THE CHANGING BURDEN OF REGULATION, PAPERWORK, AND TAX COMPLIANCE ON SMALL BUSINESS

A REPORT TO CONGRESS

Office of the Chief Counsel for Advocacy
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Introduction

When small business owners get together at events like the White House Conference on Small Business, the problem of complying with regulations and dealing with regulators is always a major topic of conversation. The paperwork burden of the Internal Revenue Service (IRS) is the primary concern because preparing a regular payroll is a constant reminder of the numerous rules and regulations dealing with tax withholding and reporting.

But businesses' concerns are not limited solely to paperwork issues. Small business owners often fear that they will inadvertently fail to comply with some obscure rule, and that a government inspector will show up, close down the business, and drive them into bankruptcy. Many believe, with some justification, that the government is more interested in obtaining penalties than in promoting compliance with the law. The recent efforts to make the government more customer-friendly, while important and dramatic, have not yet changed this longstanding perception.

When leading thinkers on small business issues assembled late in 1994 under the aegis of the White House Conference to discuss barriers to entry for small businesses, all 15 focus groups cited the burdens of regulations, paperwork, and taxpayer compliance.

Because of the widespread interest in this issue, the Congress requested that the chief counsel for advocacy complete a "study of the impact of all Federal regulatory, paperwork and tax requirements upon small business..." This Office of Advocacy report is based on some earlier landmark research, current research initiated by the office and a review of the current regulatory developments.

The importance of maintaining a viable, dynamic, and progressive role for small businesses in the American economy is beyond dispute. The nation's traditional values of individual initiative, social mobility, and political freedom are dependent on the free enterprise system which, in turn, depends upon the competition provided by a large and healthy community of small firms. Policies that encourage a growing small business sector will also ensure, as research has shown, increasing job opportunities, a continuous flow of innovations, more vigorous competition, and an ever-increasing standard of living.

This report addresses the burden of regulation, paperwork, and tax requirements, how that burden affects the cost structure of small firms relative to large firms, and, ultimately, how it may affect their profitability. It is the regulatory impact on the cost structure of a firm that makes regulation a major concern for small business owners.

Three questions need to be addressed:

1) Does the burden of regulation fall more heavily on small firms?
2) If so, is it good public policy to regulate in such a way as to give large firms a competitive cost advantage in the marketplace?
3) If the answer is no, how can the regulatory process be changed to help achieve a level playing field?

Before addressing these questions, it is important to note that this report does not attempt to measure the benefits of regulation, nor to allocate the benefits by firm size. First and foremost, comprehensive research estimating benefits is not available. Second, it is nearly impossible to allocate benefits among the affected persons and businesses.

Benefits are distributed throughout society as a whole. Clean water, for example, benefits the food processing, dairy, and outdoor recreation industries, among others. But the costs are concentrated on those being regulated--in this example, on the firms that must find alternatives to discharging pollutants into the waterways. Such firms may or may not derive direct benefits from clean water regulations to offset their compliance costs. Thus, it is extremely difficult either to estimate total benefits or to allocate those benefits among the affected sectors of society.

Last, irrespective of the benefits of a given regulation, the knowledge of the existence of a disproportionate cost impact on smaller firms is important to policymakers. The size, nature, and trends of the disproportionate effect should dictate different policy responses by decisionmakers (e.g. strengthening the Regulatory Flexibility Act or providing more compliance assistance to small firms).

This report, the first of its kind, focuses on measuring total regulatory costs, identifying how they are allocated among small and large firms, and discerning whether the regulatory environment is unnecessarily impeding the birth and growth of small businesses.

Finally, the report discusses initiatives taken by the Clinton Administration and the Congress to reduce the cost of regulation. Executive Order 12866 establishes a review process for all significant regulations to ensure that rules are cost-effective and minimize small business burdens. Certain cabinet agencies are revising their enforcement policies to emphasize compliance, rather than the imposition and recovery of penalties. The Paperwork Reduction Act (PRA) and the Regulatory Flexibility Act (RFA) require agencies to review the impact of their regulations on small businesses and consider less costly alternatives for accomplishing public policy objectives.

The report does not, however, factor in the cost savings generated by these initiatives, largely because the data are not available and because the savings are diffused throughout the economy. Also, some of the initiatives are too new to have had any concrete impact on small businesses. As a consequence, the perception persists among small firms that the regulatory burden is ever-increasing.

The perception is not totally inaccurate: the aggregate regulatory burden is still increasing. However, the relative burden, compared with the size of the economy, has been reasonably constant in recent years. In other words, the amount of regulation is growing at the same rate as the overall economy. The significant issue is how these costs are divided among firms of different sizes that compete with one another.

The Office of Advocacy funded research to address this issue and outlined the research parameters to be followed by the contractor. This research and other available data lead to the conclusion that the average annual cost of regulation, paperwork, and tax compliance for firms with fewer than 500 employees is about $5,000 per employee, compared with about $3,400 per employee for firms with more than 500 employees. While the total burden on a firm increases with firm size, the burden per employee or per dollar of sales decreases with firm size.

Thus, the answer to the first question, whether the regulatory burden falls more heavily on small firms, is yes: the regulatory cost per employee to small firms is approximately 50 percent more than the cost to large firms. Small businesses employ 53 percent of the work force, but shoulder 63 percent of the total business regulatory costs.

This inequitable cost allocation gives large firms a competitive advantage, a result at odds with the national interest in maintaining a viable, dynamic, and progressive role for small businesses in the American economy. It appears then that the answer to the second question is that an inequitable allocation of regulatory costs is not good public policy.

As for the third question -- how the regulatory process can be improved -- the finding further suggests that, despite more than 13 years' experience with the Regulatory Flexibility Act, public policy makers need additional direction to reconcile their regulatory decisions with the national goal of preserving competition through the growth of small business. The need for regulatory reform through initiatives such as amending the RFA is great.

