of accomplishments in a little more than two years (or substantially less time if one accounts for Sunstein's lengthy confirmation process).

In the remainder of this document, I will outline some suggestions on areas where further reforms/improvements in regulatory policy would be beneficial and may be feasible in the years ahead.

1. Making Retrospective Analyses Effective

The Administration's efforts to undertake retrospective analysis is an important step forward in policy, and one that has great promise to improve the functioning of the economy and Americans' lives. The key is that this nearly unassailable goal be implemented in a way that produces credible results. In this section, I have listed some ideas on how to increase the effectiveness of this initiative at improving the regulatory system.

a. Publication of Ex Ante and Ex Post Costs and Benefits of Significant Regulations

The draft report provides an impressive summary of the ex ante estimates of the benefits and costs of regulations implemented over the last decade. It would be natural to add a column to these tables that highlights the ex post benefits and costs based on retrospective analyses. This table could help to focus efforts for retrospective analyses on the most important rules and the ones that have not undergone retrospective evaluation in a long time.

b. Transparent and Credible Retrospective Evaluations

It is now common for medical researchers to announce that they are undertaking an evaluation of a new drug. Indeed, many medical journals refuse to consider articles for publication when the trial has not been registered in advance in order to build trust in the credibility of the results.

The retrospective evaluation of regulations could undertake a similar exercise in increasing the transparency and credibility of these evaluations. This could involve several steps.

i. Agencies could announce that they are undertaking a retrospective evaluation in advance of conducting the review.

ii. The announcement could specify the date that the evaluation results will be published.

iii. The announcement could specify the measures of costs and benefits that will be used. It would be natural to use the measures from the original RIA as the default but in some instances new measures of costs or benefits may have been recognized in the interim.

iv. For reasons of credibility and agency workloads, it would be natural to fund retrospective analyses by contractors or academics and have them work at arm's length.

v. All data that underlie a retrospective evaluation could be posted on the regulating agency's website so that it could be analyzed by others.

c. Designing New Regulations to Facilitate Credible Evaluations

For new regulations, it is sensible to design their implementation to facilitate a credible evaluation. The following are some suggestions on how to allow for these evaluations in cases where it is feasible or appropriate.

i. One possibility (especially in cases where there is a great deal of uncertainty around the benefits and costs) is to implement the regulation on a trial basis using a randomized control trial. In the ideal, this could be done by randomly assigning some firms/locations/consumers to a new regulation and leaving others unaffected. This may sound far-fetched, but I am currently conducting an evaluation of several different forms of regulating polluters in India using a randomized control trial approach.

The U.S. government has recently implemented a series of new and promising rules to increase information in the marketplace. In these situations, it is, for example, difficult to know which form of an information intervention (e.g., stickers for tires or cars) would be most useful. This seems like an especially appealing setting for conducting a randomized control trial to find out which form of information dissemination has the greatest benefit. Indeed, this type of horse race between competing methods is sensible from a good government perspective.

ii. If randomized control trial experiments are infeasible, regulations could be designed to allow for quasi-experimental evaluations. This could be done by giving states waivers to implement alternative forms of the regulations or by using discrete rules to determine the regulation's coverage (e.g., it might only apply to firms with more than a certain number of employees).

d. Regulatory Review Board

Another reform that could increase the credibility of the regulatory review process is to create a Regulatory Review Board. It would have the power to request evaluations of existing regulations, judge the quality of evidence on a regulation, and possibly to fund from its own resources an evaluation. The Board would focus on the most significant regulations. The potential members of the board could include the OIRA Administrator and representatives from the Chief of Staff's Office, the agencies, CEA, etc. It would lend further credibility to the board if it also included experts from academia and industry.

2. Lost Life Expectancy, Instead of Increased Mortality Rates

The report notes that the majority of benefits and costs come from the EPA's regulation of air pollution, especially fine particulate matter. Footnote 19 lays out many of the scientific uncertainties associated with measuring the mortality impacts of airborne particulate matter. However, it misses what I consider to be an issue of crucial significance that is really the next frontier in the literature on the air pollution-health relationship. Specifically, the associated literature has largely satisfied itself with demonstrating elevated mortality rates over short periods of time (occasionally, days or weeks). In the worst case, these literatures have identified cases where people have died a few days or weeks earlier than they would have in the absence of air pollution.

A complete analysis of the benefits of air pollution regulations requires an estimate of the loss of life expectancy associated with premature deaths. The resulting information should be reported as a regular matter in estimating the benefits of reductions of air pollution. It would be natural to report the cost per life year saved in tables that summarize a regulation's costs and benefits. Although this type of analysis is complicated, there is little doubt that society would prefer a regulation that extended the lives of 1,000 people by 20 years each to a regulation that extended 1,000 lives by 1 week each.

