

benefits, agencies direct resources to their most efficient use.

A good regulatory analysis informs the public and other parts of the Government as well as the agency conducting the analysis of the effects of alternative actions. Regulatory analysis will sometimes show that a proposed action is misguided, but it can also demonstrate that well-conceived actions are reasonable and justified.

Where all significant benefits and costs can be quantified and expressed in monetary units, benefit-cost analysis provides decisionmakers with a clear indication of the most efficient alternative, that is, the alternative that generates the largest net benefits to society ignoring distributional effects. This is useful information for the public to receive, even when economic efficiency is not the only or the overriding public policy objective.

It will not always be possible to assign monetary values to all of the important benefits and costs, and when it is not, the most efficient alternative will not necessarily be the one with the largest net-benefit estimate. In such cases, you should exercise professional judgment in determining how important the non-quantifiable benefits or costs may be in tipping the analysis one way or the other, but you should not use non-quantifiables as "trump cards," especially in cases where the measured net benefits overwhelmingly favor a particular alternative. When there are other competing public policy objectives, as there often are, they must be balanced with efficiency objectives.

What Should Go Into a Regulatory Analysis?

A good regulatory analysis should include the following three basic elements:

- (1) A statement of the need for the proposed action.
- (2) An examination of alternative approaches.
- (3) An evaluation of the benefits and costs of the proposed action and the main alternatives identified by the analysis.

To properly evaluate the benefits and costs of regulations and their alternatives, you will need to do the following:

- Explain how the actions required by the rule are linked to the expected benefits. For example, indicate how additional safety equipment will reduce safety risks. A similar analysis should be done for each of the alternatives.
- Identify a baseline. Benefits and costs are defined in comparison with a clearly stated alternative. This is normally a "no action" baseline, what the world would be like if the proposed rule was not adopted.
- Identify the expected undesirable side-effects and ancillary benefits of the proposed regulatory action and the alternatives. These should be added to the direct costs and benefits as appropriate.

With this information, you should be able to assess quantitatively the benefits and costs of the proposed rule and its alternatives. When your analysis is complete, you should present a summary of the benefit and cost estimates for each alternative, sometimes called a "regulatory accounting statement," so that readers can evaluate them.

As you proceed through your regulatory analysis, you should seek out the opinions of those who will be directly affected by the regulation you are considering as well as the views of those individuals and organizations with special knowledge or insight into the regulatory issues. Consultation can be useful in making sure your analysis addresses all of the relevant issues and that you have access to all the pertinent data. Early consultation can be especially helpful. You should not limit consultation to the final stages of your analytical efforts.

A good analysis is transparent. It should be possible for anyone reading the report to see clearly how you arrived at your estimates and conclusions. For transparency's sake, you should state in your report what assumptions were used, such as the discount rates or the monetary value of a statistical life. It is usually helpful to provide a sensitivity analysis to reveal whether, and to what extent, the results of the analysis are influenced by plausible changes in the main assumptions.

You will find that you cannot conduct a good regulatory analysis according to a formula. The conduct of high-quality analysis requires competent professional judgment. Different regulations may call for different emphases in the analysis, depending on the nature and complexity of the regulatory issues and the sensitivity of the benefit and cost estimates to the key assumptions.

I. Why Regulatory Action is Needed

Before proceeding with a regulatory action, you must demonstrate that the proposed action is necessary. Executive Order 12866 states that "Each agency shall identify the problem that it intends to address (including, where applicable, the failures of private markets or public institutions that warrant new agency action) as well as assess the significance of that problem." This means that you should try to explain whether the action is intended to address a significant market failure or to meet some other compelling public need such as improving governmental processes or promoting distributional fairness, privacy, or personal freedom. If you are trying to correct a significant market failure, the failure should be described both qualitatively and (where feasible) quantitatively, and you should show that a government intervention is likely to do more good than harm. For other interventions, you should also provide a demonstration of compelling social purpose and the likelihood of effective action.

If your regulatory intervention results from a statutory or judicial directive, you should describe the specific authority for your action, the extent of discretion available to you, and the regulatory instruments you might use.

A. There Is a Market Failure or Other Social Purpose To Address

The major types of market failure include: externality, market power, and inadequate or asymmetric information. Correcting market failures is a reason for regulation, but it is not the only reason. Other possible justifications include improving the functioning of government, removing distributional

unfairness, or promoting privacy and personal freedom.

1. Externality

An externality occurs when one party's actions impose uncompensated benefits or costs on another. Environmental problems are a classic case of externality—for example, the smoke from a factory may adversely affect the health of local residents while soiling the property in nearby neighborhoods. Common property resources that may become congested or overused, such as fisheries or the broadcast spectrum, represent a second example. "Public goods," such as defense or basic scientific research, provide a positive externality, where provision of the good to some individuals cannot occur without providing the same benefits free of charge to other individuals.

2. Market Power

Firms exercise market power when they reduce output below what would be offered in a competitive industry. They may exercise market power collectively or unilaterally. Government action can be a source of market power, for example, if regulatory actions exclude low-cost imports. Generally, regulations that increase market power should be avoided. However, there are some circumstances in which government may choose to validate a monopoly. If a market can be served at lowest cost only when production is limited to a single producer—local gas and electricity distribution services, for example—a natural monopoly is said to exist. In such cases, the government may choose to approve the monopoly and to regulate its prices and production decisions.

3. Inadequate or Asymmetric Information

Market failures may also result from inadequate or asymmetric information. The market will often supply less than the appropriate level of information because it is infeasible to exclude people from reaping the benefits from the information others have provided even though they have not paid for the information. The providers will not willingly supply the socially optimal quantity of information, unless they are paid for it, and that may not be possible.

Because information, like other goods, is costly, your evaluation will need to do more than demonstrate the possible existence of less than optimal or asymmetric information. Even though the market may supply a less than an optimal amount of information, the amount it does supply may be reasonably adequate and therefore not require government regulation. Sellers do have an incentive to provide information through advertising that can increase sales by highlighting distinctive characteristics of their products. Buyers may also obtain reasonably adequate information about product characteristics through other channels, for example, if a buyer's search costs are low (as when the quality of a good can be determined by inspection at the point of sale), if a buyer has previously used the product, if the seller offers a warranty, or if adequate information is provided by third parties.

In the case of uncertain information about low-probability high-consequence events,