In support of these findings, the Office of Advocacy submits the following report to Congress, which is organized as follows: Section I reviews recent revisions in the regulatory process affecting small firms. Section II proffers the theory and empirical evidence of disparate burdens on different sizes of business caused by regulation. Section III reviews tax-related paperwork burdens. Section IV addresses the total cost of regulation. Section V reviews the literature on benefits. Section VI allocates the cost of regulation by industry and firm size. The final section develops the Office of Advocacy's conclusions and discusses the future of regulation.

I. CHANGING THE REGULATORY PROCESS FOR SMALL FIRMS

President Clinton is committed to reinventing the federal regulatory process and reducing the burden of government on small firms. He initiated the Small Business Forum on Regulatory Reform, which brought together small businesses and federal agencies to formulate new solutions to help make regulations more cost-effective. The president directed federal departments to cut in half the frequency with which firms must file most reports (for example, quarterly reports will be due only semi-annually). Agencies are redoubling their efforts to focus on results, not red tape.

Executive Order 12866

On September 30, 1993, President Clinton initiated the administration's efforts to ease the regulatory burden on small firms by issuing Executive Order 12866, "Regulatory Planning and Review." This order requires federal agencies to analyze carefully their major regulatory undertakings and to take action to ensure that these regulations achieve the desired results with a minimum societal burden. A major objective of this executive order is to reduce the disproportionate share of the federal regulatory burden that falls on small businesses. Under the executive order:

(1) each agency must choose the approach that maximizes net benefits, unless the statute requires another regulatory approach;
(2) each agency should assess the costs and benefits of regulatory alternatives, including the alternative of no regulation; and
(3) each agency must tailor its regulations to impose the least burden on society, including businesses of different sizes, consistent with achieving the regulatory objectives.

Each "economically significant regulatory action" is to be accompanied by a formal regulatory analysis that includes an assessment of the potential costs and benefits of each regulatory alternative. Under the current Regulatory Flexibility Act, an analysis of regulatory alternatives minimizing the impacts on small businesses is required if there is likely to be a "significant economic impact on a substantial number of small entities." Implementation of the principles of the RFA has saved hundreds of millions of dollars annually for small businesses in Environmental Protection Agency (EPA) rulemakings alone.

Executive Order 12866 requires that significant regulations and the accompanying analyses be reviewed by the Office of Management and Budget (OMB) for compliance. The OMB has agreed to work with the Office of Advocacy regarding agency noncompliance with the Regulatory Flexibility Act.

The vice president is the president's principal regulatory advisor. A senior-level interagency regulatory working group has been established to promote the development of regulations consistent with the president's priorities and to minimize regulatory inconsistency and duplication among the various agencies. Each agency also develops an annual regulatory plan that describes the agency's most significant regulatory actions for the next fiscal year.

Reinventing Government

The National Performance Review (NPR), carried out by the Office of the Vice President, required a comprehensive review of all governmental functions in the first year of the Clinton Administration, and included substantial scrutiny of the regulatory process. The following are among the regulatory recommendations: (1) encourage more innovative approaches to regulations, (2) encourage consensus-based rulemaking, (3) enhance public participation in rulemaking, and (4) streamline agency rulemaking procedures. One important NPR recommendation advises federal agencies to include an inquiry about business size in all business surveys to ensure that policymakers making decisions affecting small businesses have adequate data. The regulatory component of the NPR reinforces the principles of Executive Order 12866.

On February 25, 1995, President Clinton initiated Phase II of the National Performance Review by directing all federal agencies to conduct a page-by-page review of all regulations and to eliminate or modify those regulations in need of reform. The president also directed the agencies to identify more opportunities for consensual rulemakings and to improve the management of federal regulatory programs.

The overhaul of the small business penalty policy, announced a month later, is an especially important part of regulatory reform. Agencies were ordered to waive up to 100 percent of any punitive penalty for any small firm that attempts in good faith to comply with regulations and corrects a violation within a reasonable time. If there is a penalty of any kind, the small business may be permitted to use the money to fix the problem, rather than paying a fine to the government. This policy marks a substantial change for the enforcement programs, which have traditionally been penalty-oriented, rather than compliance-oriented.

At the White House Conference on Small Business, President Clinton announced the preliminary results of the administration's recent regulatory review of existing regulations. More than 16,000 pages are being eliminated from the Code of Federal Regulations, including 50 percent of the Small Business Administration rules and 40 percent of the Department of Education rules. Another 31,000 pages are being modified. A 25-percent reduction in the Environmental Protection Agency's paperwork burden was also targeted for action.

Congressional Regulatory Reform Efforts

The legislative centerpiece for small business regulatory reform has been, and remains, the Regulatory Flexibility Act of 1980. This study confirms the RFA's original premise, namely that small firms suffer a disproportionate impact from federal regulations. It is still true today. Pending legislation to amend the RFA is of key interest to small businesses. For many years, small business trade groups have sought to strengthen the RFA by permitting judicial review of agency compliance with the act. H.R. 9, the Job Creation and Wage Enhancement Act of 1995, passed by the House of Representatives, would permit judicial review for up to one year after enactment of the final rule.

The Paperwork Reduction Act was also reauthorized in 1995. The PRA establishes a process to control the proliferation of paperwork and recordkeeping requirements and was designed, in part, to help small businesses. Originally passed in 1980, the law gives the Office of Management and Budget the authority to approve all federal paperwork and recordkeeping requirements, even those of the independent agencies not subject to Executive Order 12866.

