SMALL BUSINESS

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# RESEARCH SUMMARY

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## Impacts of Federal Regulations, Paperwork, and Tax Requirements on Small Business

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### Purpose

A number of studies have estimated the overall cost of regulation on business and have suggested that small business bears a disproportionate share of this burden. However, little information exists as to how much the cost of specific regulations varies between small and large entities or what aspects of a rule cause the cost to differ. This study complements earlier research funded by the Office of Advocacy and others on the overall cost of regulation by examining the impact of a large number of specific rules on different size classes within individual industries. The study breaks new ground in quantifying whether small entities face higher costs from regulations than large entities, and if so, why and how much higher.

### Scope and Methodology

The study examines the regulatory analyses accompanying 24 regulations from the Occupational Safety and Health Administration (OSHA), Environmental Protection Agency (EPA), Food and Drug Administration (FDA), and Department of Agriculture (USDA), plus an earlier study of Internal Revenue Service (IRS) paperwork burdens. Some of the rules include analyses for more than one industry or class of entities, thus yielding 28 sets of usable data in all. The study examines the overall compliance costs for each rule and calculates the costs per employee (or per dollar of revenue or other standardized variable). This calculation is made for small and large businesses (or municipalities, for rules affecting local governments). For five sectors affected by multiple rules, the aggregate compliance cost of these rules is used in the calculation. Unit compliance costs—the average (mean) cost per employee of complying with the rule, for example—are computed for each size of entity. Two linear regressions, relating total regulatory cost to entity size, are calculated for each industry or rule, allowing a test of the hypothesis that average unit compliance costs are larger for small entities than for large ones. A compliance cost ratio—defined as the ratio of the unit compliance cost for small vs. large entities—is then computed to assess how (dis)proportionate a rule's impact is. A detailed assessment of specific features of each regulation provides additional information about what types of costs a rule imposes, whether these costs are more than or less than proportionate for small entities, and what types of exemptions or other relief help to mitigate small entities' burdens. Text tables and a technical appendix provide full details on the regressions and cost ratios calculated in the study as well as source data. The report also contains an extensive bibliography.

### Highlights

- The regression analyses show that of the 28 regulations or industries examined, 17 sets of regressions had all (6 sets) or most (11 sets) of the characteristics of higher unit compliance costs for small entities than for larger entities, 9 sets with similar unit compliance costs and two with lower unit costs.

- The cost ratios calculated in the report generally indicate disproportionate impacts on small firms, although the impact

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typically varies widely across different industries for a given rule. The largest impacts were for IRS paperwork burdens, which had cost burdens about 100 times as large for small firms as for larger firms. The cost index for the median industry was unambiguously greater than one for three quarters (18) of the 24 individual regulations studied. The cost index was between 4 and 30 for 10 regulations, including four rules for which at least one industry had a cost index between 30 and 70.

- For two regulations, the cost index was unambiguously less than one, meaning the smallest entities had lower unit costs than the biggest ones.

- For four regulations, the cost index was higher than one in some industry segments but, due to a partial exemption, less than one in other segments.

- Examples of especially disproportionate impacts include: EPA's effluent guidelines for indirect dischargers (but not direct dischargers), the agency's financial responsibility standards for underground storage tanks with respect to general industry and local general government (but not the retail motor fuel industry), its drinking water rules for lead and copper and for "Phase V" chemicals, and OSHA's final revisions regarding asbestos in the shipbuilding and repair industry.

- An examination of the 13 apparent cases of equal or lower unit costs for small entities shows that four cases entailed complete or partial exemptions; two involved unit costs that did not vary much by firm size; two were cases where the small businesses appeared able to avoid regulatory costs by changing methods of doing business; and five actually reflected data problems, not savings for small firms.

- Examples include EPA's effluent guidelines for direct dischargers (exemption), OSHA's rules for lead in construction and cadmium for most industries (proportionate) and its concrete and masonry safety standard (avoidance of regulated activity). OSHA's lockout/tagout rule is one that contains questionable assumptions that improperly make it appear to be less burdensome for small firms than large ones.

- Several types of factors contribute to higher unit costs for small entities. Costs that impose the most disproportionate burdens are: statistical properties of risk pooling and monitoring, fixed administrative costs, and technical economies of scale associated with engineering control equipment or production processes. However, in absolute or dollar terms, engineering costs are generally the largest source of burdens and administrative costs tend to be a moderate source.

- Numerous powerful sources of high unit (per capita) costs for small entities occur in rules affecting small governments. Their costs are especially disproportionate because governmental entities vary in size even more than businesses do.

- There are two ways for small businesses to avoid some disproportionate cost burdens. Some regulations provide exemptions or tiering to simplify requirements for the smallest entities. In a few cases, firms can avoid lines of work to which regulatory provisions apply without exiting the industry entirely.

- Some compliance costs, such as requirements for protective clothing, have roughly constant returns to scale, because they are proportional either to the number of workers or the output.

- The fact that a unit cost for small entities is disproportionate may not be important if the regulation does not impose significant costs on any entity. For instance, OSHA's rule for electrical safety-related workplace practices had an impact roughly four times as great for the smallest firms as for the largest ones, but the rule's cost was estimated at no more than 0.0045% of revenue. Among the regulations in this report, half had essentially no significant impacts, one quarter had costs of 1 to 3 percent of revenue in at least one industry, and one quarter had costs that either exceeded 5 percent of revenue or otherwise were significant and large in at least one industry.

## Ordering Information

The complete report, along with research summaries of other studies performed under contract to the SBA Office of Advocacy, is available on the World Wide Web at: www.sba.gov/advo/research

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