3. Private Benefits versus Social Benefits and Welfare Losses

The traditional and best supported case for regulation of markets is because there is a social benefit from the regulation that cannot readily be achieved by private markets. A classic case comes from firms' failing to internalize the health damages caused by the pollution they emit. The case for regulation in these settings is very strong.

However, the EPA, DOT, and DOE have recently initiated a series of rules all of which appear to depart from the standard case in justifying energy efficiency standards for vehicles and appliances. In particular, they assume that consumers are unaware of the fuel or energy efficiency of various products. With this assumption, regulations that set energy efficiency standards count the fuel savings as benefits and indeed RIA's are increasingly relying on this type of calculation. The potential problem is that in the standard case the fuel savings are private benefits in that they entirely accrue to the person making the choice of car or appliance and thus there is no social or external benefit. Thus, regulations that require products to have increased levels of energy efficiency may cause consumers to purchase products that they have knowingly rejected. In this case, it is inappropriate to count fuel or energy savings as a benefit.

This departure from the standard case is appropriate when consumers have a demonstrated bias or inability to make judgments about energy efficiency. However, the academic literature on this topic is in its nascent stages and in my judgment has failed to provide consistent evidence that consumers are making these errors. My suggestion is that agencies and OIRA undertake a systematic study and resulting judgment about when consumer biases are likely to be a problem that requires regulation.

A closely related idea is that these regulations reduce consumer welfare by causing individuals to purchase products that they would otherwise reject. For example, the CAFE standards might cause individuals to choose smaller cars with excellent fuel economy although absent CAFE they would prefer larger ones with mediocre fuel economy (in the presence of the smaller cars in the marketplace). The analysis of potential regulations would be stronger if this welfare loss were explicitly accounted for. To be clear, many regulations may still have benefits that exceed costs, even when accounting for this issue, but the benefits would come from the reductions in pollution and other external benefits.

4. Credibility Check List

Evidence on costs and benefits comes from many sources: models, observational studies, quasi-experiments, and randomized control trials. The estimated costs and benefits from these approaches are not of equal validity. The most reliable evidence comes from randomized control trials, with quasi-experiments probably being the next most reliable, and models and observational studies providing the least reliable.

My recommendation is that OIRA develop a checklist to determine the credibility of the evidence in RIAs. It is not possible or wise to wait for gold standard evidence before regulating, but it would be beneficial to make clear the quality of the evidence that underlies the case for the regulation. These announcements could dovetail nicely with the new plan to promote retrospective analyses because it would help to identify the settings where new research or evidence would be most valuable.

5. Other Comments

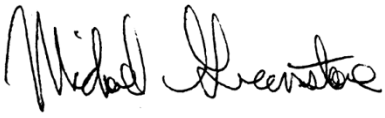
The report rightly notes that a large share of regulatory costs and benefits comes from the regulation of airborne particulate matter. The report also notes the several scientific steps to causally relate the regulation of airborne particulate matter to improvements in health. It would be powerful if the report made it clear that funding research to cement the scientific basis for this relationship has tremendous consequences for U.S. regulatory policy. This is especially so with the increasing raft of rules that regulate other air pollutants with the goal of reducing particulates as a co-pollutant.

This point is very "in the weeds" but a great deal of EPA analysis of the benefits of air pollution reductions comes from models of air pollution rather than actual pollution monitoring data. In some recent research, I am finding that the predictions of these models do not match real world data all of the time. For example, I have found that reductions in NOx emissions do not lead to reductions in ambient particulates concentrations. I am not aware of the extent of this problem, but I think it should be taken as a cautionary note about using models rather than real world pollution concentration data when the latter is available.

I will end where I began. U.S. regulatory policy is central to the quality of Americans' lives. It affects the air we breathe, the water we drink, the products we can buy, the terms of the loans we take, and many other areas of our lives. This is an excellent report that clearly details the Administration's revolutionary accomplishments in regulatory policy over the last two years. It is also forward-looking and identifies some important ways to continue to reform and improve U.S. regulatory policy. In my comments, I have tried to identify some other areas that may be worth pursuing in a revised version of the report and in the coming years.

The bottom line though is that President Obama and Administrator Sunstein are fundamentally changing U.S. regulatory policy in ways that are improving the lives of Americans. These accomplishments and the plans for the future deserve the highest praise.

Sincerely,



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