The PRA reauthorization legislation strengthens the 1980 act and requires federal agencies to reduce their paperwork requirements by 10 percent per year in 1996 and 1997, and by 5 percent each year thereafter. The new law also extends PRA coverage to include federal agency disclosure requirements and information required to be disclosed to third parties (for example, manufacturers of hazardous chemicals must provide material safety data sheets to chemical purchasers). This significant change sought by small businesses overturns a 1990 Supreme Court decision that had negatively affected millions of small businesses. This summer, OMB issued its final regulations implementing the reauthorized Paperwork Reduction Act.

Congress also has shown great interest in other legislation promoting regulatory reform and paperwork reduction. H.R. 9, for example, contains various elements of regulatory reform addressing risk assessment, cost/benefit analysis, and regulatory flexibility for small businesses. The legislation would also require the use of outside peer review groups to help ensure that the analyses are objective and unbiased. The merit of some of these reform provisions is subject to considerable debate.

Clearly, this administration and Congress plan to reduce not only the aggregate burden on small firms, but also regulation of all businesses. However, several obstacles to curbing the rising cost of regulations remain. First, there is a backlog of federal regulatory requirements that are required to be issued now and into the future. For example, the 1990 Amendments to the Clean Air Act require EPA to promulgate dozens of rules, well beyond the year 2000, causing clean air costs to continue to rise at least through the year 2005. Second, new legislation frequently requires the issuance of more regulations. Third, even the demand for the clarification of old regulatory requirements generates new rules to be read and understood.

The 1995 White House Conference on Small Business

In 1994 and 1995, more than 20,000 small business leaders participated in more than 50 state and regional meetings to formulate recommendations for federal action on small business issues. This activity culminated in the 1995 White House Conference on Small Business. The delegates sent to the president and the Congress a list of 60 key recommendations addressing many issue areas, including regulation, paperwork, and taxpayer requirements. These recommendations include cost/benefit analyses, fairer enforcement policies, judicial review of the Regulatory Flexibility Act, and paperwork reduction.

II. REGULATIONS' DISPROPORTIONATE IMPACT ON SMALL FIRMS

The Theory

The theory of how the costs of regulation, paperwork and tax compliance vary by firm size is relatively straightforward. A significant body of knowledge must be gained by a firm to determine whether a regulation applies to it, whether it is in compliance, or what action must be taken to be in compliance. For example, a firm must first learn that a form is required by rule, determine if the firm is required to submit that form, and then determine how to complete the form correctly. These fixed information-gathering costs are the same for all firms, whether large or small. The large firm advantage is its ability to spread its fixed regulatory costs among more units of output, dollars of sales, or employees, resulting in lower costs per unit. The theory predicts that if the regulatory costs are fixed, the relative burden will decline in proportion to the quantity of goods or services produced (Figure 1).

However, not all regulatory costs are fixed. Costs that grow with an increase in output or firm size, such as labor costs, are variable. With most regulations, these variable costs will be constant per unit of sales or employment.

Every regulation has fixed costs and some regulations have additional variable costs.

Insert Figure 1: COST PER UNIT OF OUTPUT OR INPUT BY SIZE OF FIRM
A line graph show high cost for small firms, sharply curving downward as size of firm increases.

Thus, one would expect that the per-unit regulatory costs will decline as firm size grows. How much these costs decline depends on the relationship between fixed and variable costs. Adding the costs of regulation, paperwork, and tax compliance onto the traditional cost structure raises costs and lowers profits for smaller firms relative to larger firms, suggesting that the startup of new small firms would be more difficult. Thus, the innovative activity brought about by new small firms would be slowed, with the potential deceleration of economic growth in the industry and the economy.

Compounding the problem, with every new regulation that increases fixed costs, a number of existing small firms may be forced to leave the industry because they cannot cover the additional costs of the regulations. Competition within an industry will decrease, and the industry structure will become more dominated by large firms.

Since the relative burden on small firms is higher because of the fixed-cost nature of regulation, Congress and a number of regulatory agencies have, on occasion, exempted small firms through "tiering" of the laws and rules.

> Tiering is designing regulations to account for relevant differences among those being regulated. Tiering may be desirable when a uniform rule would otherwise impose disproportionate impacts on regulated businesses. By tiering, an agency can alleviate disproportionate burdens, ensure that the regulatory solution fits the problem, and make more efficient use of its limited enforcement resources. This concept of designing flexible alternatives to uniform rules is the heart of the recently enacted Regulatory Flexibility Act (RFA) (P.L. 96-354). In that act, Congress instructed federal agencies to explore alternatives, such as tiering, to minimize the disproportionate impact of regulations on small businesses, associations and governmental units.
>
> In many cases tiering is an effective way of increasing the cost-effectiveness of a regulation. EPA has tiered up to 50 different regulations based either on firm size or the amount of pollutant released. A possible disadvantage is that tiered regulations may provide a disincentive for a firm to grow and, consequently, subject itself to a more stringent standard. Additionally, in certain cases, it may be difficult to set an appropriate tier.

Consequently, empirical studies may or may not show a declining burden by firm size as the theory suggests, depending on the amount of tiering utilized in a particular regulation. Since the passage of the RFA, Congress has frequently required the tiering of regulatory standards for small firms.

The Evidence

Several reports are available on the relative cost of regulations for large versus small businesses, almost all in response to research requests issued by the Office of Economic Research in the Office of Advocacy and performed under contract with the U.S. Small Business Administration over the last 15 years. Some estimate the costs imposed on small businesses by the rules; others attempt to measure the actual regulation and paperwork costs borne by small businesses.

Small business regulatory burdens may be reduced in a number of ways, both intentional and unintentional. They may be reduced intentionally by tiering. The actual regulatory burdens are also reduced for small firms by the extent to which they are not aware of the regulations or otherwise fail to comply with the rules.

At the direction of the Office of Advocacy, Thomas Hopkins and Diversified Research prepared a study, A Survey of Regulatory Burdens. The study found that about 40 percent of the 360 small businesses surveyed indicated that small firms in their industries did not fully comply with most regulations. The small businesses cited ignorance of the rules as the most common cause of this lack of compliance.

In recent years, small firms appear to have been overwhelmed by the growing and constantly changing mass of federal, state, and local requirements. Thus, one might expect regulatory impact studies to differ in result, depending on whether the inquiry is directed at the regulatory burden imposed by the rules, or the regulatory burden actually borne by the businesses (which may be less because of noncompliance). In fact, this difference has long been noted in the literature.

A 1980 study of actual compliance costs by Battelle found that very small businesses with fewer than 50 employees bear a disproportionate cost burden from regulations, compared with businesses with 50-500 employees. For every one of 21 different compliance costs surveyed in a study of 361 Washington State businesses, the costs were roughly 7 to 10 times higher for the small firms.

Similarly, Jack Faucett Associates found in 1984 that a set of 14 federal regulations promulgated in the late 1970s and early 1980s had a disproportionate impact on small firms. The cost per employee for small firms was 2.83 times that for large firms. The mid-sized firm multiple was 1.35. This report relied solely on the federal government's cost estimates for the proposed rules -- not for the final rules that were later promulgated -- and therefore, the study only estimated expected costs without measuring the actual costs incurred.

An examination of the actual costs incurred by firms complying with environmental and health and safety regulations between 1974 and 1981 by David Evans shows the contrast among some of the empirical studies. In actuality, the Evans study found that large firms spent more per employee than small firms. Specifically, every one percent in establishment employment increase corresponded to a 1.46-percent increase in pollution abatement operating costs for the years 1974-1981.

A 1984 research paper that also addressed pollution costs actually incurred reached conclusions that were contrary to Evans' findings that large firms spend more per employee than small firms. Peter Pashigian found that higher regulatory costs hurt small businesses more than large businesses. This report concluded that industries with high pollution-abatement costs became more capital-intensive, had larger increases in mean plant size (i.e. the number of smaller plants declined over time) and had larger decreases in the number of plants over the years 1972-1977. In addition, small firms' market share in high pollution-abatement-cost industries declined relative to their share of industries with lower costs. However, Brock and Evans questioned the statistical validity of some of Pashigian's results.

In a more recent study, Thomas Dean found that environmental regulations deterred the formation of small establishments, but had no significant effect on large establishment formation or establishment size. He postulated that the regulations produced disproportionate impacts on small firms, not only because of the existence of scale economies, but also because of the complexity of the regulations and other unspecified burdens.

Another recent work focused attention on evidence that larger businesses carried relatively larger burdens than did small businesses. Brown, Hamilton & Medoff discussed the proliferation of small business statutory exemptions and relaxed enforcement of regulations on smaller firms. Indeed, a large number of statutes enacted throughout the 1980s and 1990s required tiering of regulations for small businesses, including the Immigration Reform and Control Act of 1986, the Worker Adjustment and Retraining Act of 1988, the Americans with Disabilities Act of 1990, the Clean Air Act Amendments of 1990, and the Family and Medical Leave Act of 1993.

In the 1995 Hopkins and Diversified report, the researchers found that one-third of the firms faced only minor burdens, while two-thirds faced moderate to substantial burdens. They found that total burdens increased with firm size, but that burdens per unit of sales or per employee decreased with firm size.

When firms were asked to describe the types of burdens they face, 94 percent said it was unclear what firms must do to be in compliance, 85 percent cited frequent changes in the regulations or their interpretation, 80 percent said it was difficult to obtain clear and specific answers to questions about compliance, and 80 percent said the requirements to reach full compliance were too costly.

Of the firms that reported moderate to substantial burdens, the smallest firms carried the heaviest burdens, the Hopkins study found. Using this sample of reporting firms, the four smallest firm size classes (firms with 1-4, 5-9, 10-19, and 20-49 employees) reported regulatory spending percentages (costs to revenue) exceeding the average 14 percent of revenue, excluding the relatively modest capital expenditures. Those firms with 20-49 employees spent, on average, 19 cents out of every revenue dollar on regulatory costs.

Reported regulatory costs per employee were highest for the smallest firms with 1-4 employees at $31,748; for the largest firms (500+ employees), total costs per employee were $16,241. However, these normalized cost burdens are based on a sample of 181 businesses and include only firms that reported more than a minor regulatory burden. This Advocacy study, using national data drawn from other academic research, reports lower per-employee costs.

III. TAX-RELATED PAPERWORK BURDENS

The 1995 Hopkins and Diversified Research study confirms that tax compliance and payroll recordkeeping are the two largest components of regulatory burden today. Small businesses bear a greater relative burden of tax compliance costs based on their revenue or senior management time. In fact, tax compliance or payroll recordkeeping elicited widespread concerns about burden, although some surveyed firms did mention other regulatory costs that were burdensome. Firms with fewer than 10 employees (excluding firms reporting only minor burdens) reported that their tax and payroll costs represented about 80 percent of their total regulatory burden.

When firms were asked how burdens might be reduced, 95 percent recommended simplifying reporting and recordkeeping, 73 percent suggested additional small business exemptions, and 68 percent asked for more flexible enforcement.

In the only study available in the United States on the impact of tax-related paperwork on all firms by firm size, the Tax Foundation reports that the smallest firms spend 0.5 percent of their sales on tax compliance activity; the largest firms spend less than 0.1 percent of their sales on tax paperwork (Table 1). The more recent 1995 Hopkins and Diversified study shows that the smallest firms (those with fewer than 50 employees) spend closer to 5 percent of revenue on tax compliance costs.

TABLE 1: Estimated Cost of Corporate Income Tax Compliance by Amount of Company's Annual Sales

Annual Sales (Thousands of $)	Compliance Cost-to-Sales Ratio (%)	Estimated Compliance Cost ($)
1,000	0.50	5,025
25,000	0.50	126,000
50,000	0.50	251,000
100,000	0.47	470,000
250,000	0.13	325,000
500,000	0.13	650,000
750,000	0.12	900,000
1,250,000	0.07	875,000
2,000,000	0.08	1,600,000
3,000,000	0.07	2,100,000
5,000,000	0.07	3,500,000
7,500,000	0.05	3,750,000
10,000,000	0.05	5,000,000

Source: Arthur P. Hall, The High Cost of Tax Compliance for U.S. Business, Special Report No. 25, Tax Foundation, November 1993.

Recent administration actions have been undertaken that could significantly reduce the taxpayer compliance burdens, including a proposed increase from $10,000 to $25,000 in 1993 (subsequently reduced by Congress to $17,500) in the amount of capital investment that businesses can expense; simplified calculations for computing the individual alternative minimum tax, simplified and unified determination of depreciation deductions (allowing taxpayers to group certain assets in one or more "general asset" accounts), an increased threshold for recordkeeping on meals and entertainment expenses from $25 to $75, and rules that would allow an unincorporated entity to elect to be treated as a partnership by simply checking a box on its tax return (replacing complicated business form criteria).

The administration has moved forward on the Simplified Tax and Wage Reporting System (STAWRS) that will ultimately enable an employer to file a single return providing payroll and tax information electronically (or, for a small business, on one sheet of paper that can be copied). This system would eliminate the need to file multiple reports with state and federal agencies that require the same data. Finally, the administration has proposed reforms to ease rules for participation in pension plans, and reduce the frequency and quantity of information reports. These measures should prove very beneficial to small businesses.

IV. TRENDS IN THE BURDENS OF REGULATION ON THE PRIVATE SECTOR

In his new study for the Office of Advocacy, Thomas Hopkins updates his earlier estimate of the total cost burden of regulation on the economy, and then projects how these regulatory burdens are distributed to major sectors of the economy and by firm size. His initial work, "The Cost of Federal Regulations," was published in 1992. A second, unpublished paper written in 1992, "Cost of Regulation: Filling the Gaps," updates the first paper and provides more details on where the regulatory burdens come from and where they fall (Table 2).

TABLE 2: Distribution of Compliance Costs in 1991 (Percent)

	Percent
Environmental	
Air and Radiation	33.3
Water	48.0
Land	14.6
All Others	4.1
Other Social Regulation	
Worker Health and Safety	33.6
Auto Safety	29.5
Nuclear Safety	24.7
Other Consumer Protection	8.7
Job Security	3.5
Economic Regulation	
Transportation	30.7
International Trade	27.3
Communication	22.3
Agricultural/Natural Resources	11.6
Financial	6.9
Other Economic	1.2
Process Regulation	
Paperwork	74.4
State - Local Mandates	3.7
Health	21.9

Source: Thomas D. Hopkins, Cost of Regulation: Filling the Gaps, August 1972.

Paperwork Costs

The OMB's report on paperwork dated October 1993 reported 6.64 billion hours of federal paperwork for fiscal year 1992, including 5.60 billion hours from IRS taxpayer compliance. This represents a 0.7-percent decrease from the previous year's level. OMB projected a 2-percent decrease for fiscal year 1993, followed by a 0.5-percent increase for fiscal year 1994.

Hopkins uses the OMB paperwork hourly estimates, and assumes a $26 per hour labor rate to calculate the cost for the paperwork portion of "process regulations."

Total Regulatory Costs

Hopkins adds the cost of process regulations to environmental and other social and economic regulatory costs to derive an estimate of total regulatory costs of $668 billion (in 1995 dollars) in 1995, increasing to $721 billion in 2000. (See Table 2 for the components of each of these terms and Table 3 and Figure 2 for the costs.) Total costs fell from 1977 to 1988 and then increased from 1988 to 2000.

TABLE 3: Annualized Regulatory Costs in Billions of 1995 Dollars

A: Environmental Regulation
B: Other Social Regulation
C: Economic Regulation Efficiency Costs
D: Economic Regulation Transfer Costs
E: Process Regulation
F: Total Regulatory Costs

Year	A	B	C	D	E	F
1977	47	32	149	288	138	654
1978	52	35	142	273	139	640
1979	56	37	134	256	139	623
1980	60	39	125	239	143	605
1981	63	37	118	225	147	590
1982	65	35	113	213	144	570
1983	71	32	108	204	161	576
1984	76	31	103	194	163	567
1985	81	31	99	186	165	561
1986	87	31	95	177	165	555
1987	93	32	90	168	174	557
1988	98	34	86	158	173	548
1989	105	36	85	156	180	561
1990	112	39	83	153	206	593
1991	129	40	82	151	219	621
1992	137	47	82	150	226	642
1993	149	51	81	149	212	642
1994	152	53	80	148	215	649
1995	168	55	80	147	218	668
1996	174	58	79	145	221	677
1997	180	60	79	144	225	688
1998	188	62	78	143	229	700
1999	193	65	77	142	232	709
2000	199	68	77	141	236	721

Projected costs do not reflect savings from regulatory reform since 1993.

Source: Thomas D. Hopkins, Profiles of Regulatory Costs, SBA Contract SBAHQ-95-M-0298 (Draft Final Report, 1995) Table A.

FIGURE 2: A pictorial graph reflecting data of Table 3

Although Hopkins projects costs well into the future (to the year 2000), the Office of Advocacy believes these figures are highly speculative. Hopkins' future projections are likely an overestimate because he does not estimate the cost reductions that will accrue from the administrative and congressional initiatives to reinvent government and reduce government regulation. Furthermore, it is extremely difficult to estimate the future costs, for example, of environmental and tax regulations that have yet to be written. Therefore, these future projections are only suggestive of possible trends.

The business community has total regulatory costs of some $400 billion, up from the $330 billion range in 1988. When the business share of regulatory costs is distributed across sectors, it appears that manufacturing firms carry about one-third of all business regulatory costs in 1995. The rest of the costs are borne in roughly equal shares by trade, services and all other industries. In constant dollars, the manufacturing regulatory burden has climbed sharply since 1982, while the other sectors have experienced little change. (See Figure 6 for the distribution of costs by business sector.)

The economic regulatory burden declined in the late 1970s with the deregulation of transportation, natural gas and oil, and communications. The burden of economic regulations has remained basically constant since 1988 and was expected to remain constant into the 21st century.

Process regulation in 1992 accounted for some 40 percent of total business regulatory costs, while environmental regulation was the source of about a quarter of total business regulatory costs. The burdens that are increasing are environmental regulation and process (primarily paperwork) regulation (Figure 3).

FIGURE 3: Regulatory Costs by Cost Category 1977-1993 (Billions of 1995 Dollars: A line graph showing rising and falling trends of the data in Profiles of Regulatory Costs.

When total costs are expressed relative to gross domestic product (GDP), a decline also occurred from 1977 to 1988 (Figure 4). While regulatory burdens have been increasing in absolute terms for the past decade, since 1992, the increases have only matched the increases in GDP. In other words, regulatory burdens have remained at approximately 9 percent of GDP. Hopkins expects this relationship to continue through the year 2000.

FIGURE 4: Regulatory Costs as Percent of Gross Domestic Product, 1977-2000: A line graph showing regulatory cost figures computed using EPA estimates for the environmental regulatory cost component.

V. TOTAL BENEFITS OF REGULATION

Ideally, the true measure of the burden of regulation is determined by the difference between the total costs and the total benefits. Unfortunately, although the benefits of regulations are important, no reliable estimates of total benefits exist. According to a carefully documented report by the Harvard Center for Risk Analysis, federal regulations have had significant beneficial effects:

> For example, over the past 30 years the United States has made substantial progress in cleaning up air, water and land, in part due to the strong regulatory presence of the federal government. The automobile manufacturing industry is now producing cars that emit 75-95 percent fewer pollutants from tailpipes than they did in 1968 -- a rate of

> progress that would not have been achieved without strong federal regulation. Prevention of lead pollution has been a notable success story, as the national rate of lead emissions from all man-made sources has declined 96 percent since 1970, and the concentrations of lead in the blood of children has fallen substantially, particularly since the lead content of gasoline was reduced and then eliminated. Product manufacturers have also responded to regulatory and liability pressure by paying more attention to safety in both design and manufacturing. Many new cost-effective safety features have been added to products (e.g., airbags in automobiles) as a result of the continued prodding and regulatory presence of the federal government. . . . In short, many risk-reduction policies have been shown to have benefits greater than costs, even though benefits are sometimes difficult to estimate.

Hopkins' 1993 paper also includes some information about benefits:

> The net benefits of environmental regulation may be positive or negative. By 1990, the benefits of air pollution regulations probably were exceeding the compliance costs, perhaps by as much as $10 billion. For water pollution regulations, on the other hand, the results were just the opposite. The best information available suggests that costs exceeded benefits by roughly $20 billion per year in the water pollution area. For other environmental areas, we lack comparable data. The general trend appears to be the adoption of regulations whose benefits do not exceed their costs. The 1990 Clean Air Act Amendments very likely will impose additional compliance costs of $30 billion annually while generating far smaller additional benefits. This trend is driven in part by the fact that many of the low cost options for lessening risks already have been adopted.

The burdens of regulation, like taxes, fall specifically on the persons or businesses that pay, whereas the benefits tend to be more generally distributed. Therefore, the complaints of the regulated will be more focused than the appreciation of those benefiting from the regulation. Thus, while it is common to focus on the more obvious cost of regulation, the more elusively determined net benefit provides the public policy foundation for a given rule.

VI. ALLOCATION OF THE BURDEN OF REGULATIONS BY INDUSTRY AND FIRM SIZE

Hopkins' Estimates

Regulatory burden estimates for small firms have been made for a specific regulation or sets of regulations in previous studies by asking business owners to estimate their costs. To date, there has been no attempt to allocate total regulatory costs across business sectors and firm sizes.

Based on his previous work, Thomas Hopkins of the Rochester Institute of Technology was selected to fill this critical data gap. In his earlier study for the Office of Advocacy, Hopkins surveyed 360 firms, most of them small (with fewer than 500 employees), in 15 different industries. Based on the survey, he developed estimates by firm size of the cost of regulation, along with costs per employee and per dollar of sales.

The Office of Advocacy requested that Hopkins attempt this first approximation of total burdens by firm size, using the data from his previous studies and elsewhere. Several steps were required.

Initially, Hopkins separated the regulatory burdens that fall on consumers or state and local governments from the burdens that fall on business. The business costs were divided into industrial sectors, and further subdivided by firm size. The following allocation rules that were developed in earlier research studies or from anecdotal evidence were used to separate business from nonbusiness regulatory costs:

	Percent of Regulatory Costs Borne By	
	Business	Government & Consumers
Environmental regulation	65	35
Other social regulation	100	
Economic regulation (transfer and efficiency costs)	50	50
Process regulation (primarily paperwork)		
Mandates		100
Health care	50	50
Tax paperwork	67	33
Other paperwork		100

The allocation of -- and trends in -- these costs are shown in Figure 5. The business costs were then allocated to the various industrial sectors using research and anecdotal evidence:

FIGURE 5 is a pictorial graph showing Business Share of Regulatory Costs, 1977-2000 in Billions of 1995 dollars, contrasting the business share with the non-business share.

	Percent of Regulatory Costs Borne By			
	Mfg.	Trade	Services	Other
Environmental regulation	70	10	10	10
Other social regulations	40	20	20	20

For all other regulation (economic and process), costs are allocated across the four sectors in proportion to the employment share.

These allocations and the resulting trends through time are shown in Figure 6.

The scheme for allocating costs by firm size was derived using data in the Hopkins study, A Survey of Regulatory Burdens. Among the enterprises facing at least moderate regulatory burdens per employee, firms employing fewer than 20 employees reported costs that exceeded the average cost per employee for all firms by 30 percent. Hopkins divided the total regulatory cost per sector by the number of employees to derive the average cost per employee. The average cost per employee is multiplied by 130 percent to represent the cost for the smallest firms, and the remaining cost is allocated to the 20-499 employee size firms and large firms (500+ employees). His results are shown in Table 4.

TABLE 4: Business Regulatory Burdens by Sector. 1992. The Hopkins Case (1995 Dollars)

A= Total Cost (billions)

B= Cost per Firm
C= Average Cost Per Employee
D= Cost per Employee by Firm Size
Da= <20
Db= 20-499
Dc= 500+
E= Cost as a Percent of Receipts

Manufacturing

Type Regulation	A	B	C	Da	Db	Dc	E
Environment	62	188,909	3,413	4,437	5,218	2,389	1.8
Other Social	19	57,891	1,046	1,360	1,599	732	0.6
Economic (Efficiency Costs)	7	21,328	385	501	589	270	0.2
Economic (Transfer Costs)	13	39,610	716	930	1,094	501	0.4
Process	25	76,173	1,376	1,789	2,104	963	0.7
Total Regulatory Costs	126	389,911	6,936	9,016	10,605	4,855	3.7

Trade

Type Regulation	A	B	C	Da	Db	Dc	E
Environment	9	6,125	349	454	411	244	0.2
Other Social	9	6,125	349	454	511	244	0.2
Economic (Efficiency Costs)	10	6,806	388	504	456	272	0.2
Economic (Transfer Costs)	18	12,250	698	908	821	489	0.3
Process	35	23,819	1,358	1,765	1,596	950	0.6
Total Regulatory Costs	82	55,805	3,181	4,135	3,740	2,227	1.4

Services

Type Regulation	A	B	C	Da	Db	Dc	E
Environment	9	4,584	293	382	341	205	0.5
Other Social	9	4,584	293	382	341	205	0.5
Economic (Efficiency Costs)	12	6,111	391	509	454	274	0.6
Economic (Transfer Costs)	22	11,204	717	933	833	502	1.1
Process	42	21,390	1,370	1,780	1,590	959	2.1
Total Regulatory Costs	94	47,872	3,065	3,985	3,558	2,146	4.8

Other

Type Regulation	A	B	C	Da	Db	Dc	E
Environment	9	6,563	494	642	608	346	0.2
Other Social	9	6,563	494	642	608	346	0.2
Economic (Efficiency Costs)	12	8,751	659	856	810	461	0.3
Economic (Transfer Costs)	22	16,043	1,208	1,570	1,486	845	0.6
Process	42	30,627	2,306	2,997	2,836	1,614	1.1
Total Regulatory							

Costs	93	67,817	5,105	6,637	6,280	3,574	2.4

U.S. Totals

Type Regulation	A	B	C	Da	Db	Dc	E
Environment	89	17,467	959	1,246	1,194	671	0.6
Other Social	47	9,224	506	658	630	354	0.3
Economic (Efficiency Costs)	41	8,047	442	574	550	309	0.3
Economic (Transfer Costs)	75	14,719	808	1,050	1,006	566	0.5
Process	144	28,261	1,551	2,017	1,931	1,086	1.0
Total Regulatory Costs	395	77,522	4,255	5,532	5,298	2,979	2.7

Numbers may not add due to rounding

Source: Thomas D. Hopkins. Profiles of Regulatory Costs, SBA Contract No. SBAHQ-95-M-0298 (Draft Final Report, 1995).

For the entire United States, the average cost of regulation per employee in 1992 (1995 dollars) is:

<20 employees	$ 5,532
20-499 employees	$ 5,298
>500 employees	$ 2,979

The smallest firms' regulatory costs per employee are l.86 times those of the largest firms.

For manufacturing, where the regulatory costs are the highest, the cost per employee in 1992 is about double the average cost per employee across the entire economy:

<20 employees	$ 9,016
20-499 employees	$10,605
>500 employees	$ 4,855

In the service industry, where the costs are the lowest, the costs per employee in 1992 are:

<20 employees	$ 3,985
20-499 employees	$ 3,558
>500 employees	$ 2,146

The Office of Advocacy's Estimates

The Office of Advocacy believes that Hopkins overestimates the allocation of the burdens on small firms. In his earlier study, about one-third of the small firms reported only minor regulatory burdens. Hopkins' use of the 30-percent greater-than-average figure per employee for small firms excludes consideration of the firms with only minor costs. In order to present a more balanced estimate of the allocation of burdens, the Office of Advocacy projects that when firms with minor burdens are included, a 20-percent greater-than-average figure is more appropriate for small firms. Twenty percent below the average should be used for large firms (Table 5).

TABLE 5: Business Regulatory Burdens by Sector. 1992. The Advocacy Case (1995 Dollars)

A= Total Cost (billions)
B= Cost per Firm
C= Average Cost Per Employee
D= Cost per Employee by Firm Size
Da= <20
Db= 20-499
Dc= 500+
E= Cost as a Percent of Receipts

Manufacturing

Type Regulation	A	B	C	Da	Db	Dc	E
Environment	62	188,909	3,413	4,095	4,617	2,730	1.8
Other Social	19	57,891	1,046	1,255	1,415	837	0.6
Economic (Efficiency Costs)	7	21,328	385	462	521	308	0.2
Economic (Transfer Costs)	13	39,610	716	859	968	572	0.4
Process	25	76,173	1,376	1,651	1,862	1,101	0.7
Total Regulatory Costs	126	389,911	6,936	8,323	9,382	5,549	3.7

Trade

Type Regulation	A	B	C	Da	Db	Dc	E
Environment	9	6,125	349	419	390	279	0.2
Other Social	9	6,125	349	419	390	279	0.2
Economic (Efficiency Costs)	10	6,806	388	466	433	310	0.2
Economic (Transfer Costs)	18	12,250	698	838	780	559	0.3
Process	35	23,819	1,358	1,629	1,517	1,086	0.6
Total Regulatory Costs	82	55,805	3,181	3,817	3,554	2,545	1.4

Services

Type Regulation	A	B	C	Da	Db	Dc	E
Environment	9	4,584	293	352	325	235	0.5
Other Social	9	4,584	293	352	325	235	0.5
Economic (Efficiency Costs)	12	6,111	391	470	433	313	0.6
Economic (Transfer Costs)	22	11,204	717	861	794	574	1.1
Process	42	21,390	1,370	1,644	1,516	1,096	2.1
Total Regulatory Costs	94	47,872	3,065	3,678	3,394	2,452	4.8

Other

Type Regulation	A	B	C	Da	Db	Dc	E
Environment	9	6,563	494	593	570	395	0.2

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Total Regulatory Costs	93	67,817	5,105	6,126	5,889	4,084	2.4

U.S. Totals

Type Regulation	A	B	C	Da	Db	Dc	E
Environment	89	17,467	959	1,151	1,115	767	0.6
Other Social	47	9,224	506	608	589	405	0.3
Economic (Efficiency Costs)	41	8,047	442	530	514	353	0.3
Economic (Transfer Costs)	75	14,719	808	970	940	646	0.5
Process	144	28,261	1,551	1,862	1,805	1,241	1.0
Total Regulatory Costs	395	77,522	4,255	5,106	4,950	3,404	2.7

Numbers may not add due to rounding

Source: Thomas D. Hopkins. Profiles of Regulatory Costs, SBA Contract No. SBAHQ-95-M-0298 (Draft Final Report, 1995).

Total regulatory costs per employee (in dollars) for all sectors are shown below:

	<20	20-499	>500	Sm/Lg
Hopkins' estimate	5,532	5,298	2,979	1.86
Advocacy's estimate	5,106	4,950	3,404	1.50

If total regulatory costs are divided by total sales (or receipts), the differentials become even larger:

	<20	20-499	>500	Sm/Lg
Hopkins' estimate	.044	.040	.018	2.44
Advocacy's estimate	.040	.038	.021	1.90

The story is basically the same: Even after the most crucial assumption in the analysis is adjusted in favor of large firms, small firms pay significantly more than large firms per employee or dollar of sales.

VII. THE FUTURE OF REGULATION

The average cost of regulation, paperwork, and taxpayer requirements per employee in 1992, as estimated by Hopkins, is in the $5,400 range for small firms and the $3,000 range for large firms. Although these figures are only approximations, the difference between large and small firms -- some 80 percent -- is very significant.

The more conservative Advocacy estimates for the small firm are in the $5,000 range and, for the large firm, some $3,400 per employee. Under either scenario, this huge differential handicaps a new innovative entrepreneur in competition with larger firms.

The total regulatory costs for small and large firms are estimated in

Table 6. Using the Hopkins scenario, firms with fewer than 500 employees have a total regulatory, paperwork and tax compliance burden of $265 billion, while firms with more than 500 employees have a total burden of $130 billion. Firms with fewer than 500 employees bear 67 percent of the total burden of regulation, paperwork and tax compliance.

Using the more conservative Advocacy numbers, the total small firm burden is $247 billion and the large firm burden is $148 billion; thus small firms bear 63 percent of the total regulatory, paperwork and tax compliance burden. Because small firms generate some 50 percent of the employment and sales, this indicates that the burden is too heavy on the smaller firms.

Table 6: Business Regulatory Costs of Employees, 1992 (in billions of 1995 dollars)

Type of Regulation	Total Cost Per Employee by Firm Size		
	<500	500+	Total
A. Hopkins' Case *			
U.S. Total	265	130	395
Environmental	60	29	89
Other Social	32	15	47
Economic-- Efficiency	28	13	41
Economic-- Transfer	51	25	75
Process	97	47	144
B. Advocacy's Case **			
U.S. Total	247	148	395
Environmental	56	33	89
Other Social	29	18	47
Economic-- Efficiency	26	15	41
Economic-- Transfer	47	54	75
Process	90	54	144

Numbers may not add due to rounding.

* Assumes small firms experience total employee costs that are 30% higher than the average and that the largest firms experience total employee costs that are just 70% of the average.

** Assumes small firms experience total employee costs that are 20% higher than the average and that the largest firms experience total employee costs that are just 80% of the average.

Source: Thomas D. Hopkins, Profiles of Regulatory Costs, SBA Contract No, SBAHQ-95-M-0298 (Draft Final Report 1995)

The data regarding the disproportionate impact on smaller firms establish that regulatory costs are not being allocated fairly. If the nation's goals are to generate employment and innovation, improve global competitiveness, and encourage economic growth, government actions should not impose disproportionate cost burdens on the small business sector to solve other problems. The lesson here is that policymakers must implement additional efforts to identify ways to minimize these burdens, while still achieving the regulatory goals.

If there is a White House Conference on Small Business in the year 2005, many expect that small business owners will still list regulation, paperwork, and taxes as a primary concern. It is unlikely that the regulatory burden relative to the size of the economy will have changed significantly. However, if the spirit of cooperation between the regulatory agencies and the small business community continues well beyond the 1995 White House Conference on Small Business and if Congress continues to revise the legislative mandates, there could be a significant downward trend in the regulatory burden faced by small firms.